

Comprehensive Annual Financial Report Fiscal Year Ended June 30, 2019 Prepared by: State Accounting Office



GEORGIA STATE CAPITOL Atlanta, Georgia Submitted by the State Accounting Office 11-

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The Georgia State Capitol is one of only forty-three National Historic Landmarks in Georgia. The General Assembly convenes legislative sessions annually in January.



Prepared by: State Accounting Office



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INTRODUCTORY SECTION



CENTENNIAL OLYMPIC PARK Atlanta, Georgia Submitted by the Georgia World Congress Center Authority



Brian P. Kemp Governor Thomas Alan Skelton

State Accounting Officer

December 30, 2019

The Honorable Brian P. Kemp, Governor of Georgia

The Honorable Members of the General Assembly

Citizens of the State of Georgia

It is my privilege to present the *Comprehensive Annual Financial Report* (CAFR) on the operations of the State of Georgia (State) for the fiscal year ended June 30, 2019, in accordance with the Official Code of Georgia Annotated (OCGA), Section 50-5B-3(a)(7). The objective of this report is to provide a clear picture of our government as a single comprehensive reporting entity.

This report consists of management's representations concerning the State's finances and management assumes full responsibility for the completeness and reliability of the information presented. This report reflects my commitment to you, the citizens of the State, and to the financial community to maintain our financial statements in accordance with Generally Accepted Accounting Principles (GAAP) applicable to governments as prescribed by the Governmental Accounting Standards Board (GASB). Information presented in this report is believed to be accurate in all material respects, and all disclosures have been included that are necessary to enable the reader to obtain a thorough understanding of the State's financial activities.

Internal Controls

The State's management is responsible for the establishment and maintenance of internal accounting controls which are designed to provide reasonable, but not absolute, assurance that assets are safeguarded, financial transactions are properly recorded and adequately documented, and to ensure the reliability of financial records for preparing financial statements. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived from such control and that the evaluation of those costs and benefits requires estimates and judgments by the State's management.

Independent Audit

The financial statements of significant organizations comprising the State reporting entity have been separately audited and reported on by either the State Auditor or independent certified public accountants. The State Auditor and other independent auditors have performed an examination of the accompanying financial statements for the State and have issued unmodified opinions on the State's basic financial statements included in this report.

Federal regulations also require the State to undergo an annual Single Audit in conformance with the Single Audit Act Amendments of 1996 and the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (contained in Title 2 U.S. Code of Federal Regulations Part 200). Information related to the Single Audit, including the schedule of expenditures of federal awards, audit findings and recommendations, summary of prior audit findings, and the Independent Auditor's reports, is issued in a separate report and will be available at a later date.

Management's Discussion and Analysis

GAAP requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of MD&A. This letter of transmittal is designed to complement MD&A and should be read in conjunction with it. The State's MD&A can be found immediately following the independent auditor's report.

PROFILE OF THE STATE OF GEORGIA

The State, founded on February 12, 1733, was the last of the original 13 colonies and became the fourth state by ratifying the U.S. Constitution on January 2, 1788. The State is an economic hub of the southeast. Atlanta, the state capital, is the major economic and population center of the State with major regional economic and population centers in Augusta, Savannah, and Macon. The State's economic base is diverse with major port facilities on the coast, agricultural resources throughout the State, manufacturing and service industries, and is a major transportation center with one of the busiest airports in the nation. The State is the eighth largest state with an estimated population of 10.5 million people.

Reporting Entity

The Constitution of the State of Georgia (Constitution) provides the basic framework for the State's government, which is divided into three separate branches: legislative, executive, and judicial, as shown on the organizational chart on page v. The duties of each branch are outlined in the Constitution and in the OCGA.

For financial reporting purposes, the State's reporting entity consists of (1) the primary government, (2) component unit organizations for which the primary government is financially accountable, and (3) other component unit organizations for which the nature and significance of their relationship with the primary government is such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete. Further information about the State's reporting entity can be found in *Note 1 - Section B* to the financial statements.

The State and its component units provide a full range of services to its citizens, including education, health and welfare, transportation, public safety, economic development and assistance, culture and recreation, conservation, and general government services. The financial statements present information on the financial position and operations of state government associated with these services as a single comprehensive reporting entity. Accordingly, the various agencies, departments, boards, commissions, authorities, foundations, funds, and accounts of the State that have been identified as part of the primary government or a component unit have been included in this report.

Budgetary Control

The Constitution requires that budgeted expenditures not exceed the estimated revenues and other funding sources, including beginning fund balances. The State's legal level of budgetary control is funding source within program. Annually, the Governor submits a balanced budget by program to the Legislature. In addition to the internal controls previously discussed, the State maintains budgetary controls to ensure compliance with the legal provisions of the State's Appropriation Act, which reflects the Georgia General Assembly's approval of the annual budget. Budgetary control is maintained through a formal appropriation and allotment process.

The State's annual budget is prepared on a statutory basis which is principally the modified accrual basis utilizing encumbrance accounting. The State monitors spending activity to ensure that expenditures do not exceed appropriated amounts by agency at the legal level of control as provided for by the Constitution. Information regarding the State's budgetary process can be found in the Notes to Required Supplementary Information within this report.

The statutory basis of accounting required by state law differs materially from the basis used to report revenues and expenditures in accordance with GAAP. Detailed information on the statutory basis of accounting and the results of operations on that basis for fiscal year 2019 can be found in the separately issued Budgetary Compliance Report (BCR) dated November 27, 2019.

Budget Stabilization

The State maintains the Revenue Shortfall Reserve (RSR) which provides for the sound management of excess revenue collections in any given fiscal year. By statute, all surplus state funds existing at the end of each fiscal year shall be reserved and added to the RSR. Funds in the RSR carry forward from fiscal year to fiscal year without reverting to the revenue collections fund within the General Fund at the end of a fiscal year. Additional information about the State's RSR balances can be found in MD&A.

Long-term Financial Planning - Debt Management

Each year, the Georgia State Financing and Investment Commission (Commission) issues its debt management plan (Plan) which provides a five-year projection of the State's general obligation and guaranteed revenue bond issuances and the debt service requirements for all outstanding debt and projected new debt issuances. The Plan covers the current fiscal year and the four succeeding fiscal years. The resulting projected annual debt service requirements are compared to the actual treasury receipts of the State for the immediately preceding fiscal year and projected future treasury receipts of the State to determine the ratio of debt service requirements to the prior year's State treasury receipts. This ratio, which is established by the Constitution at a maximum of 10%, but the Plan is limited to a maximum of 7% by Commission policy, along with several other ratios discussed in the Plan, serves as a guide for the Governor and the General Assembly in their consideration of the authorization of new State debt during the budget preparation, review, and adoption process. Projected issuances of new debt may be increased or decreased depending on the capital needs of the State and projections of estimated treasury receipts in future years.

Fiscal Year Budget Overview

State General Fund Receipts deposited with the Office of the State Treasurer during fiscal year 2019 were \$25.6 billion, which was 1.0% greater than the final amended revenue estimate of \$25.3 billion and 5.1% greater than prior year 2018. Total Net Taxes were 4.8% greater in fiscal year 2019 than fiscal year 2018 and indicated continued economic growth in Georgia. As a result, the balance of the RSR as of June 30, 2019 was \$3.1 billion.

By statute, up to 1% of fiscal year 2019 net revenue collections (\$255.7 million) may be appropriated from the RSR in fiscal year 2020 for K-12 needs. As of the date of this report, the \$3.1 billion RSR balance has not been adjusted for this potential appropriation. In addition, the Governor may release, for appropriation in a subsequent year, funds in excess of 4% of current year (fiscal year 2019) revenue collections.

ECONOMIC FACTORS AND OUTLOOK

Many factors indicate that the State's economy has recovered from the Great Recession. Some of these indicators include job growth, personal income growth, lower initial unemployment claims and the recovery of home prices. Additional information on the economic outlook for the State, including detailed information on employment, personal income, and housing markets, can be found in the State's MD&A which can be found immediately following the independent auditor's report.

AWARDS AND ACKNOWLEDGEMENTS

The Government Finance Officers Association (GFOA) awarded the *Certificate of Achievement for Excellence in Financial Reporting* to the State of Georgia for its comprehensive annual financial report for the fiscal year ended June 30, 2018. This was the seventh consecutive year that the State has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

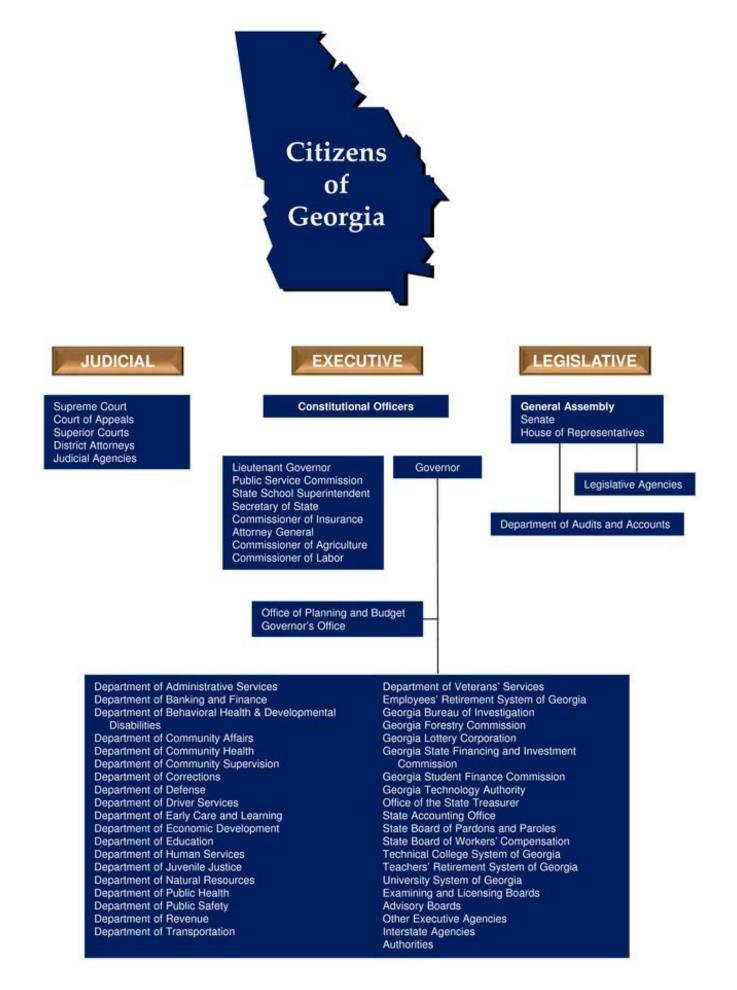
A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to GFOA to determine its eligibility for another certificate. We are committed to this effort, and we intend to maintain a highly qualified and professional staff to make this certification possible.

The preparation of this report would not have been possible without the dedicated and efficient service of the entire staff of the State Accounting Office. We also express our appreciation to the fiscal officers throughout state government for their dedicated efforts in assisting us in the preparation of this report.

Respectfully submitted,

Alarga

Thomas Alan Skelton State Accounting Officer





State of Georgia Principal State Officials June 30, 2019



Executive:

Brian P. Kemp	Governor
Brad Raffensperger	
Chris Carr	Attorney General
Mark Butler	Commissioner of Labor
Richard Woods	State Superintendent of Schools
John F. King	Commissioner of Insurance
Gary W. Black	Commissioner of Agriculture
Chuck Eaton	
Tim Echols (Vice Chairman)	Public Service Commissioner
Lauren "Bubba" McDonald, Jr (Chairman)	
Tricia Pridemore	
Jason Shaw	Public Service Commissioner
Legislative:	
Geoff Duncan	Lieutenant Governor/President of the Senate
David Ralston	
Judicial:	
Harold D. Melton	Chief Justice of the Supreme Court





Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

State of Georgia

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2018

Christophen P. Morrill

Executive Director/CEO



ACKNOWLEDGEMENTS

The Georgia Comprehensive Annual Financial Report (CAFR) for the fiscal year ending June 30, 2019 was prepared by:

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SPECIAL APPRECIATION

The State Accounting Office would like to extend special appreciation to all fiscal and accounting personnel throughout the State who contributed the financial information for their agencies. Additionally, the Division of Statewide Accounting and Reporting would like to acknowledge the efforts given by all of the functional and support personnel of the State Accounting Office.



FINANCIAL SECTION



ABRAHAM BALDWIN AGRICULTURAL COLLEGE

Tifton, Georgia

Submitted by the University System of Georgia Board of Regents



DEPARTMENT OF AUDITS AND ACCOUNTS

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GREG S. GRIFFIN STATE AUDITOR (404) 656-2174

Independent Auditor's Report

The Honorable Brian P. Kemp, Governor of Georgia and Members of the General Assembly of the State of Georgia

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the State of Georgia (State), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the State's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We did not audit the financial statements of the following entities:

AU Health System, Inc.	Georgia Student Finance Authority
Augusta University Foundation, Inc. and Subsidiaries	Georgia Tech Athletic Association
Augusta University Research Institute, Inc.	Georgia Tech Facilities, Inc.
Employees' Retirement System of Georgia	Georgia Tech Foundation, Inc.
Georgia Advanced Technology Ventures, Inc.	Georgia Tech Research Corporation
and Subsidiaries	Kennesaw State University Foundation, Inc.
Georgia College & State University Foundation, Inc.	Medical College of Georgia Foundation, Inc.
and Subsidiaries	Middle Georgia State University Real Estate
Georgia Gwinnett College Foundation, Inc.	Foundation, Inc. and Subsidiaries
Georgia Health Sciences Foundation, Inc.	Teachers Retirement System of Georgia

Georgia Higher Education Facilities Authority	The University of Georgia Foundation
Georgia Housing and Finance Authority	University of Georgia Athletic Association, Inc.
Georgia Lottery Corporation	University of Georgia Research Foundation, Inc.
Georgia Ports Authority	and Subsidiaries
Georgia Southern University Housing Foundation, Inc.	University of North Georgia Real Estate
and Subsidiaries	Foundation, Inc. and Subsidiaries
Georgia State Financing and Investment Commission	UWG Real Estate Foundation, Inc.
Georgia State University Athletic Association, Inc.	University System of Georgia Foundation, Inc.
Georgia State University Foundation, Inc	and Affiliates
Georgia State University Research Foundation, Inc.	VSU Auxiliary Services Real Estate Foundation, Inc.

Those financial statements represent part or all of the total assets, net position or fund balances, and revenues or additions of the governmental activities, the business-type activities, the aggregate discretely presented component units, the major governmental fund-General Obligation Bond Projects fund, and the aggregate remaining fund information as reported in the following table:

Opinion Unit	Percent of Total Assets	Percent of Net Position/ Fund Balance	Percent of Total Revenues/ Additions
Governmental Activities	5%	33%	0%
Business-type Activities	3%	5%	0%
Aggregate Discretely Presented Component Units	72%	59%	91%
Governmental Fund – General Obligation Bond Projects Fund	100%	99%	100%
Aggregate Remaining Fund Information	85%	87%	38%

Those financial statements were audited by other auditors whose reports thereon have been furnished to us, and our opinions, insofar as they relate to the amounts included for the above mentioned entities, are based solely on the reports of the other auditors.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. The following financial statements were not audited in accordance with *Government Auditing Standards*:

Georgia Advanced Technology Ventures, Inc. and	Georgia Tech Foundation, Inc.
Subsidiaries	Georgia State University Athletic Association
Georgia College & State University Foundation, Inc.	Kennesaw State University Foundation, Inc.
and Subsidiaries	Medical College of Georgia Foundation, Inc.
Georgia Gwinnett College Foundation, Inc.	Middle Georgia State University Real Estate
Georgia Health Sciences Foundation, Inc.	Foundation, Inc. and Subsidiaries
Georgia Lottery Corporation	The University of Georgia Foundation
Georgia Southern University Housing	University of Georgia Athletic Association, Inc.
Foundation, Inc. and Subsidiaries	University of North Georgia Real Estate Foundation,
Georgia State University Foundation, Inc.	Inc. and Subsidiaries

Georgia Tech Athletic Association Georgia Tech Facilities, Inc. UWG Real Estate Foundation, Inc. VSU Auxiliary Services Real Estate Foundation, Inc.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the State's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the State's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. Georgia statutes, in addition to audit responsibilities, entrust other responsibilities to the Department of Audits and Accounts. Those responsibilities include service by the State Auditor on the governing boards of various agencies, authorities, commissions, and component units of the State. The Department of Audits and Accounts elected not to provide audit services for the organizational units of the State of Georgia associated with these boards. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, based on our audit and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund and the aggregate remaining fund information of the State, as of June 30, 2019, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Notes 2 and 3 to the financial statements, the fiscal year 2018 ending balances of the Governmental funds, the Governmental Activities, the Nonmajor Special Revenue funds, Nonmajor Debt Service fund, Business-type Activities, Nonmajor Enterprise funds, Higher Education fund, and aggregate discretely presented component unit financial statements have been restated for changes in accounting principles and to correct errors in previously issued financial statements. Our opinions are not modified with respect to these matters.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and required supplementary information listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any

assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the State's basic financial statements. The introductory section, combining and individual nonmajor fund financial statements and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining and individual nonmajor fund financial statements are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, based on our audit, the procedures performed as described above, and the reports of the other auditors, the combining and individual nonmajor fund financial statements are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we will also issue our report dated December 30, 2019, on our consideration of State's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. That report will be issued under separate cover in the State's *Single Audit Report*. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the State's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the State's internal control over financial reporting and compliance.

Respectfully submitted,

Greg Stripp-

Greg S. Griffin State Auditor

December 30, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS



State of Georgia

Management's Discussion and Analysis

(Unaudited)



INTRODUCTION

The *Management's Discussion and Analysis* (MD&A) of the State of Georgia's *Comprehensive Annual Financial Report* (CAFR) presents an overview and analysis of the financial activities of the State for the fiscal year ended June 30, 2019. It should be read in conjunction with the letter of transmittal, located in the Introductory Section of this report, and the State's financial statements, including the notes to the financial statements, which are an integral part of the statements that follow this narrative.

FINANCIAL HIGHLIGHTS – PRIMARY GOVERNMENT

Government-wide

- <u>Net Position</u> Total assets and deferred outflows of resources of the State exceeded liabilities and deferred inflows of resources by \$24.6 billion. Contributing to this amount, a deficit of \$10.6 billion was reported as unrestricted net position.
- <u>Changes in Net Position</u> The State's total net position increased by \$3.2 billion in fiscal year 2019 compared to the balances reported in the prior year. More specifically, net position of governmental activities increased by \$2.1 billion while net position of business-type activities increased by \$1.0 billion.
- <u>Excess of Revenues over Expenses Governmental Activities</u> The State's total revenues for governmental activities, which totaled \$45.4 billion were \$5.7 billion more than total expenses (excluding transfers). General revenues, which are primarily comprised of tax collections, totaled \$26.2 billion, and program revenues, which primarily come from operating grants and contributions, totaled \$19.2 billion.

Fund Level

- <u>Governmental Funds Fund Balances</u> The governmental funds reported combined ending fund balances of \$10.8 billion. This amount represents an increase of \$1.2 billion (12.9%) (as restated), when compared with the prior year. Of this total fund balance, \$37.6 million (0.3%) represents nonspendable fund balance; \$7.4 billion (67.9%) represents restricted fund balance; \$9.4 million (0.1%) represents committed fund balance; \$595.1 million (5.5%) represents assigned fund balance; and \$2.8 billion (26.2%) represents unassigned fund balance.
- <u>General Fund Fund Balances</u> The General Fund ended the fiscal year with a total fund balance of \$8.8 billion, of which \$2.8 billion was classified as unassigned fund balance. Total revenues increased by \$1.1 billion (2.4%) over the prior year.
- <u>Enterprise Funds Net position</u> The Enterprise Funds ended the fiscal year with a total net position of \$5.7 billion. More specifically, the major funds areas with significant net positions were the Higher Education Fund of \$2.4 billion, the Unemployment Compensation Fund of \$2.5 billion, and the State Health Benefit Plan of \$622.4 million.

Long-term Debt

The long-term bond debt of the primary government, prior to restatements, increased \$285.0 million (2.6%) during the fiscal year. The increase represents the net difference between new issuances and maturing principal payments. The amount owed for general obligation bonds increased by \$309.1 million (3.1%) for the primary government,

Management's Discussion and Analysis



(Unaudited)

while the amount owed for revenue bonds decreased \$24.1 million (2.7%) for the primary government. The State issued new bonded debt during the year in the amount of \$1.6 billion for the primary government. The State continues to balance the need to issue debt for capital improvements against State management's desire to maintain a conservative approach to debt management.

OVERVIEW OF THE FINANCIAL STATEMENTS

The financial section of this report includes four parts: (1) management's discussion and analysis, (2) basic financial statements, (3) required supplementary information, and (4) other supplementary information. The Basic Financial Statements consist of three components: government-wide financial statements, fund financial statements, and notes to the financial statements.

Government-wide Financial Statements – Reporting the State as a Whole

The Statement of Net Position and the Statement of Activities together comprise the government-wide financial statements and provide a broad overview of the State's financial activities as a whole. These statements are prepared with a long-term focus using the full-accrual basis of accounting, similar to private-sector businesses. This means all revenues and expenses associated with the fiscal year are recognized regardless of when cash is spent or received, and all assets, deferred outflows of resources, liabilities and deferred inflows of resources, including capital assets and long-term debt, are reported at the entity level.

The government-wide statements report the State's net position, which is the difference between total assets and deferred outflows of resources and total liabilities and deferred inflows of resources. These statements also include how these items have changed from the prior year. Over time, increases and decreases in net position measure whether the State's overall financial condition is improving or declining. In evaluating the State's overall condition, however, additional non-financial information should be considered, such as the State's economic outlook, changes in demographics, and the condition of its capital assets and infrastructure. The government-wide statements report three activities:

- <u>Governmental Activities</u> The majority of the State's basic services fall under this activity, including services related to general government, education, health and welfare, transportation, public safety, economic development and assistance, culture and recreation, and conservation. Taxes and intergovernmental revenues are the major funding sources for these programs.
- <u>Business-Type Activities</u> The State operates certain activities similar to private-sector businesses by charging fees to customers to recover all or a significant portion of their costs of providing goods and services. The Unemployment Compensation Fund, the self-insured State Health Benefit Plan (SHBP), and the Higher Education Fund are some examples of business-type activities. The Higher Education Fund consists of the University System of Georgia and the Technical College System of Georgia.
- <u>Component Units</u> Certain organizations are legally separate from the State; however, the State remains financially accountable for them. The Georgia Environmental Finance Authority, Georgia Housing and Finance Authority, and Georgia Lottery Corporation are examples of component units.

State of Georgia

Management's Discussion and Analysis

(Unaudited)



Fund Financial Statements – Reporting the State's Most Significant Funds

The fund financial statements provide detailed information about individual major funds, not the State as a whole, and are located in the Basic Financial Statements – Fund Financial Statements section. A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The State, like other state and local governments, uses funds to ensure and demonstrate compliance with finance-related and legal requirements. All of the State funds are divided into three types, each of which use a different accounting approach and should be interpreted differently:

- <u>Governmental Funds</u> Most of the basic services provided by the State are financed through governmental funds and are essentially the same functions reported as governmental activities in the government-wide financial statements. Governmental funds use the modified accrual basis of accounting, and focus on short-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. These statements provide a detailed short-term view of the State's finances that assist in determining whether there will be adequate financial resources available to meet the current needs of the State.
- <u>Proprietary Funds</u> The Proprietary funds, which include enterprise funds and internal service funds, account for state activities that are similar to private-sector businesses. Like government-wide statements, proprietary fund statements are presented using the full-accrual basis of accounting. Activities whose customers are mostly outside of state government are accounted for in enterprise funds and are the same functions reported as business-type activities. The enterprise fund financial statements provide more detail and additional information than in the government-wide statements, such as cash flows. Activities whose customers are mostly other state organizations are accounted for in internal service funds. The internal service fund activities are allocated proportionately between the governmental activities (predominately) and the business-type activities in the government-wide statements based on the benefit of the services provided to those activities.
- <u>Fiduciary Funds</u> These funds are used to account for resources held for the benefit of parties outside the state government. The State is responsible for ensuring these assets are used for their intended purposes. Fiduciary funds use full-accrual accounting but are not reflected in the government-wide financial statements because the resources from these funds are not available to support the State's own programs.

Reconciliation between Government-wide and Fund Statements

This report also includes two schedules that reconcile and explain the differences between the amounts reported for the governmental activities on the government-wide statements (full-accrual accounting, long-term focus) with the amounts reported on the governmental fund statements (modified accrual accounting, short-term focus). The schedules are located in the Basic Financial Statements – Fund Financial Statements – Governmental Funds section. The following explanations represent some of the reporting differences between the two statements:

- Capital outlays result in capital assets on the government-wide statements but are reported as expenditures in the governmental fund financial statements.
- Bond proceeds are recorded as long-term debt on the government-wide statements but are listed as current financial resources on the governmental fund statements.

Management's Discussion and Analysis

(Unaudited)



• Net pension and other postemployment (OPEB) assets/liabilities are reported on the government-wide statements but are not reported on the governmental fund statements.

Notes to the Financial Statements

The notes to the financial statements located at the end of the basic financial statements section provide additional information essential to a complete understanding of the financial statements. The notes are applicable to both the government-wide financial statements and the fund financial statements.

Required and Other Supplementary Information

In addition to this MD&A, the basic financial statements are followed by a section containing other required supplementary information which further explains and supports the information in the financial statements. This section of the report includes: (1) a budgetary comparison schedule of the General Fund (Budget Fund), including reconciliations of revenues and expenditures on the statutory and GAAP basis for the fiscal year, (2) information on the State's public entity risk pool, (3) information on the State's defined benefit pension plans and (4) information on the State's OPEB plans. Other supplementary information includes combined financial statements for the State's nonmajor governmental funds, nonmajor enterprise funds, internal service funds, fiduciary funds and non-major component units. The total columns of these combined financial statements carry forward to the applicable fund financial statements.

FINANCIAL ANALYSIS OF THE STATE AS A WHOLE

Net Position

Governmental entities are required by Generally Accepted Accounting Principles (GAAP) to report on their net position. The *Statement of Net Position* presents the value of all of the State's assets and deferred outflows of resources, as well as all liabilities and deferred inflows of resources, with the difference reported as net position.

As shown in Table 1 on the following page, the State reported a total net position of \$24.6 billion, which is comprised of \$25.6 billion in net investment in capital assets, \$9.6 billion in restricted net position, and an unrestricted portion of net position deficit of \$10.6 billion.

Based on this measurement, no funds were available for discretionary purposes. However, a significant contributing factor is that governments recognize long-term liabilities on the government-wide statement of net position as soon as a liability has been incurred. Accordingly, the State recognizes long-term liabilities (such as general obligation debt, net pension and OPEB liabilities) on the statement of net position. While financing and budgeting functions focus on when such liabilities will be paid, this statement focuses on when a liability has been incurred. The following table was derived from the current and prior year government-wide *Statement of Net Position*.

(Table on next page)

Management's Discussion and Analysis

(Unaudited)

Table 1 - Net Position												
		As	of Ju	ne 30, 2019 an	d 20	8 (in thousand	s)					
	Governmental Activities				Business-type Activities			Total Primary Government				
		2019		2018		2019		2018	2019		2018	
Assets												
Non-Capital Assets	\$	18,926,472	\$	17,187,431	\$	6,827,176	\$	6,407,815	\$	25,753,648	\$	23,595,246
Net Capital Assets		23,695,200		23,009,176		11,592,071		11,072,098		35,287,271		34,081,274
Total Assets		42,621,672		40,196,607		18,419,247		17,479,913		61,040,919		57,676,520
Deferred Outflows of Resources		1,919,380	_	1,705,307		1,432,993		1,024,781		3,352,373		2,730,088
Liabilities												
Noncurrent Liabilities		17,764,845		18,555,692		11,698,551		11,740,526		29,463,396		30,296,218
Current Liabilities		6,345,445		5,787,154		1,110,481		1,092,444		7,455,926		6,879,598
Total Liabilities		24,110,290		24,342,846		12,809,032		12,832,970		36,919,322		37,175,816
Deferred Inflows of Resources		1,454,518		730,905		1,465,855		1,116,502		2,920,373	_	1,847,407
Net Position												
Net Investment in Capital Assets		20,361,680		19,542,361		8,429,136		7,849,961		25,566,212		24,372,160
Restricted		6,275,129		5,792,152		3,349,557		2,955,296		9,624,686		8,747,448
Unrestricted		(7,660,565)		(8,506,350)		(6,201,340)		(6,250,035)		(10,637,301)		(11,736,223)
Total Net Position	\$	18,976,244	\$	16,828,163	\$	5,577,353	\$	4,555,222	\$	24,553,597	\$	21,383,385
Percent Change in Total:									_		_	
Net Position from Prior Year		12.8%				22.4%			14.8%			
Percent Change after Restatements		13.3%			20.8% 14.9%							

Note: Prior year adjustments recorded in the current year have not been reflected in the prior year column in the table above.

Net position for governmental activities as originally reported increased by \$2.1 billion (12.8%), and also increased by \$2.2 billion (13.3%), when adjusted for restatements. The deficit unrestricted balance of \$7.7 billion is primarily the result of the following three types of transactions:

- The State continues to issue general obligation debt for the purposes of capital acquisition and construction on behalf of county and independent school systems. Since the issuance of this debt does not result in capital assets acquisitions for governmental activities, the debt of \$5.7 billion is not reflected in the net position category, net investment in capital assets, but rather in the unrestricted net position category.
- GASB Statement No. 68 (GASB 68), as related to pensions, required the State to recognize its proportional share of the net pension liability of the pension plans applicable to said standard. As of June 30, 2019, this liability resulted in a \$3.0 billion impact to unrestricted net position.
- GASB Statement No. 75 (GASB 75), as related to OPEB, required the State to recognize its proportional share of the net OPEB liability of the OPEB plans applicable to said standard. As of June 30, 2019, this liability resulted in a \$2.5 billion impact to unrestricted net position.

Net position for business-type activities as originally reported increased by \$1.0 billion (22.4%), and also increased by \$961.6 million (20.8%), when adjusted for restatements. The deficit unrestricted balance of \$6.2 billion is primarily due to the recognition of net pension and OPEB liabilities.

(Unaudited)



- GASB 68, as related to pensions, required the State to recognize its proportional share of the net pension liability of the pension plans applicable to said standard. As of June 30, 2019, this liability resulted in a \$2.6 billion impact to unrestricted net position.
- GASB 75, as related to OPEB, required the State to recognize its proportional share of the net OPEB liability of the OPEB plans applicable to said standard. As of June 30, 2019, this liability resulted in a \$4.8 billion impact to unrestricted net position.

Changes in Net Position

The revenue and expense information, as shown in Table 2 on the following page, was derived from the governmentwide *Statement of Activities* and summarizes the State's total revenues, expenses and changes in net position for fiscal year 2019. Consistent with the prior year, the State received a majority of its \$55.7 billion in revenues from taxes and operating grants and contributions. Expenses of the primary government during fiscal year 2019 were \$52.5 billion with the increase over the prior year driven largely by education and transportation. As a result of the excess revenues over expenses, the total net position of the primary government increased by \$3.2 billion, net of transfers.

(Table on next page)

Management's Discussion and Analysis

(Unaudited)

Table 2 - Changes in Net Position										
For the	e Years Ended	June 30, 2019	and 2018 (in th	ousands)						
	Governmental Activities		Busine Activ	ss-type vities	Prir	otal nary rnment	Total Percentage Change			
	2019	2018	2019	2018	2019	2018	2018 to 2019			
Revenues:										
Program Revenues:										
Sales and Charges for Services	\$ 1,300,343	\$ 1,261,263	\$ 6,887,111	\$ 7,236,472	\$ 8,187,454	\$ 8,497,735	(3.7%			
Operating Grants/Contributions	16,236,248	16,277,251	3,354,730	3,031,969	19,590,978	19,309,220	1.5%			
Capital Grants/Contributions	1,614,685	1,560,745	109,838	107,167	1,724,523	1,667,912	3.4%			
General Revenues:										
Taxes	23,783,820	22,258,729	_	_	23,783,820	22,258,729	6.9%			
Lottery for Education - Lottery Proceeds	1,207,369	1,143,515	_	_	1,207,369	1,143,515	5.6%			
Nursing Home and Hospital Provider Fees	488,218	465,595	_	_	488,218	465,595	4.9%			
Tobacco Settlement Funds	163,851	168,926	_	_	163,851	168,926	(3.0%			
Unrestricted Investment Income	205,072	104,230	_	_	205,072	104,230	96.7%			
Unclaimed Property	144,841	151,462	_	_	144,841	151,462	(4.4%			
Other	221,221	184,240			221,221	184,240	20.1%			
Total Revenues	45,365,668	43,575,956	10,351,679	10,375,608	55,717,347	53,951,564	3.3%			
Expenses:										
General Government	1,262,837	1,380,132	—	—	1,262,837	1,380,132	(8.5%)			
Education	13,892,451	13,266,545	—	—	13,892,451	13,266,545	4.7%			
Health and Welfare	18,015,041	18,082,536	_	_	18,015,041	18,082,536	(0.4%			
Transportation	2,668,539	2,400,875	—	—	2,668,539	2,400,875	11.1%			
Public Safety	2,605,402	2,525,521	_	_	2,605,402	2,525,521	3.2%			
Economic Development and Assistance	465,465	524,516	_	_	465,465	524,516	(11.3%			
Culture and Recreation	309,863	308,917	_	_	309,863	308,917	0.3%			
Conservation	54,758	72,135	_	_	54,758	72,135	(24.1%			
Interest and Other Charges on Long-Term Debt	381,895	379,211	_	_	381,895	379,211	0.7%			
Higher Education Fund	_	_	9,739,025	9,300,291	9,739,025	9,300,291	4.7%			
State Health Benefit Plan	_	_	2,613,192	2,882,954	2,613,192	2,882,954	(9.4%			
Unemployment Compensation Fund	_	_	319,367	325,523	319,367	325,523	(1.9%			
Nonmajor Enterprise Funds	_	_	205,638	207,054	205,638	207,054	(0.7%			
Total Expenses	39,656,251	38,940,388	12,877,222	12,715,822	52,533,473	51,656,210	1.7%			
Increase (Decrease) in Net Position Before Contributions and Transfers	5,709,417	4,635,568	(2,525,543)	(2,340,214)	3,183,874	2,295,354				
Contributions to Permanent Endowments	—	_	1,300	345	1,300	345				
Transfers	(3,485,850)	(2,993,509)	3,485,850	2,993,509						
Change in Net Position	2,223,567	1,642,059	961,607	653,640	3,185,174	2,295,699				
Net Position July 1 - Restated	16,752,677	15,186,104	4,615,746	3,901,582	21,368,423	19,087,686				
Net Position June 30	\$ 18,976,244	\$ 16,828,163	\$ 5,577,353	\$ 4,555,222	\$ 24,553,597	\$ 21,383,385	14.8 %			

Note: Prior year adjustments recorded in the current year have not been reflected in the prior year column in the table above.

Governmental Activities

The State's total revenues for governmental activities from all sources increased by \$1.8 billion (4.1%). The primary driver of this change was an increase in tax revenue totaling \$1.5 billion which continues to reflect the overall economic growth of the state economy.

The following table shows to what extent program revenues (charges for services and grants) covered program expenses. During fiscal year 2019, program revenues covered \$19.2 billion (48.3%) of the \$39.7 billion in total program expenses.

Management's Discussion and Analysis

(Unaudited)

For the remaining \$20.5 billion (51.7%) of the total program expenses, the State relied on taxes and other general revenues.

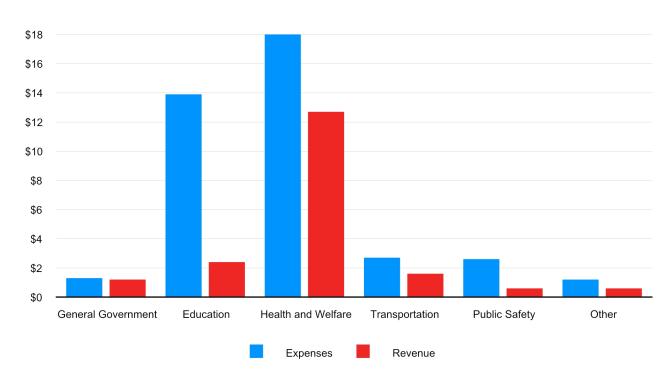


Table 3 – Net Program RevenueFor the Year Ended June 30, 2019 (in billions)

Business-type Activities

Net position of business-type activities (as restated) increased by \$961.6 million (20.8%) during the fiscal year. Total revenues and expenses for the State's business-type activities decreased by \$23.9 million and increased by \$161.4 million (0.2%) and 1.3% from prior year respectively.

In fiscal year 2019, business-type activities expenses were funded 80.4% from program revenues compared to 81.6% in the prior year. The amount of funding for these activities coming from program revenues remained flat at \$10.4 billion in fiscal years 2018 and 2019. The remaining expenses were funded by \$3.5 billion in transfers from governmental activities, of which the majority went to the Higher Education Fund. The amount of transfers increased by \$492.3 million over the prior year due to an increase in capital contributions for the addition of new campus buildings and a cyber security center.

Management's Discussion and Analysis *(Unaudited)*



FINANCIAL ANALYSIS OF THE STATE'S GOVERNMENTAL FUNDS

Fund Balances

At June 30, 2019, the State's governmental funds reported a combined ending fund balance of \$10.8 billion. Of this amount \$7.4 billion (67.9%) is restricted for specific programs by constitutional provisions, external constraints, or contractual obligations and \$2.8 billion (26.2%) of fund balance is unassigned.

General Fund

The General Fund is the chief operating fund of the State and had a total fund balance of \$8.8 billion as of fiscal year end. The net change in fund balance during the fiscal year was \$714.3 million (8.8%). The following major revenues, expenditures and other sources/uses contributed to the change in fund balance:

- <u>Revenues</u> Revenues of the General Fund totaled \$44.8 billion in the fiscal year, for an increase of \$1.1 billion (2.4%) over the prior year. The primary factor contributing to this change was a \$862.4 million increase in tax revenues from fiscal year 2018 as a result of continued overall growth in the Georgia economy. This growth was consistent with the expected growth in taxes contemplated by the fiscal year 2019 budget. In addition to the increase in tax revenues, revenues from fines and forfeitures and lottery proceeds increased by \$47.3 million and \$63.9 million respectively.
- <u>Expenditures</u> Expenditures of the General Fund totaled \$39.8 billion in the fiscal year, an increase of \$1.0 billion over the prior year. The State continues to focus additional budgetary funding in the areas of education and transportation. For example, the two largest factors contributing to this change include:
 - Education expenses increased \$587.9 million consistent with additional funds allocated in the fiscal year 2019 budget for K-12 education to fund enrollment growth and teacher training and experience.
 - Transportation expenses increased \$357.7 million, which is consistent with continued long-term investment in infrastructure.

Capital Project Fund - General Obligation Bond Projects Fund

Fund balance in the General Obligation Bond Projects Fund increased by \$341.5 million (29.9%) from the prior year. This was primarily the result of general revenues, debt issuances, and transfers in exceeding capital expenditures and transfers out. Capital outlay expenditures decreased by \$11.5 million from the prior year.

Management's Discussion and Analysis *(Unaudited)*



FINANCIAL ANALYSIS OF THE STATE'S PROPRIETARY FUNDS

Higher Education Fund

The total net position of the Higher Education Fund (as restated) increased \$753.2 million (45.3%) primarily due to an increase in transfers in from the general fund.

Operating revenues of the Higher Education Fund increased by \$336.1 million (6.2%), primarily due to increase in operating grants and contributions of \$335.5 million and net student tuition and fees revenue of \$29.3 million. Nonoperating revenues (net of expenses) decreased \$2.5 million primarily due to grants and contributions. In addition, the Higher Education Fund received an increase of \$196.8 million (7.3%) of transfers in, primarily from the General Fund and from Governmental Activities for the cyber security center, compared to the prior year.

Operating expenses increased \$310.7 million (3.4%), compared to the prior year. This amount is primarily attributable to increases in Board of Regents expenses for the following functional classifications: Research (\$73.4 million), Institutional Support (\$91.4 million), Plant Operations (\$81.7 million), and Patient Care (\$40.8 million).

State Health Benefit Plan

Operating revenues for SHBP decreased by \$441.4 million and operating expenses decreased by \$269.8 million, which resulted in an operating income loss of \$89.5 million in fiscal year 2019. The decrease in operating revenues and expenses is primarily due to a change in reporting of payments from the State Health Benefit Fund to fiduciary funds to contra-revenue from benefits expense.

Unemployment Compensation Fund

Georgia's unemployment rate at June 30, 2019 improved from 3.9% to 3.7% in fiscal year 2019. As a result, unemployment claims were slightly lower and unemployment benefit payments continued to decline annually and decreased \$22.8 million (7.0%) this year as compared to the prior year. In addition, employer unemployment rates were reduced and the corresponding federal revenue and unemployment tax revenue decreased by \$51.4 million (7.9%). In fiscal year 2019 employer taxes and other revenues exceeded benefit payments by \$332.6 million. Employer Unemployment Insurance (UI) tax bills are based on both a base rate and the employer's experience rating. The base rate did not change during state fiscal year 2019; however, the experience ratings for many of Georgia's employers declined due to the continued decrease in the state's unemployment rate. This led to lower UI tax bills and a lower UI receivable.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The State's capital assets increased by a net \$1.2 billion (3.5%) during the year. The change consisted of a net increase in infrastructure of \$899.8 million, as well as net increases in machinery and equipment, software, land, and buildings of \$20.7 million, \$38.8 million, \$212.4 million and \$571.8 million respectively. Conversely, construction in progress decreased by \$(569.3) million.

(Unaudited)



At June 30, 2019, the State had general fund commitments of \$2.2 billion and capital project fund commitments of \$525.0 million for highway infrastructure and bridge construction. The State Road and Tollway Authority had \$465.2 million of commitments, which is primarily due to \$343.9 million for the I-285/GA 400 Interchange, \$109.4 million for the I-85 Widening Project and \$5.5 million for the Northwest Corridor Express Lane Project. Additionally, the Board of Regents had \$51.4 million for various construction and renovation projects.

Additional information on the State's capital assets can be found in *Note 9 – Capital Assets* of the Notes to the Financial Statements section of this report.

Table 4 - Capital Assets, Net of Accumulated Depreciation												
As of June 30, 2019 and 2018 (in thousands)												
	Governmental Activities				Business-type Activities				Total Primary Government			
		2019		2018		2019		2018		2019	2018	
Buildings/Building Improvements	\$	2,232,297	\$	2,138,265	\$	9,490,556	\$	9,012,743	\$	11,722,853	\$	11,151,008
Improvements Other Than Buildings		111,379		87,447		188,454		175,874		299,833		263,321
Infrastructure		12,872,483		12,000,811		255,850		227,688		13,128,333		12,228,499
Intangibles - Other Than Software	125,568 123,822		123,822				—		125,568		123,822	
Land		4,389,041		4,206,006		520,658		491,297		4,909,699		4,697,303
Library Collections		—				169,985		179,577		169,985		179,577
Machinery and Equipment		278,222		270,800		564,063		550,794		842,285		821,594
Software		283,852		267,735		108,651		85,946		392,503		353,681
Works of Art and Collections		1,400		1,391		60,018		57,006		61,418		58,397
Construction in Progress		3,400,958		3,912,899		233,836		291,173		3,634,794		4,204,072
Total	\$	23,695,200	\$	23,009,176	\$	11,592,071	\$	11,072,098	\$	35,287,271	\$	34,081,274

Note: Prior year adjustments recorded in the current year have not been reflected in the prior year column in the table above.

Debt Administration

The Constitution authorizes issuing general obligation debt only as approved by the legislature and prohibits the issuance of general obligation bonds for operating purposes. The Constitution requires the State to maintain a reserve sufficient to pay annual debt service requirements on all general obligation debt. If for any reason the reserve balance is insufficient to make all debt service payments when due, the first revenues received thereafter in the General Fund will be set aside for such use. The Constitution also stipulates that no debt may be incurred when the highest aggregate annual debt service requirements for any year for outstanding general obligation debt and guaranteed revenue debt, including proposed debt, exceed 10% of the total revenue receipts, less refunds in the state treasury, in the fiscal year immediately preceding the year in which any such debt is to be incurred. At June 30, 2019, the State was \$1.1 billion below the annual debt service limit established by the Constitution.

(Table on next page)

(Unaudited)

Table 5 - Net Outstanding Bond Debt As of June 30, 2019 and 2018 (in thousands)									
		imental vities		ess-type ivities	Total Primary Government				
	2019	2018	2019	2018	2019	2018			
General Obligation Bonds	\$10,352,603	\$10,043,489	\$ —	\$ —	\$10,352,603	\$10,043,489			
GARVEE Revenue Bonds	397,825	397,825	—	—	397,825	397,825			
Revenue Bonds	215,945	215,945	242,003	266,150	457,948	482,095			
	\$10,966,373	\$10,657,259	\$242,003	\$ 266,150	\$11,208,376	\$10,923,409			

Note: Prior year adjustments recorded in the current year have not been reflected in the prior year column in the table above.

At the end of the fiscal year, the State had \$11.2 billion in total outstanding bonded debt. Of this amount \$10.6 billion (net of premiums and discounts) (94.3%), is secured by the full faith and credit of the government for general obligation bonds and guaranteed revenue bonds; \$242.0 million (2.2%), is secured primarily by lease arrangements with the Board of Regents or applicable security deed and related assignment of contract documents; and \$397.8 million (3.5%) in State Road and Tollway Authority GARVEE debt is secured by Federal Highway Administration grant funds and state motor fuel funds.

Total general obligation bonds and revenue bonds payable, net of premiums and discounts, increased \$309.1 million (3.1%) and decreased \$24.1 million (2.7%) respectively, prior to restatements. During the fiscal year, the State issued \$1.2 billion of general obligation bonds, excluding premiums, discounts, and refunding issues. Of the general obligation bonds issued, \$304.7 million was issued for K-12 school facilities, \$485.1 million was issued for higher education facilities, \$200.0 million was issued for transportation projects and bridge maintenance, \$69.0 million for economic development, \$16.0 million for water and sewer loans to local governments, and \$153.8 million for various state agency facilities.

The State maintains a triple-A bond rating on its general obligation debt from all three national rating agencies. These ratings, the highest available, help the State achieve the lowest possible interest rates. Additional information regarding the State's outstanding debt can be found in *Note 10 – Long-Term Liabilities* of the notes to the financial statements section.

BUDGETARY HIGHLIGHTS

Fiscal Year 2019 Budget Highlights

The fiscal year 2019 budget focused on meeting growth needs in education, addressing needs in human services programming, and continuing to meet the state's pension obligations. The budget was built on 4.1% net revenue growth over the Amended FY 2018 budget, including 4.1% expected tax growth. Examples of growth in budgetary functions included:

K-12 Education

- \$114.9 million in additional funds for the Quality Basic Education (QBE) program to fund enrollment growth and teacher training and experience.
- \$166.8 million to eliminate remaining austerity adjustments and fully fund the QBE funding formula.
- \$30.7 million for the Quality Basic Education Equalization program to assist low-wealth school systems.

(Unaudited)



Higher Education

- \$54.3 million to fully fund enrollment growth for the University System.
- \$82.4 million in federal funds to transfer the Governor's Office of Workforce Development from the Department of Economic Development to leverage workforce development initiatives and education resources to meet industry workforce training demands.
- \$68.1 million in additional lottery funds to provide a 3% increase in the award amount for the HOPE scholarships and grants.
- \$26.7 million for growth in the Dual Enrollment program.

Human Services

- \$240.9 million for Medicaid.
- \$41.2 million to meet increased demand in child welfare programs.
- \$19.1 million for behavioral health services as recommended by the Commission on Children's Mental Health.
- \$11.8 million for additional waivers and services as part of the DOJ settlement extension.

Transportation Infrastructure

- \$31.6 million for transportation projects as a result of additional revenues from HB 170.
- \$100 million in bond funds for the repair, replacement, and renovation of bridges throughout the state.
- \$100 million in bond funds for transit grants statewide.
- \$35 million in bond funds for the Savannah Harbor Deepening project.

Other

• \$364.9 million to meet the ADEC for the Teachers Retirement System

Amended Fiscal Year 2019 Budget Highlights

	FY 2018 Original	SFY 2019	AFY 2019	FY 2019 Amended
	Budget	Changes	Changes	Amount
State General Fund Receipts	24,873,812,920	270,826,277	178,013,404	25,322,652,601
Lottery for Education Proceeds and Interest	1,201,496,219		2,908,641	1,204,404,860
Tobacco Settlement Funds and Interest	150,159,978		11,563,053	161,723,031
Brain and Spinal Injury Trust Fund	1,445,857			1,445,857
Mid-Year Adjustment for Education (K-12)			243,198,693	243,198,693
Total State Treasury Receipts	26,226,914,974	270,826,277	435,683,791	26,933,425,042

Management's Discussion and Analysis



(Unaudited)

In November 2018 Governor Nathan Deal convened a special session of the General Assembly to address supplemental funding needs resulting from Hurricane Michael, which caused widespread damage across southwest Georgia in October.

- Revenue estimate increase included \$205.9 million in state general funds and \$64.9 million in motor fuel funds.
- HB 1EX provided \$270.8 million of additional anticipated fiscal year 2019 revenue growth to address disaster response and economic development efforts in hurricane impacted counties, including:
 - \$69.3 million for the Governor's Emergency Fund to pay the state match for federal disaster assistance funding for expenses related to damages and operating costs associated with Hurricane Michael.
 - \$55 million for emergency disaster relief assistance for farmers and \$20 million for timberland owners in counties impacted by Hurricane Michael.
 - \$8.2 million for the Georgia Forestry Commission to replace equipment and facilities damaged by Hurricane Michael.
 - \$25 million for the OneGeorgia Authority to provide financial assistance to local communities impacted by Hurricane Michael and for statewide economic development efforts, and \$15 million for Regional Economic Business Assistance (REBA) grants for projects with immediate statewide economic impact.
 - \$69.3 million in state general and motor fuel funds estimated as a result of HB 170 to be used to offset expenses incurred as a result of Hurricane Michael.

The amended fiscal year 2019 appropriations bill was signed by the Governor on March 12, 2019 as passed by the General Assembly with no vetoes, and provides \$435.7 million in additional revenue over the current budget.

- The amended fiscal year 2019 budget was built on a 4.1% increase in general fund revenue collections over fiscal year 2018 actuals, including a 4.1% increase in tax revenues.
- Limited changes in amended bill over those included in the special legislative session, focused on meeting growth needs in education and human services:
 - \$88.9 million for a midterm adjustment for enrollment in the Quality Basic Education (QBE) program.
 - \$42.1 million for the State Commission Charter Schools supplement to implement HB 787 (2018 Session).
 - \$69.4 million to provide school security grants.
 - \$8.4 million to provide school-based mental health services in high schools through the Georgia Apex Program.
 - \$50.9 million for the Indigent Care Trust Fund and Medicaid
 - \$9.9 million for child welfare services for expenses associated with the increased number of children in state custody.
 - \$20 million for further disaster relief funding to agricultural communities affected by Hurricane Michael.

Fiscal Performance

Total state fund revenues increased by 5.1% to \$25.6 billion, which includes a 4.8% increase in tax revenue collections over fiscal year 2018, exceeding the revenue estimate by 1.0% and enabling the State to add to the revenue shortfall reserve.

These results are consistent with the State's practice of setting conservative revenue estimates and corresponding budgets. These results have a direct impact on the State's revenue shortfall reserve discussed below.

Management's Discussion and Analysis

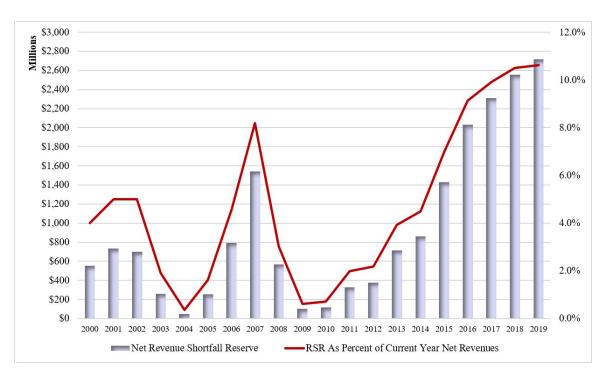
(Unaudited)



Revenue Shortfall Reserve (RSR)

The RSR provides for the sound management of excess revenue collections in any given fiscal year. By statute, all surplus State funds existing at the end of each fiscal year shall be reserved and added to the RSR. Each fiscal year, the General Assembly may appropriate from the RSR an amount up to 1% of the net revenue collections of the preceding fiscal year for funding increased K-12 education needs. Also, the Governor may release for appropriation by the General Assembly a stated amount of reserve funds in the RSR that are in excess of 4% of the net revenue collections of the preceding fiscal year. The RSR cannot exceed 15% of the previous fiscal year's net revenue collections.

The ending balance in the RSR is a critical tool in helping to address budget shortfalls similar to those witnessed during the Great Recession. After reaching a peak in fiscal year 2007 at \$1.7 billion (9.2% of state general fund receipts/net revenue collections), the State's RSR balance declined to a low of \$268.2 million in fiscal year 2010. For the year ended June 30, 2019, the RSR increased by \$263.5 million and has a current balance of \$3.1 billion. The RSR balance is now the largest balance in the history of the state.



The increase to the RSR was accomplished due to revenue collections exceeding revenue estimates (\$248.4 million) and return of unexpended and unobligated funds by agencies. By statute, 1% of fiscal year 2019 state general fund receipts/net revenue collections (\$255.7 million) is available from the RSR for the mid-year K-12 education appropriation adjustment in the amended fiscal year 2019 budget. However, this amount had not been appropriated as of the date of this report.

Management's Discussion and Analysis *(Unaudited)*



ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

Economic Results During 2019

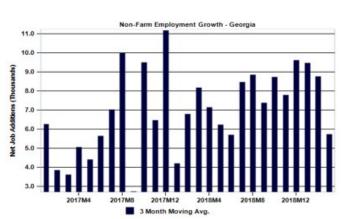
Governor's revenue estimates assumed an economic track in which GDP growth slows from 2018 levels but continues in line with the overall post-Great Recession period. This indicates moderate growth, tightening of job markets, a pick up in wage growth and gradually rising interest rates. No recession is anticipated during the budget period.

Market volatility, government shut-down, and other factors increased concerns about growth prospects but the most recent economic data has calmed those fears. Atlanta Fed GDPNow tracking estimate of 1st quarter GDP growth is 2.3%, still above trend growth post Great Recession.

Georgia's economy continues to grow. The pace of Georgia job growth exceeds that of the US. Unemployment is very low and unemployment insurance claims activity is below year ago levels. Home price growth nationally and, to a lesser extent, in Georgia is slowing but still positive. Growth in activity at Georgia's Ports remains strong.

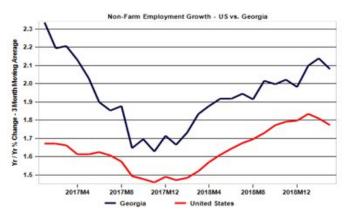
The economy appears to have shrugged off stock market volatility of December 2018 and the weak economic data of early 2019 and resumed growth in line with post-recession trends. This is expected to continue although there are risks. Slower global growth and potentially contentious trade negotiations could weigh on growth prospects.

Georgia Labor Market Continues to Expand

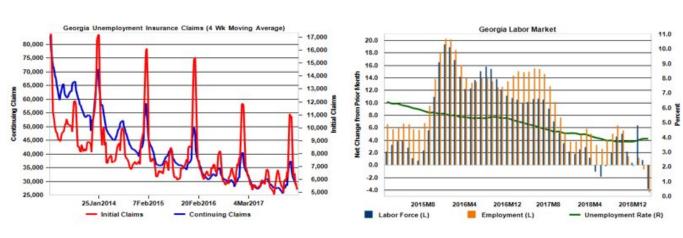


Georgia Added 85 Jobs over 12 Months Ended Mar18

Georgia Job Growth Continues to Outpace that of US



(Unaudited)



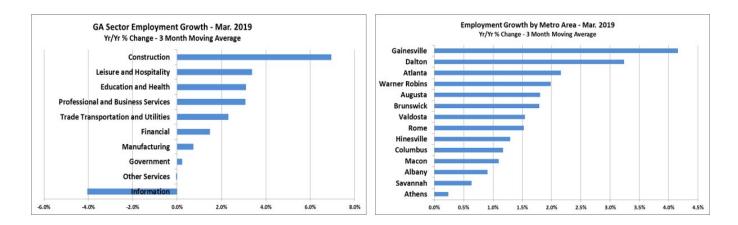
Unemployment Insurance Claims Healthy

Household Survey Data Reflect Strong Labor Market Conditions

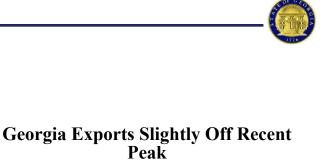
Job Growth is Diverse; International Trade Activity Still Strong

Job Growth Well-Diversified Across Sectors...

...And Across Metro Areas



Management's Discussion and Analysis *(Unaudited)*



10,200

9,900

9,600

9,300

9.000

8,700

8,400

8,100

7,800

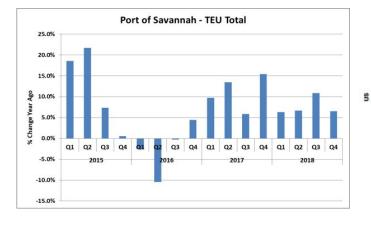
7,500

7,200

6,900

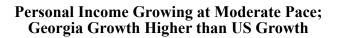
6,600

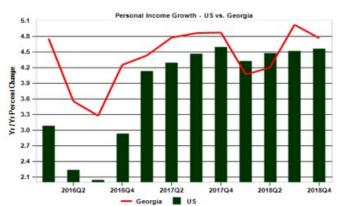
2018Q3



Total Port Throughput Growing Briskly

Personal Income Growing at Moderate Pace





Georgia Wage and Salary Growth Lagging Overall Personal Income Growth



2014Q4

Georgia (NSA)

2016Q1

2017Q2

2013Q3

Value of Exports - US vs Georgia (\$ M)

1,680,000

1,640,000

1,600,000

1,560,000

1,520,000

1,480,000

1,440,000

1,400,000

1,360,000

1.320.000

1,280,000

1,240,000

1,200,000

2011Q1

2012Q2

- US (SAAR)

Management's Discussion and Analysis

(Unaudited)

Housing Market has Weakened



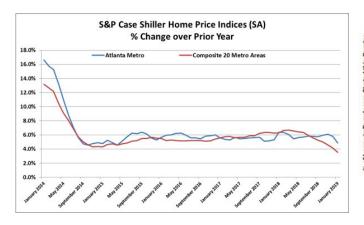
Home Sales have Weakened

Housing Starts Down in US; Holding Up in Georgia



Growth in Home Prices Increasing is Slowing

Mortgage Foreclosures Declined Below Prerecession Rate



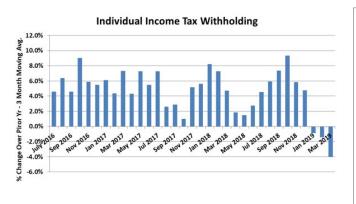




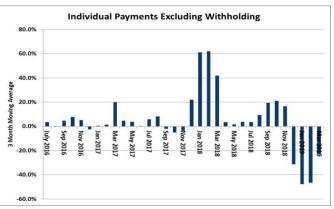
(Unaudited)

Recent Revenue Collection Trends Impacted by Federal and State Tax Reform

Tax Rate Reduction Impacting Withholding Revenue

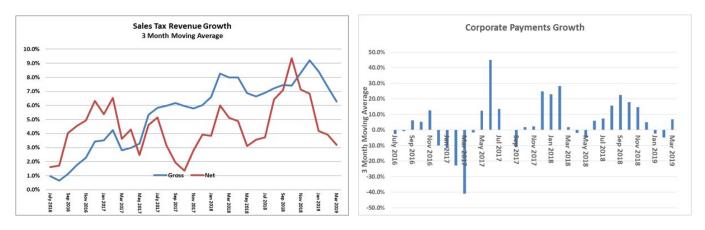


SALT Limitation Having Major Impact on Timing of Payments



Sales Tax Revenue Growth Slowing a Bit

Corporate Payments Growth



HB 918 - Annual Internal Revenue Code update (2018 Legislative Session)

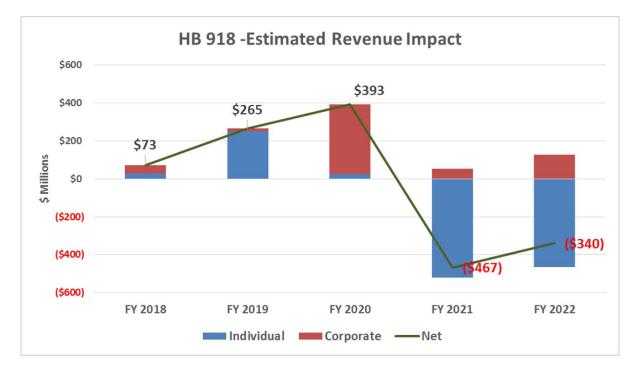
Conforms to IRS code post-2017 Federal tax changes (with selected exceptions) and incorporates changes to Georgia tax structure.

- Step 1 Double standard deduction (e.g. MFJ doubles from \$3,000 to \$6,000). Effective 1/1/2018.
- Step 2 Reduce income tax rate from 6.0% to 5.75%. Applies to top PIT rate and corporate rate. Effective 1/1/2019.
- Step 3 Reduce income tax rate to 5.5%. Applies to top PIT rate and corporate rate. Effective 1/1/2020 but requires joint resolution from House and Senate and signature of Governor on or after 1/13/2020.
- These changes to Georgia tax structure sunset on 12/31/2025.

(Graph on next page)

Management's Discussion and Analysis

(Unaudited)



Fiscal Year 2020 Budget Highlights

The fiscal year 2020 budget focused on meeting growth needs in education, including increasing the base salaries for teachers, addressing needs in human services programming, and continuing to meet the state's pension obligations. The budget was built on 3.2% general fund revenue growth over the Amended fiscal year 2019 budget, including 3.5% expected tax growth. On a budgetary basis, the State of Georgia's fiscal year 2020 net tax revenue collections for July 2019 through November 2019 totaled \$9.6 billion for a decrease of approximately \$33.6 million (0.3%) compared to the same period of fiscal year 2019.

Education

- \$532.3 million to provide a \$3,000 increase to the state base salary schedule for certified teachers and employees and a two percent increase for non-certificated employees.
- \$133.2 million for enrollment growth and training and experience to recognize a 0.05 percent increase in enrollment.
- \$78.6 million for the QBE Equalization program to assist low-wealth school systems.
- \$86.2 million for resident instruction to reflect an increase in credit hour enrollment, graduate medical education, and square footage at University System institutions.

Human Services

- \$165 million for Medicaid and PeachCare for Kids.
- \$12.6 million to meet increased demand in child welfare programs.
- \$26.4 million for core behavioral health services.

Other

- \$115.1 million to continue to address state employee salary needs through merit increases.
- \$21.5 million to fully fund the actuarially determined employer contribution for the Teachers Retirement System.
- \$32.2 million for transportation projects as a result of additional revenues from HB 170

Management's Discussion and Analysis (Unaudited)



REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the State's finances for all of the State's citizens, taxpayers, customers, and investors and creditors. This financial report seeks to demonstrate the State's accountability for the money it receives. Questions concerning any of the information provided in this report or requests for additional information should be addressed to: State Accounting Office, 200 Piedmont Avenue, Suite 1604 West Tower, and Atlanta, Georgia 30334-9010.

BASIC FINANCIAL STATEMENTS

State of Georgia Statement of Net Position



June 30, 2019 (dollars in thousands)

		Primary Government		Component	
	Governmental	Business-type			
	Activities	Activities	Total	Units	
Assets	¢	A	* * * * *	* - - - - - - - - - -	
Cash and Cash Equivalents	\$ 4,283,091	\$ 1,220,937	\$ 5,504,028	\$ 732,726	
Pooled Investments with State Treasury	4,734,377	769,977	5,504,354	1,626,783	
Investments	2,966,999	794,708	3,761,707	1,156,086	
Receivables (Net)	5,688,793	732,390	6,421,183	5,848,833	
Due from Primary Government	—	—	—	78,944	
Due from Component Units	104,910	473,068	577,978	_	
Internal Balances	419,525	(419,525)	_	—	
Inventories	35,990	30,313	66,303	34,139	
Prepaid Items	48,774	66,783	115,557	59,380	
Other Assets	76,646	2,751	79,397	164,138	
Restricted Assets					
Cash and Cash Equivalents		2,769,053	2,769,053	424,097	
Pooled Investments with State Treasury	235,652	124,191	359,843	99,527	
Investments	_	250,495	250,495	3,522,081	
Receivables (Net)	_	_	_	1,316,471	
Net Pension Asset	100,647	_	100,647	9,420	
Net OPEB Asset	231,068	12,035	243,103	3,000	
Capital Assets					
Nondepreciable	7,916,524	809,738	8,726,262	911,576	
Depreciable (Net of Accumulated Depreciation)	15,778,676	10,782,333	26,561,009	3,559,974	
Total Assets	42,621,672	18,419,247	61,040,919	19,547,175	
Deferred Outflows of Resources	1,919,380	1,432,993	3,352,373	137,423	
Liabilities					
Accounts Payable and Accrued Liabilities	1,689,025	290,801	1,979,826	346,368	
Local Education Agencies Payable	1,300,055	290,001	1,300,055	540,500	
Due to Primary Government	1,500,055		1,500,055	577,978	
Due to Component Units	64,716	14,228	78,944	577,978	
Benefits Payable	1,540,677	248,343	1,789,020		
Accrued Interest Payable				8 42,110	
-	253,126	2,703	255,829		
Contracts Payable	74,511	29,388	103,899	54,457	
Funds Held for Others	156,547	99,507	256,054	43,338	
Unearned Revenue	117,273	370,290	487,563	170,382	
Claims and Judgments Payable	916,988	2,667	919,655	1,000	
Other Liabilities	232,527	52,554	285,081	1,156,768	
Noncurrent Liabilities:					
Due within one year	1,215,960	329,203	1,545,163	310,260	
Due in more than one year					
Net Pension Liability	3,996,404	3,370,692	7,367,096	202,626	
Net OPEB Liability	2,126,551	4,693,818	6,820,369	139,917	
Other Noncurrent Liabilities	10,425,930	3,304,838	13,730,768	4,919,711	
Total Liabilities	24,110,290	12,809,032	36,919,322	7,964,923	
Deferred Inflows of Resources	1,454,518	1,465,855	2,920,373	74,569	
				(continued)	

(continued)

Statement of Net Position

June 30, 2019 (dollars in thousands)

	1			
	Governmental Activities	Business-type Activities	Total	Component Units
Net Position				
Net Investment in Capital Assets (1)	20,361,680	8,429,136	25,566,212	3,534,685
Restricted for:				
Bond Covenants/Debt Service	64,016	_	64,016	94,454
Capital Projects		13,076	13,076	217,230
Guaranteed Revenue Debt Common Reserve Fund	53,776	_	53,776	_
Loan and Grant Programs	—	_	_	1,844,780
Lottery for Education	1,354,630	—	1,354,630	_
Motor Fuel Tax Funds	3,508,961	—	3,508,961	_
Nonexpendable:				
Permanent Trust	—	181,016	181,016	2,398,751
Other Programs	—	—	—	46,977
Other Benefits	—	305,877	305,877	_
Other Purposes	1,293,746	313,732	1,607,478	407,868
Permanent Trust Expendable		—	_	804,556
Unemployment Compensation Benefits		2,535,856	2,535,856	_
Unrestricted ⁽¹⁾	(7,660,565)	(6,201,340)	(10,637,301)	2,295,805
Total Net Position	\$ 18,976,244	\$ 5,577,353	\$ 24,553,597	\$ 11,645,106

⁽¹⁾ Refer to Note 4 for additional details



Statement of Activities For the Fiscal Year Ended June 30, 2019

(dollars in thousands)

	Expenses		Sales and Charges for Services		Program Revenues Operating Grants and Contributions		Capital Grants and Contributions	
Functions/Programs	 Expenses		Services		ontributions		miloutons	
Primary Government								
Governmental Activities:								
General Government	\$ 1,262,837	\$	761,015	\$	384,320	\$	68,681	
Education	13,892,451		12,656		2,358,034		—	
Health and Welfare	18,015,041		75,300		12,655,639		4,028	
Transportation	2,668,539		42,858		61,500		1,525,618	
Public Safety	2,605,402		187,020		416,394		10,125	
Economic Development and Assistance	465,465		52,198		248,575		2,080	
Culture and Recreation	309,863		165,437		93,895		3,472	
Conservation	54,758		3,859		17,891		681	
Interest and Other Charges on Long-Term Debt	 381,895							
Total Governmental Activities	 39,656,251		1,300,343		16,236,248		1,614,685	
Business-type Activities:								
Higher Education	9,739,025		3,730,124		3,251,794		25,431	
State Health Benefit Plan	2,613,192		2,523,714		21,978		_	
Unemployment Compensation	319,367		592,707		58,391		_	
Other Business-type Activities	205,638		40,566		22,567		84,407	
Total Business-type Activities	 12,877,222		6,887,111		3,354,730		109,838	
Total Primary Government	\$ 52,533,473	\$	8,187,454	\$	19,590,978	\$	1,724,523	
Component Units								
Georgia Environmental Finance Authority	\$ 47,011	\$	32,668	\$	122,416	\$	_	
Geo. L. Smith II Georgia World Congress Center Authority	197,590		66,004		13,349		6,790	
Georgia Housing and Finance Authority	187,208		87,787		125,496			
Georgia Lottery Corporation	4,545,758		4,553,368				_	
Georgia Ports Authority	304,938		473,619		7,498		21,151	
Georgia Tech Foundation, Incorporated	122,586		32,981		137,048		21,131	
Nonmajor Component Units	3,199,983		1,523,881		1,682,709		33,503	
Total Component Units	\$ 8,605,074	\$	6,770,308	\$	2,088,516	\$	61,444	
Total Component Onits	\$ 8,003,074	¢	0,770,508	φ	2,088,510	φ	01,444	
General Revenues:								
Taxes								
Income Taxes - Individual								
Sales and Use Taxes - General								
Motor Fuel Taxes								
Motor Vehicle License and Title Ad Valorem Taxes								
Corporate Taxes								

Other Taxes

Lottery for Education - Lottery Proceeds

Nursing Home and Hospital Provider Fees

Tobacco Settlement Funds

Unrestricted Investment Income/(Loss) Unclaimed Property

Other Payments from the Primary Government Contributions to Permanent Endowments Transfers Total General Revenues, Contributions to Permanent Endowments and Transfers Change in Net Position Net Position, July 1 - Restated (Note 3)

Net Position, June 30



	Net (Expense)		
	Changes in I Primary Government		
Governmental Activities	Business-Type Activities	Total	Component Units
 (48,821) (11,521,761) (5,280,074) (1,038,563) (1,991,863) (162,612) (47,059) (32,327) (381,895) (20,504,975) 		\$ (48,821) (11,521,761) (5,280,074) (1,038,563) (1,991,863) (162,612) (47,059) (32,327) (381,895) (20,504,975)	
(20,504,975)	\$ (2,731,676) (67,500) 331,731 (58,098) (2,525,543) (2,525,543)	(2,731,676) (67,500) 331,731 (58,098) (2,525,543) (23,030,518)	
			\$ 108,073 (111,447) 26,075 7,610 197,330 47,443 40,110 315,194
12,255,424 6,226,817 1,836,890 1,253,113 1,272,157 939,419 1,207,369 488,218 163,851 205,072 144,841 221,221	 1,300	12,255,424 6,226,817 1,836,890 1,253,113 1,272,157 939,419 1,207,369 488,218 163,851 205,072 144,841 221,221 1,300	 28,663 61,717 123,793 80,954
(3,485,850) 22,728,542 2,223,567 16,752,677 5 18,976,244	3,485,850 3,487,150 961,607 4,615,746 \$ 5,577,353	26,215,692 3,185,174 21,368,423 \$ 24,553,597	295,127 610,321 11,034,785 \$ 11,645,106

Balance Sheet Governmental Funds June 30, 2019

	 General Fund	1	General Obligation Bond Projects Fund		Nonmajor Funds	 Total
Assets						
Cash and Cash Equivalents	\$ 3,028,133	\$	941,321	\$	289,948	\$ 4,259,402
Pooled Investments with State Treasury	4,600,903				5,462	4,606,365
Investments	2,180,667		659,699		85,030	2,925,396
Receivables (Net)	5,540,703		—		38,686	5,579,389
Due from Other Funds	17,245		—		25,654	42,899
Due from Component Units	104,859		—		—	104,859
Inventories	20,397		—		—	20,397
Restricted Assets						
Pooled Investments with State Treasury	61,640		—		174,012	235,652
Other Assets	 124,938				190	 125,128
Total Assets	\$ 15,679,485	\$	1,601,020	\$	618,982	\$ 17,899,487
Liabilities, Deferred Inflows of Resources and Fund Balances Liabilities:						
Accounts Payable and Other Accruals	\$ 2,874,874	\$	49,356	\$	2,449	\$ 2,926,679
Due to Other Funds	595,929		16,687		15,292	627,908
Due to Component Units	64,716		_		_	64,716
Benefits Payable	1,540,677		_		_	1,540,677
Contracts Payable	25,636		26,029		22,846	74,511
Undistributed Local Government Sales Tax	13,200		_		_	13,200
Funds Held for Others	155,758		_			155,758
Unearned Revenue	116,451		714			117,165
Other Liabilities	91,033		24,922		55,563	171,518
Total Liabilities	 5 479 274		117 709		96,150	 5 602 122
Total Liabilities	 5,478,274		117,708		90,130	 5,692,132
Deferred Inflows of Resources	 1,377,093					 1,377,093
Fund Balances:						
Nonspendable	20,780		—		16,770	37,550
Restricted	5,438,608		1,454,773		461,805	7,355,186
Unrestricted						
Committed	9,385		_		_	9,385
Assigned	522,273		28,539		44,257	595,069
Unassigned	 2,833,072					 2,833,072
Total Fund Balances	 8,824,118		1,483,312		522,832	 10,830,262
Total Liabilities, Deferred Inflows of Resources and Fund Balances	\$ 15,679,485	\$	1,601,020	\$	618,982	\$ 17,899,487
	 			_		



Reconciliation of Fund Balances To the Statement of Net Position June 30, 2019

(dollars in thousands)

Total Fund Balances - Governmental Funds (from previous page)	\$ 10,830,262
Amounts reported for governmental activities in the Statement of Net Position are different because:	

Capital Assets used in governmental activities are not financial resources and, therefore, are not reported in the funds. These assets consist of:

Total Net Position - Governmental Activities	\$	18,976,244
Ouici	 (00,809)	(17,941,797)
Net Pension Liability Other	(3,946,432) (60,869)	(17,941,797)
Net OPEB Liability	(2,097,668)	
Long-Term Notes	(56,709)	
Compensated Absences	(382,056)	
Capital Leases	(178,564)	
Accrued Interest Payable	(4,399)	
Premiums	(43,290)	
Revenue Bonds	(570,480)	
Accrued Interest Payable	(248,727)	
Premiums	(963,808)	
General Obligation Bonds	(9,388,795)	
Certain long-term liabilities and related accrued interest are not due and payable in the current period and, therefore, are not reported in the funds.		
Other Assets	 100	327,941
Net Pension Asset	100,647	
Net OPEB Asset	227,194	
Other assets not available in the current period and therefore are not reported in the governmental funds:		
Related to pensions	 1,119,259	1,899,828
Related to OPEB	678,939	
Amount on refunding of bonded debt	101,630	
Deferred outflows of resources are not reported in the governmental funds:		
Internal service funds are used by management to charge the costs of certain activities to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the Statement of Net Position.		590,564
Related to pensions	 (292,210)	(57,647)
Related to OPEB	(1,104,514)	(57 6 47)
Amount on refunding of bonded debt	(854)	
Revenues are not available soon enough after year end to pay for current period's expenditures	1,339,931	
Deferred inflows of resources are not reported in the governmental funds:		
Accumulated Depreciation	 (22,568,499)	23,327,093
Software	545,806	22 227 002
Intangibles - Other Than Software	126,769	
Works of Art	126	
Construction in Progress	3,386,798	
Infrastructure	32,464,073	
Machinery and Equipment	1,067,712	
Improvements Other Than Buildings	153,409	
Buildings and Building Improvements	3,784,230	
Land	\$ 4,366,669	
funds. These assets consist of:		

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Statement of Revenues, Expenditures, and Changes in Fund Balances Governmental Funds For the Fiscal Year Ended June 30, 2019

(dollars in thousands)

	General Fund	General Obligation ond Projects Fund	onmajor Funds	Total
Revenues:				
Taxes	\$ 23,702,030	\$ —	\$ —	\$ 23,702,030
Licenses and Permits	406,811	—	—	406,811
Intergovernmental - Federal	16,911,870	18,810	—	16,930,680
Intergovernmental - Other	472,214	38,598	152,786	663,598
Sales and Services	428,836	_	214	429,050
Fines and Forfeits	523,033	_	—	523,033
Interest and Other Investment Income	211,664	62,857	10,704	285,225
Unclaimed Property	144,841	—	—	144,841
Lottery Proceeds	1,207,369	_	—	1,207,369
Nursing Home Provider Fees	154,263	—	—	154,263
Hospital Provider Payments	333,955	_	—	333,955
Other	 327,806	 406	 	 328,212
Total Revenues	 44,824,692	 120,671	 163,704	 45,109,067
Expenditures:				
Current:				
General Government	1,014,394	4,396	—	1,018,790
Education	13,859,041	—	—	13,859,041
Health and Welfare	18,192,601	—	—	18,192,601
Transportation	3,144,609	—	95,135	3,239,744
Public Safety	2,697,770	_	—	2,697,770
Economic Development and Assistance	493,208	_	31,918	525,126
Culture and Recreation	311,170	—	—	311,170
Conservation	62,549	_	—	62,549
Capital Outlay	—	890,631	—	890,631
Debt Service				
Principal	—	_	1,029,075	1,029,075
Interest	178	_	436,038	436,216
Accrued Interest on Bonds Retired in Advance	—	—	5	5
Discount on Bonds Retired in Advance	—	—	27	27
Other Debt Service Expenditures	—	22,258	1,475	23,733
Intergovernmental	 	 178,421	 	 178,421
Total Expenditures	 39,775,520	 1,095,706	 1,593,673	 42,464,899
Excess (Deficiency) of Revenues Over (Under) Expenditures	5,049,172	 (975,035)	(1,429,969)	2,644,168
Other Financing Sources (Uses):				
Debt Issuance - General Obligation Bonds	_	1,228,625	_	1,228,625
Debt Issuance - Refunding Bonds	_	_	285,915	285,915
Debt Issuance - GARVEE Bonds	_	_	63,850	63,850
Debt Issuance - General Obligation Bonds - Premium	_	95,163		95,163
Debt Issuance - Refunding Bonds - Premium	_	_	27,159	27,159
Debt Issuance - GARVEE Bonds - Premium	_	_	11,455	11,455
Payment to Refunded Bond Escrow Agent	_	_	(313,095)	(313,095)
Capital Leases	16,304	_	_	16,304
Transfers In	69,333	9,359	1,574,347	1,653,039
Transfers Out	 (4,420,502)	 (16,632)	 (40,311)	 (4,477,445)
Net Other Financing Sources (Uses)	 (4,334,865)	 1,316,515	 1,609,320	 (1,409,030)
Net Change in Fund Balances	714,307	341,480	179,351	1,235,138
Fund Balances, July 1	8,109,811	1,141,832	343,481	9,595,124
Fund Balances, June 30	\$ 8,824,118	\$ 1,483,312	\$ 522,832	\$ 10,830,262

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The notes to the financial statements are an integral part of this statement.

Governmental Funds to the Statement of Activities

For the Fiscal Year Ended June 30, 2019

		\$ 1,235,138
nounts reported for governmental activities in the Statement of Activities are different because:		
Capital outlays are reported as expenditures in governmental funds. However, in the Statement of Activities, the cost of those assets is allocated over their estimated useful lives as depreciation expense. This is the amount by which capital outlays exceeded depreciation in the current period.		
Capital outlay (net of losses), net of transfers to Business-Type Activities, Component Units and outside organizations	\$ 1,816,475	
Depreciation expense	(1,165,231)	651,244
Revenues in the Statement of Activities that do not provide current financial resources are not reported as revenue in the governmental funds.		(17,251
Bond proceeds (net of payments to refunding escrow) and notes provide current financial resources to governmental funds; however, issuing debt increases long-term liabilities in the Statement of Net Position.		
Revenue Bonds Issued	(349,765)	
Premiums on Revenue Bonds Issued	(38,614)	
General Obligation Bonds Issued	(1,228,625)	
Premiums on General Obligation Bonds Issued	(95,163)	
Payments to escrow agent for refunding	313,095	(1,399,072
Some capital additions were financed through capital leases. In governmental funds, a capital lease arrangement is considered a source of financing, but in the Statement of Net Position, the lease obligation is reported as a liability.		(16,304
Repayment of long-term debt is reported as an expenditure in governmental funds, but the		
repayment reduces the long-term liabilities in the Statement of Net Position. Payments were made on the following long-term liabilities:		
repayment reduces the long-term liabilities in the Statement of Net Position. Payments were made on the following long-term liabilities: General Obligation Bonds	833,870	
were made on the following long-term liabilities:	833,870 195,205	
were made on the following long-term liabilities: General Obligation Bonds	,	
were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds	195,205	1,053,329
were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes	 195,205 2,903	1,053,329 28,538
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net 	195,205 2,903	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds.	195,205 2,903	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences	195,205 2,903 21,351 (14,642)	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences Accrued Interest on Bonds Payable 	195,205 2,903 21,351 (14,642) (6,345)	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences Accrued Interest on Bonds Payable Amortization of Deferred Amount on Refunding 	195,205 2,903 21,351 (14,642) (6,345) (43,478)	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences Accrued Interest on Bonds Payable Amortization of Deferred Amount on Refunding Bond Premiums 	195,205 2,903 21,351 (14,642) (6,345) (43,478) 124,167	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences Accrued Interest on Bonds Payable Amortization of Deferred Amount on Refunding Bond Premiums OPEB costs, net 	195,205 2,903 21,351 (14,642) (6,345) (43,478) 124,167 547,380	
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences Accrued Interest on Bonds Payable Amortization of Deferred Amount on Refunding Bond Premiums OPEB costs, net Pension costs, net 	195,205 2,903 21,351 (14,642) (6,345) (43,478) 124,167 547,380 107,163	28,538
 were made on the following long-term liabilities: General Obligation Bonds Revenue Bonds Notes Capital Leases Internal service funds are used by management to charge the costs of certain activities to individual funds. The incorporation of the external activities of these funds, and the elimination of profit/loss generated by primary government customers results in net revenue (expense) for Governmental Activities. Some items reported in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in the governmental funds. This adjustment combines the net changes in the following balances: Compensated Absences Accrued Interest on Bonds Payable Amortization of Deferred Amount on Refunding Bond Premiums OPEB costs, net 	195,205 2,903 21,351 (14,642) (6,345) (43,478) 124,167 547,380	

State of Georgia Statement of Net Position

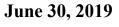
Statement of Net Position Proprietary Funds June 30, 2019

		Governmental Activities -				
	Higher Education Fund	State Health Benefits Plan	Unemployment Compensation Fund	Nonmajor Funds	Total	Internal Service Funds
Assets						
Current Assets:						
Cash and Cash Equivalents	\$ 1,025,378	\$ 195,472	\$	\$ 87	\$ 1,220,937	\$ 23,695
Pooled Investments with State Treasury	427,038	303,835	_	39,104	769,977	128,012
Investments	72,644	135,481	_	305,795	513,920	6,290
Accounts Receivable (Net)	447,679	118,292	120,985	10,104	697,060	109,385
Due from Other Funds	16,687	4,706	_	72	21,465	834,254
Due from Component Units	275,493	_	—	197,575	473,068	50
Inventories	30,187	_	_	126	30,313	15,593
Other Assets	69,504	_	—	30	69,534	193
Restricted Assets:						
Cash and Cash Equivalents	262,315	_	2,495,750	7,652	2,765,717	_
Restricted Pooled Investments with State Treasury	—	_	_	124,191	124,191	_
Investments	519	_	—	_	519	—
Total Current Assets	2,627,444	757,786	2,616,735	684,736	6,686,701	1,117,472
Noncurrent Assets:						
Investments	197,695	83,093	_	_	280,788	35,313
Other Receivables	1,655	—	_	_	1,655	_
Notes Receivable	33,603	—	—	_	33,603	
Restricted Assets:						
Cash and Cash Equivalents	3,336	—	—	_	3,336	_
Investments	249,976	_	_	_	249,976	_
Net OPEB Asset	11,340	293	—	402	12,035	3,874
Non-Depreciable Capital Assets	767,673	—	—	42,065	809,738	37,806
Depreciable Capital Assets, net	10,724,825	_	_	57,508	10,782,333	330,300
Total Noncurrent Assets	11,990,103	83,386		99,975	12,173,464	407,293
Total Assets	14,617,547	841,172	2,616,735	784,711	18,860,165	1,524,765
Deferred Outflows of Resources	1,417,337	2,457		13,199	1,432,993	19,556
						(continued)



State of Georgia Statement of Net Position

Statement of Net Position Proprietary Funds



(dollars in thousands)

	Business-type Activities - Enterprise Funds							
	Higher Education Fund	State Health Benefits Plan	Unemployment Compensation Fund	Nonmajor Funds	Total	Internal Service Funds		
Liabilities								
Current Liabilities:								
Accounts Payable and Other Accruals	255,471	3,877	10,255	21,190	290,793	49,202		
Due to Other Funds	244,955	—	—	25,654	270,609	12		
Due to Component Units	14,228	—	—	—	14,228			
Benefits Payable	45,015	195,355	7,973	—	248,343	—		
Unearned Revenue	256,803	9,700	62,651	—	329,154	108		
Notes and Loans Payable	1,141	_	—	35,000	36,141	3,891		
Claims and Judgments Payable	2,667	—	—	—	2,667	916,988		
Compensated Absences Payable	174,136	215	—	179	174,530	2,112		
Capital Leases/Installment Purchases Payable								
Component Units	92,116	_	_	_	92,116	_		
Other	20,545	_	_	_	20,545	5,548		
Revenue Bonds Payable	_	_	_	5,580	5,580	_		
Other Current Liabilities	150,152	8	_	29,828	179,988	931		
Current Liabilities Payable								
from Restricted Assets				29,671	29,671			
Total Current Liabilities	1,257,229	209,155	80,879	147,102	1,694,365	978,792		
Noncurrent Liabilities:								
Compensated Absences Payable	89,951	190	—	559	90,700	2,828		
Capital Leases/Installment Purchases Payable								
Component Units	2,273,012	_	_	_	2,273,012			
Other	470,536	_	_	_	470,536	35,147		
Claims and Judgments Payable	4,464	_	_	_	4,464	_		
Revenue Bonds Payable	_	_	_	236,423	236,423			
Notes and Loans Payable	11,620	_	_	221,698	233,318	8,662		
Net OPEB Liability	4,684,160	2,848	_	6,810	4,693,818	28,884		
Net Pension Liability	3,354,840	7,215	_	8,637	3,370,692	49,973		
Other Noncurrent Liabilities	11,465	_	_	849	12,314	_		
Total Noncurrent Liabilities	10,900,048	10,253		474,976	11,385,277	125,494		
Total Liabilities	12,157,277	219,408	80,879	622,078	13,079,642	1,104,286		
Deferred Inflows of Resources	1,462,682	1,849		1,324	1,465,855	19,779		
Net Position								
Net Investment in Capital Assets	8,340,144			88,992	8,429,136	323,800		
Restricted for:	0,040,144			00,772	0,429,150	525,800		
Capital Projects	13,076				13,076			
Other Purpose	270,889	261		42,582	313,732	3,066		
Nonexpendable:	270,009	201	_	42,562	515,752	5,000		
Permanent Trust	181,016	_	_		181,016			
Other Benefits	101,010	_	_	305,877	305,877			
Unemployment Compensation Benefits			2,535,856	505,877	2,535,856			
Unrestricted	(6,390,200)	622,111	2,555,650	(262,943)	(6,031,032)	93,390		
			\$ 2,525,95 <i>4</i>					
Total Net Position	\$ 2,414,925	\$ 622,372	\$ 2,535,856	\$ 174,508	5,747,661	\$ 420,256		
Adjustment to reflect the consolidation of In	ternal Service Fund ac	tivities related to Ente	rprise Funds.		(170,308)			
Net Position of Business-type Activities					\$ 5,577,353			



The notes to the financial statements are an integral part of this statement.



Statement of Revenues, Expenses, and Changes in Net Position Proprietary Funds For the Fiscal Year Ended June 30, 2019

		Governmental Activities -					
	Higher Education Fund	State Health Benefits Plan	Unemployment Compensation Fund	Nonmajor Funds	Total	Internal Service Funds	
Operating Revenues:							
Operating Contributions/Premiums	\$ 150,884	\$ 2,523,714	\$ 592,707	\$ 531	\$ 3,267,836	\$ 243,652	
Operating Grants	2,016,509	—	5,529	—	2,022,038	—	
Rents and Royalties	11,400	—	—	—	11,400	49,178	
Sales and Services	1,241,922	—	—	40,035	1,281,957	355,564	
Tuition and Fees	3,010,313	—	—	—	3,010,313	—	
Less: Scholarship Allowances	(737,801)	—	—	—	(737,801)	—	
Other	53,406				53,406	7,384	
Total Operating Revenues	5,746,633	2,523,714	598,236	40,566	8,909,149	655,778	
Operating Expenses:							
Personal Services	5,443,270	4,094	—	10,012	5,457,376	41,231	
Services and Supplies	2,494,627	113,581	—	34,843	2,643,051	364,192	
Scholarships and Fellowships	478,914	—	—	—	478,914	—	
Benefits Expense	434,268	2,495,517	302,700	3,424	3,235,909	—	
Claims and Judgments	—	—	—	—	—	250,585	
Interest Expense	—	—	—	8,698	8,698	—	
Depreciation	587,775	—	—	11,685	599,460	27,657	
Amortization	—	—	—	(312)	(312)	—	
Other				649	649		
Total Operating Expenses	9,438,854	2,613,192	302,700	68,999	12,423,745	683,665	
Operating Income (Loss)	(3,692,221)	(89,478)	295,536	(28,433)	(3,514,596)	(27,887)	
Nonoperating Revenues (Expenses):							
Grants and Contributions	1,164,563	—	—	_	1,164,563	7,388	
Interest and Other Investment Income	67,497	21,978	52,862	22,217	164,554	5,055	
Interest Expense	(139,227)	_	—	(10,012)	(149,239)	—	
Other	(144,524)		(16,667)	(126,283)	(287,474)	(1,825)	
Net Nonoperating Revenues (Expenses)	948,309	21,978	36,195	(114,078)	892,404	10,618	
Income (Loss) Before Contributions and transfers	(2,743,912)	(67,500)	331,731	(142,511)	(2,622,192)	(17,269)	
Contributions to Permanent Endowments	1,300				1,300		
Capital Grants and Contributions	603,888	_	_	84,407	688,295	118,339	
Total Contributions	605,188			84,407	689,595	118,339	
Transfers:							
Transfers In	2,904,607		864	14,660	2,920,131	15,065	
Transfers Out	(12,671)		804	14,000	(12,671)	(100,846)	
					(12,071)	(100,040)	
Net Transfers	2,891,936		864	14,660	2,907,460	(85,781)	
Change in Net Position	753,212	(67,500)	332,595	(43,444)	974,863	15,289	
Net Position, July 1 - Restated (Note 3)	1,661,713	689,872	2,203,261	217,952		404,967	
Net Position, June 30	\$ 2,414,925	\$ 622,372	\$ 2,535,856	\$ 174,508		\$ 420,256	
	3 2,414,923		, , , , , , , , , , , , , , , , , , , ,				
Adjustment to reflect the consolidation of Inte					(13,256)		

Statement of Cash Flows Proprietary Funds For the Fiscal Year Ended June 30, 2019

(dollars in thousands)

Other Operating Payments (3,123,123,123,123,123,123,123,123,123,12	State Health Benefits Plan	Unemployment Compensation Fund	Nonmajor Funds	Total	Activities - Internal Service Funds
Cash Received from Customers\$56,5Cash Received from Other Funds (Internal Activity)Cash Received from Grants and Required Contributions/ Premiums (Internal Activity)2,000,5Cash Received from Grants and Required Contributions/ Premiums (Internal Activity)2,000,5Cash Received from Tuition and Fees3,599,4Cash Paid to Vendors(3,980,5)Cash Paid to Vendors(4,322,5)Cash Paid to Employees(4,322,5)Cash Paid for BenefitsCash Paid for Claims and JudgmentsCash Paid to Other Funds (Internal Activity)Cash Paid for Scholarships, Fellowships and LoansOther Operating Receipts9,5Other Operating Receipts9,5Other Operating Payments(3,123,1)Cash Flows from Noncapital Financing Activities(3,123,1)Interest Paid on DebtTransfers from Other Funds(12,6)Transfers to Other Funds(12,6)Payments on Noncapital Financing Debt0Other Noncapital Receipts1,020,4)Other Noncapital Payments(39,8)	961 \$				
Cash Received from Other Funds (Internal Activity)Cash Received from Grants and Required Contributions/ PremiumsPremiumsCash Received from Grants and Required Contributions/ Premiums (Internal Activity)Cash Received from Tuition and FeesCash Paid to VendorsCash Paid to VendorsCash Paid for BenefitsCash Paid for Claims and JudgmentsCash Paid to Other Funds (Internal Activity)Cash Paid for Scholarships, Fellowships and LoansOther Operating ReceiptsOther Operating ReceiptsNet Cash Provided by (Used in) Operating ActivitiesInterest Paid on DebtTransfers from Other FundsTransfers to Other FundsOther Noncapital Financing DebtOther Noncapital Receipts1,020,4Other Noncapital Receipts1,020,4Other Noncapital PaymentsCash Paid on DebtTransfers to Other FundsCash Paid on DebtCher Noncapital Pinancing DebtOther Noncapital PaymentsCash Payme	961 \$	<u>^</u>			
Cash Received from Grants and Required Contributions/ Premiums2,000,5Cash Received from Grants and Required Contributions/ Premiums (Internal Activity)3,599,4Cash Received from Tuition and Fees3,599,4Cash Paid to Vendors(3,980,8Cash Paid to Vendors(3,980,8Cash Paid to Employees(4,322,8Cash Paid for Benefits2Cash Paid for Claims and Judgments2Cash Paid to Other Funds (Internal Activity)2Cash Paid for Scholarships, Fellowships and Loans(486,2Other Operating Receipts9,2Other Operating Receipts9,2Other Operating Payments(3,123,1)Cash Flows from Noncapital Financing Activities(12,6)Interest Paid on Debt7Transfers from Other Funds(12,6)Payments on Noncapital Financing Debt(12,6)Other Noncapital Receipts1,020,4)Other Noncapital Receipts1,020,4)Other Noncapital Payments(39,8)		\$	\$ 31,812	\$ 88,773	\$ 87,321
Premiums2,000,5Cash Received from Grants and Required Contributions/ Premiums (Internal Activity)3,599,4Cash Received from Tuition and Fees3,599,4Cash Paid to Vendors(3,980,8Cash Paid to Employees(4,322,8Cash Paid for Benefits(4,322,8Cash Paid for Claims and Judgments(486,2Cash Paid to Other Funds (Internal Activity)(2sh Paid for Scholarships, Fellowships and LoansOther Operating Receipts9,5Other Operating Receipts9,5Other Operating Payments(3,123,1)Cash Flows from Noncapital Financing Activities:(12,6)Interest Paid on Debt(12,6)Transfers from Other Funds(12,6)Payments on Noncapital Financing Debt(12,6)Other Noncapital Receipts1,020,4)Other Noncapital Payments(39,8)			1,754	1,754	324,793
Premiums (Internal Activity) Cash Received from Tuition and Fees 3,599,4 Cash Paid to Vendors (3,980,8 Cash Paid to Employees (4,322,8 Cash Paid for Benefits (4,322,8 Cash Paid for Claims and Judgments (Cash Paid for Scholarships, Fellowships and Loans (486,2 Other Operating Receipts 9,5 Other Operating Payments (3,123,1) Net Cash Provided by (Used in) Operating Activities (3,123,1) Cash Flows from Noncapital Financing Activities: 1 Interest Paid on Debt (12,6) Transfers from Other Funds (12,6) Payments on Noncapital Financing Debt 0 Other Noncapital Receipts 1,020,4) Other Noncapital Payments (39,8)	2,436,867	624,352	_	5,062,165	23,688
Cash Paid to Vendors(3,980,5)Cash Paid to Employees(4,322,8)Cash Paid for Benefits(4,322,8)Cash Paid for Claims and JudgmentsCash Paid for Claims and JudgmentsCash Paid to Other Funds (Internal Activity)Cash Paid for Scholarships, Fellowships and LoansOther Operating Receipts9,5Other Operating Receipts9,5Other Operating Receipts9,5Other Operating Payments(3,123,1)Cash Flows from Noncapital Financing Activities:(3,123,1)Interest Paid on DebtTransfers from Other Funds2,806,5Transfers to Other Funds(12,6)Payments on Noncapital Financing Debt0Other Noncapital Receipts1,020,4Other Noncapital Payments(39,8)		_	_	—	150,710
Cash Paid to Employees (4,322,8) Cash Paid for Benefits (4,322,8) Cash Paid for Claims and Judgments (2,322,8) Cash Paid to Other Funds (Internal Activity) (2,38) Cash Paid to Scholarships, Fellowships and Loans (486,2) Other Operating Receipts 9,5 Other Operating Payments (3,123,1) Cash Flows from Noncapital Financing Activities: (3,123,1) Interest Paid on Debt 7 Transfers from Other Funds (12,6) Payments on Noncapital Financing Debt (12,6) Other Noncapital Receipts 1,020,4) Other Noncapital Payments (39,8)			—	3,599,463	—
Cash Paid for Benefits Cash Paid for Claims and Judgments Cash Paid to Other Funds (Internal Activity) Cash Paid for Scholarships, Fellowships and Loans (486,2 Other Operating Receipts 9,5 Other Operating Payments 9,5 Net Cash Provided by (Used in) Operating Activities (3,123,1) Cash Flows from Noncapital Financing Activities: 1 Interest Paid on Debt 2,806,5 Transfers from Other Funds (12,6) Payments on Noncapital Financing Debt 0 Other Noncapital Receipts 1,020,4 Other Noncapital Payments (39,8)	(113,612) —	(29,351)	(4,123,830)	(370,004)
Cash Paid for Claims and Judgments Cash Paid to Other Funds (Internal Activity) Cash Paid for Scholarships, Fellowships and Loans (486,2 Other Operating Receipts 9,5 Other Operating Payments 9,5 Net Cash Provided by (Used in) Operating Activities (3,123,1) Cash Flows from Noncapital Financing Activities: Interest Paid on Debt Transfers from Other Funds 2,806,5 Transfers to Other Funds (12,6) Payments on Noncapital Financing Debt 0 Other Noncapital Receipts 1,020,4 Other Noncapital Payments (39,8)	(5,062) —	(11,271)	(4,339,228)	(55,015)
Cash Paid to Other Funds (Internal Activity)Cash Paid for Scholarships, Fellowships and LoansOther Operating Receipts9,5Other Operating PaymentsNet Cash Provided by (Used in) Operating ActivitiesInterest Paid on DebtTransfers from Other Funds2,806,5Transfers to Other FundsQuerter Noncapital Financing DebtOther Noncapital Receipts1,020,4Other Noncapital Payments(39,8)	- (2,500,454) (302,314)	_	(2,802,768)	_
Cash Paid for Scholarships, Fellowships and Loans(486,7Other Operating Receipts9,5Other Operating Payments(486,7Net Cash Provided by (Used in) Operating Activities(3,123,1)Cash Flows from Noncapital Financing Activities:(3,123,1)Interest Paid on Debt7Transfers from Other Funds(12,6)Payments on Noncapital Financing Debt(12,6)Other Noncapital Receipts1,020,4)Other Noncapital Payments(39,8)		_	_	_	(160,763)
Other Operating Receipts 9,5 Other Operating Payments 0 Net Cash Provided by (Used in) Operating Activities (3,123,1) Cash Flows from Noncapital Financing Activities: 1 Interest Paid on Debt 2,806,5 Transfers from Other Funds (12,6) Payments on Noncapital Financing Debt 0 Other Noncapital Receipts 1,020,4 Other Noncapital Payments (39,8)		_	(1,223)	(1,223)	_
Other Operating Payments (3,123,123,123,123,123,123,123,123,123,12		· _	_	(486,232)	_
Net Cash Provided by (Used in) Operating Activities(3,123,1)Cash Flows from Noncapital Financing Activities:1Interest Paid on Debt2,806,5Transfers from Other Funds(12,6)Payments on Noncapital Financing Debt0Other Noncapital Receipts1,020,4Other Noncapital Payments(39,8)	522 —	· _	27,135	36,657	_
Cash Flows from Noncapital Financing Activities: Interest Paid on Debt Transfers from Other Funds 2,806,5 Transfers to Other Funds (12,6 Payments on Noncapital Financing Debt 0ther Noncapital Receipts Other Noncapital Payments (39,8	(22) —		_	(22)	(538)
Interest Paid on Debt Transfers from Other Funds 2,806,5 Transfers to Other Funds (12,6 Payments on Noncapital Financing Debt Other Noncapital Receipts 1,020,4 Other Noncapital Payments (39,8	(182,261) 322,038	18,856	(2,964,491)	192
Transfers from Other Funds2,806,5Transfers to Other Funds(12,6Payments on Noncapital Financing Debt1,020,4Other Noncapital Receipts1,020,4Other Noncapital Payments(39,8					
Transfers to Other Funds(12,6)Payments on Noncapital Financing Debt(12,6)Other Noncapital Receipts1,020,2)Other Noncapital Payments(39,8)			(8,788)	(8,788)	_
Payments on Noncapital Financing Debt Other Noncapital Receipts 1,020,4 Other Noncapital Payments (39,8)		_	8,060	2,815,025	9,411
Other Noncapital Receipts1,020,4Other Noncapital Payments(39,8)	571) —		—	(12,671)	(3,201)
Other Noncapital Payments (39,6		_	(21,970)	(21,970)	_
		864	—	1,021,351	21,766
		· _	_	(39,831)	(12,976)
Net Cash Provided by (Used in) Noncapital Financing Activities 3,774,9		864	(22,698)	3,753,116	15,000
Cash Flows from Capital and Related Financing Activities:					
Capital Contributions			_		43,359
Capital Grants and Gifts Received 78,0	197 —		(0(215)	78,097	_
Grant Disbursements			(96,315)	(96,315)	
Proceeds from Sale of Capital Assets 18,5				18,560	2,224
Intergovernmental Grant			39,343	39,343	_
Proceeds from Capital Debt Acquisition and Construction of Capital Assets (451,2			2,459	2,459	(48.264)
•	·		(28,737)	(480,005) (134,196)	(48,264)
Principal Paid on Capital Debt (134, Interest Paid on Capital Debt (140,7)	,			(140,799)	(9,090)
Net Cash Used in Capital Debt (140,) Net Cash Used in Capital and Related Financing (629, 6			(83,250)	(712,856)	(11,771)
Cash Flows from Investing Activities:					
Proceeds from Sales of Investments 1,320,8	374 49,648		289,087	1,659,609	53,459
Purchase of Investments (1,322,4			(305,795)	(1,821,692)	(42,082)
Interest and Dividends Received 64,5			22,152	160,382	5,534
Other Investing Activities			30,759	30,759	
Net Cash Provided by (Used in) Investing Activities 63,0	031 (123,039) 52,863	36,203	29,058	16,911
Net Increase (Decrease) in Cash and Cash Equivalents 85,2	251 (305,300) 375,765	(50,889)	104,827	20,332
Cash and Cash Equivalents, July 1 - Restated (Note 3) 1,632,8	816 804,607	2,119,985	221,923	4,779,331	131,369
Cash and Cash Equivalents, June 30					

The notes to the financial statements are an integral part of this statement.



State of Georgia Statement of Cash Flows

Statement of Cash Flows Proprietary Funds For the Fiscal Year Ended June 30, 2019

	Business-type Activities - Enterprise Funds							Governmental Activities -			
	1	Higher Education Fund	Hea	State lth Benefits Plan	Une Co	employment ompensation Fund		onmajor Funds	Total		Internal Service Funds
Reconciliation of Operating Income (Loss) to Net Cash provided by (Used in) Operating Activities											
Operating Income (Loss)	\$	(3,692,221)	\$	(89,478)	\$	295,536	\$	(28,433)	\$ (3,514,596)	\$	(27,887)
Adjustments to Reconcile Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities:											
Depreciation/Amortization Expense		587,775		_		_		11,373	599,148		27,656
Other Reconciling Items		6,340		_		_		649	6,989		_
Changes in Assets, Deferred Outflows of Resources,											
Liabilities, and Deferred Inflows of Resources:											
Accounts Receivable		(85,869)		(60,148)		15,643		266	(130,108)		(6,201)
Due from Other Funds		_		(4,706)		_		_	(4,706)		(63,283)
Due from Component Units		_		_		_		_	_		(3)
Notes Receivable		4,406		_		_		_	4,406		_
Net OPEB Asset		(174,003)		(293)		_		(402)	(174,698)		(210)
Other Assets		(15,094)		_		_		74	(15,020)		191
Deferred Outflows of Resources		(242,299)		(355)		_		170	(242,484)		(4,282)
Accounts Payable and Other Accruals		38,632		(159)		1,061		34,681	74,215		(5,956)
Due to Other Funds				(8,737)					(8,737)		(148)
Benefits Payable		_		(4,936)		386		_	(4,550)		
Unearned Revenue		(4,163)		(13,127)		9,412		(7,300)	(15,178)		9
Claims and Judgments Payable		(1,105)		(,)				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(,		89,820
Compensated Absences Payable		1,536		8		_		(82)	1,462		58
Net OPEB Liability		208,176		(1,505)		_		(434)	206,237		(18,582)
Net Of ED Elability		11,938		(1,505)		_		(1,851)	10,083		(1,364)
Other Liabilities		23,872		(4) 87		_		8,899	32,858		(418)
Deferred Inflows of Resources		207,850		1,092				1,246	210,188		10,792
Net Cash Provided by (Used in) Operating Activities	\$	(3,123,124)	\$	(182,261)	\$	322,038	\$	18,856	\$ (2,964,491)	\$	192
Noncash Investing, Capital, and Financing Activities:											
Gifts other than Capital Assets Reducing Proceeds of											
Grants and Gifts for Other than Capital Assets	\$	15,124	\$	—	\$	_	\$	_	\$ 15,124	\$	_
Donation of Capital Assets		515,001		_		-		_	515,001		—
Change in Receivable from Grantor Agency											
Affecting Proceeds of Capital Debt		651		_		_		_	651		—
Change in Accrued Interest Payable											
Affecting Interest Paid		212		—		—		—	212		
Capital Assets Acquired by Incurring											
Capital Lease Obligations		77,234		_				_	77,234		—
Change in Fair Value of Investments		2,339		1,177		_		_	3,516		(479)
Special Item - Equipment-Capital Asset Transfer		52,678		_		_		37,942	90,620		—
Gain (Loss) of Debt Refunding		9,463		_				_	9,463		
Claims and Judgments Reducing Other Noncap Fin											
Pmts & Proceeds frm Cap Debt		1,291		_		_		_	1,291		_
Loss on Disposal of Capital Assets Reducing											
Proceeds from Sale of Capital Assets		(24,547)		_		_		_	(24,547)		_
Other		25,444						9,947	 35,391		
Total Noncash Investing, Capital and											
Financing Activities	\$	674,890	\$	1,177	\$		\$	47,889	\$ 723,956	\$	(479)

Statement of Fiduciary Net Position Fiduciary Funds June 30, 2019

	Pension and Other Employee Benefits Trust	Investment Trust	Private Purpose Trust	Agency	Total
Assets					
Cash and Cash Equivalents	\$ 2,846,035	\$	\$ 11,307	\$ 137,911	\$ 2,995,253
Pooled Investments with State Treasury	1,729,573	9,292,165	274,729	70,493	11,366,960
Restricted Pooled Investments with State Treasury	626	—	—	—	626
Receivables					
Interest and Dividends	457,099	5,105	—	_	462,204
Due from Brokers for Securities Sold	26,706	_	—	_	26,706
Other	324,703	_	21,106	5,570	351,379
Due from Other Funds	478	—	—	—	478
Investments, at Fair Value					
Certificates of Deposit	—	—	—	1,394	1,394
Pooled Investments	16,268,876	—	—	158,907	16,427,783
Exchange Traded Funds	9,044	—	—	—	9,044
Mutual Funds	2,579,070	—	—	—	2,579,070
Municipal, U.S. and Foreign					
Government Obligations	17,911,665	—	—	24,758	17,936,423
Corporate Bonds/Notes/Debentures	5,251,328	—	—	—	5,251,328
Stocks	54,320,924	—	—	—	54,320,924
Asset-backed Securities	43,332	—	—	—	43,332
Mortgage Investments	104,022	—	—	—	104,022
Real Estate Investment Trusts	57,328	_	—	_	57,328
Capital Assets					
Land	8,883	—	—	—	8,883
Buildings	7,793	_	826	_	8,619
Software	29,325	—	—	—	29,325
Machinery and Equipment	6,804	—	94	—	6,898
Works of Art	114	—	—	—	114
Construction in Progress	550	—	—	—	550
Accumulated Depreciation	(37,369)	—	(698)	—	(38,067)
Net OPEB Asset	2,883	_	114	_	2,997
Other Assets				10,369	10,369
Total Assets	101,949,792	9,297,270	307,478	409,402	111,963,942
Deferred Outflows of Resources	12,167		421		12,588
Liabilities	16 270		25	2.474	40.000
Accounts Payable and Other Accruals	46,378	14	37	2,474	48,903
Due to Other Funds	567	—	_	_	567
Due to Brokers for Securities Purchased	204,494	—	_		204,494
Salaries/Withholdings Payable	2	—	_	14	16
Benefits Payable	39,825	_	_	40(712	39,825
Funds Held for Others		_	_	406,712	406,712
Unearned Revenue	3 71	_	68	198	201 139
Compensated Absences Payable	22,840	—	658	—	23,498
Net OPER Liebility		—		—	
Net OPEB Liability Other Liabilities	27,823	—	1,153 282	4	28,976 286
Total Liabilities	342,003	14	2,198	409,402	753,617
Deferred Inflows of Resources	12,131	14	626	409,402	12,757
	12,151		020		12,131
Net Position					
Restricted for:					
Pension Benefits	98,017,176	—	—	—	98,017,176
Other Postemployment Benefits	3,590,649		—	—	3,590,649
Pool Participants	—	9,297,257	205.055	—	9,297,257
Other Purposes			305,075	<u></u>	305,075
Total Net Position	\$ 101,607,825	\$ 9,297,257	\$ 305,075	<u>э</u>	\$ 111,210,157



Statement of Changes in Fiduciary Net Position Fiduciary Funds For the Fiscal Year Ended June 30, 2019

	Pension and Other Employee Benefits Investment Trust Trust		Private Purpose Trust	Total		
Additions:						
Contributions/Assessments						
Employer	\$ 4,497,955	\$	\$	\$ 4,497,955		
NonEmployer	108,720	—	_	108,720		
Plan Members/Participants	966,568	—	110,339	1,076,907		
Other Contributions						
Insurance Premiums	3,328	—	—	3,328		
Other Fees	497	—	—	497		
Interest and Other Investment Income						
Dividends and Interest	2,167,392	210,694	5,523	2,383,609		
Net Appreciation (Depreciation) in Investments Reported at Fair Value	4,248,097	53	_	4,248,150		
Less: Investment Expense	(78,510)	(4,464)	—	(82,974)		
Pool Participant Deposits	—	12,411,525	—	12,411,525		
Other						
Transfers from Other Funds	2,727	—	—	2,727		
Miscellaneous	1,045			1,045		
Total Additions	11,917,819	12,617,808	115,862	24,651,489		
Deductions:						
General and Administrative Expenses	41,181	—	1,248	42,429		
Benefits	7,374,315	—	33,734	7,408,049		
Pool Participant Withdrawals	5,753	10,678,886	—	10,684,639		
Refunds	98,024			98,024		
Total Deductions	7,519,273	10,678,886	34,982	18,233,141		
Change in Net Position Restricted for:						
Pension and Other Employee Benefits	4,398,546	_	_	4,398,546		
Pool Participants	_	1,938,922	_	1,938,922		
Other Purposes	—	—	80,880	80,880		
Net Position, July 1	97,209,279	7,358,335	224,195	104,791,809		
Net Position, June 30	\$ 101,607,825	\$ 9,297,257	\$ 305,075	\$ 111,210,157		



State of Georgia Statement of Net Position

Statement of Net Position Component Units

June 30, 2019

Assets Current Assets: Cash and Cash Equivalents \$ 5,372 \$ 10,939 \$ 104,636 \$ Pooled Investments with State Treasury 1,066,798 15,240 74,948 Investments 4,925 — 83,683 Receivables - - 82,683 Accounts (Net) 4,319 14,514 — Capital Leases from Primary Government — — - Intrest and Dividends 3,399 — 752 Notes and Loans (Net) — 3,070 — Taxes — 3,070 — Due from Primary Government — — — Intergovernmental Receivables 1,716 — — Intergovernmental Receivables 1,716 — — Inventory — 377 — Other Current Assets — 115 84,695 Restricted for: — — — —	on
Cash and Cash Equivalents \$ 5,372 \$ 10,939 \$ 104,636 \$ Pooled Investments with State Treasury 1,066,798 15,240 74,948 1 Investments 4,925 83,683 8 Receivables 4,319 14,514 Capital Leases from Primary Government Interest and Dividends 3,399 Notes and Loans (Net) <td< th=""><th></th></td<>	
Pooled Investments with State Treasury1,066,79815,24074,948Investments4,925-83,683ReceivablesAccounts (Net)4,31914,514-Capital Leases from Primary GovernmentInterest and Dividends3,399-752Notes and Loans (Net)Taxes-3,070-Due from Primary GovernmentDue from Primary GovernmentInterest and Dividends3,070-Taxes-3,070-Due from Primary GovernmentDue from Component UnitsIntergovernmental Receivables1,716-Inventory-377-Other Current Assets-11584,695Restricted for:	32,229
Investments4,92583,683ReceivablesAccounts (Net)4,31914,514Accounts (Net)Capital Leases from Primary GovernmentInterest and Dividends3,399752Notes and Loans (Net)Taxes3,070Due from Primary GovernmentDue from Component UnitsIntergovernmental Receivables1,716Inventory377Other Current Assets11584,695Restricted for:	
ReceivablesAccounts (Net)4,31914,514—Capital Leases from Primary Government———Interest and Dividends3,399—752Notes and Loans (Net)———Taxes—3,070—Due from Primary Government———Due from Orimary Government———Due from Component Units———Intergovernmental Receivables1,716——Inventory—377—Other Current Assets—11584,695Restricted for:———	_
Accounts (Net)4,31914,514Capital Leases from Primary GovernmentInterest and Dividends3,399Notes and Loans (Net)Taxes3,070Due from Primary GovernmentDue from Component UnitsIntergovernmental Receivables1,716Inventory377Other Current Assets11584,695Restricted for:	
Capital Leases from Primary Government——Interest and Dividends3,399—752Notes and Loans (Net)———Taxes—3,070—Due from Primary Government———Due from Component Units———Intergovernmental Receivables1,716——Inventory—377—Other Current Assets—11584,695Restricted for:———	193,063
Interest and Dividends3,399752Notes and Loans (Net)Taxes3,070Due from Primary GovernmentDue from Component UnitsIntergovernmental Receivables1,716Inventory377Other Current Assets11584,695Restricted for:	
Notes and Loans (Net)———Taxes—3,070—Due from Primary Government———Due from Component Units———Intergovernmental Receivables1,716——Inventory—377—Other Current Assets—11584,695Restricted for:———	_
Taxes—3,070—Due from Primary Government———Due from Component Units———Intergovernmental Receivables1,716——Inventory—377—Other Current Assets—11584,695Restricted for:———	_
Due from Primary GovernmentDue from Component UnitsIntergovernmental Receivables1,716Inventory377Other Current Assets11584,695Restricted for:	_
Due from Component UnitsIntergovernmental Receivables1,716Inventory377Other Current Assets11584,695Restricted for:	119
Intergovernmental Receivables1,716——Inventory—377—Other Current Assets—11584,695Restricted for:——11584,695	
Inventory—377—Other Current Assets—11584,695Restricted for:—11584,695	_
Other Current Assets—11584,695Restricted for:	_
Restricted for:	1,095
	1,095
	_
Pooled Investments with State Treasury — 99,527	_
Investments	_
Other Receivables (Net) — 75,826 —	_
	226,506
Noncurrent Assets:	
Investments — — 159,832	—
Receivables	
Capital Leases from Primary Government — — — — —	—
Notes and Loans (Net) 1,473,389 — 858,200	—
Other (Net)	—
Restricted Assets	
Cash and Cash Equivalents — 17,198 25,867	17,902
Investments — — 68,477	190,224
Net OPEB Asset 343 1,295 —	—
Receivables	
Notes and Loans (Net) — — 1,016,822	—
Interest and Dividends — — 8,901	—
Other (Net)	—
Non-depreciable Capital Assets — 73,557 800	—
Depreciable Capital Assets (Net) 217 1,496,993 2,114	11,477
Net Pension Asset — — — —	—
Other Noncurrent Assets — — — —	—
Total Noncurrent Assets 1,473,949 1,589,043 2,141,013	219,603
Total Assets 2,560,478 1,709,124 2,589,254	446,109
Deferred Outflows of Resources 1,458 6,674 —	50

Total	 onmajor mponent Units	eorgia Tech oundation, ncorporated		eorgia Ports Authority	
732,726	\$ 493,851	\$ 6,895	4 \$	78,804	\$
1,626,783	147,894	_	3	321,903	
244,667	138,816	—	3	17,243	
723,751	428,264	12,958	3	70,633	
92,116	84,743	7,373	-	-	
8,191	4,040	_	-	-	
168,899	168,199	700	-	_	
3,929	859	_	-	—	
78,944	75,539	3,286	_	—	
25,758	25,385	373	_	—	
13,382	11,666	—	_	—	
34,139	28,191	—	1	5,571	
174,810	73,584	1,504	7	13,817	
99,512	85,169	14,343	_	_	
99,527	-	_	-	-	
154,443	154,443	_	-	—	
146,222	46,474	 23,922		_	
4,427,799	 1,967,117	 71,354	1	507,971	
911,419	458,393	293,194	_		
2,273,012	2,170,155	102,857	_	_	
2,507,437	175,848	_	-	_	
58,116	43,108	15,008	_	—	
324,585	263,618	—	_	_	
3,367,638	1,638,877	1,470,060	-	—	
3,000	1,362	_	_	_	
1,016,822	—	_	_	_	
8,901	—	—	_	—	
144,526	75,438	69,088	_	—	
911,576	281,043	68,154	2	488,022	
3,559,974	1,147,592	79,243	8	822,338	
9,420	_	_	0	9,420	
48,708	 20,608	 23,519	1	4,581	
15,145,134	 6,276,042	 2,121,123	1	1,324,361	
19,572,933	 8,243,159	 2,192,477	2	1,832,332	
137,423	 99,513	 	8	29,728	
(continued)		 			

State of Georgia Statement of Net Position

Statement of Net Position Component Units

June 30, 2019

(dollars in thousands)

	Georgia Environmental Finance Authority		Georgia Housing and Finance Authority	Georgia Lottery Corporation
Liabilities				
Current Liabilities:				
Accounts Payable and Other Accruals	3,682	90	7,382	150,187
Due to Primary Government	1,450	27,516	1,283	74,229
Due to Component Units		—	_	_
Funds Held for Others	—	_	_	—
Unearned Revenue	_	5,425	3,070	_
Notes and Loans Payable	_	_	_	_
Revenue/Mortgage Bonds Payable	2,025	_	38,385	_
Other Current Liabilities	101	9,785	313,740	5,191
Current Liabilities Payable from				
Restricted Assets:				
Other	—	13,181	_	17,589
Total Current Liabilities	7,258	55,997	363,860	247,196
Noncurrent Liabilities:				
Unearned Revenue	—	—	—	—
Notes and Loans Payable	—	—	—	—
Revenue/Mortgage Bonds Payable	30,215	—	1,407,057	—
Grand Prizes Payable	_	_	—	173,363
Derivative Instrument Payable	_	_	—	—
Net OPEB Liability	2,264	21,255	—	—
Net Pension Liability	4,440	24,816	—	244
Other Noncurrent Liabilities	304	65,530	595,780	4,766
Total Noncurrent Liabilities	37,223	111,601	2,002,837	178,373
Total Liabilities	44,481	167,598	2,366,697	425,569
Deferred Inflows	1,793	8,244		7,176
N - D - M				
Net Position	214	1 570 540	2 01 4	11.455
Net Investment in Capital Assets	216	1,570,549	2,914	11,477
Restricted for:	01.007			
Bond Covenants/Debt Service	81,326	—	—	—
Capital Projects	—	_	_	—
Permanent Trust Expendable		17.252		
Other Purposes	—	17,353	—	—
Nonexpendable:				
Permanent Trust	—	—	—	—
Other Purposes	1.044.700	—	_	—
Loan and Grant Programs	1,844,780	(47.040)	210 642	1.027
Unrestricted	589,340	(47,946)	219,643	1,937
Total Net Position	\$ 2,515,662	\$ 1,539,956	\$ 222,557	\$ 13,414

Georgia Ports Authority	Georgia Tech Foundation, Incorporated	Nonmajor Component Units	Total
71,209	5,329	166,977	404,856
410	9,376	463,714	577,978
_	6,414	19,344	25,758
_	_	43,338	43,338
—	18,164	117,260	143,919
_	55,613	42,459	98,072
—	12,065	113,687	166,162
3,346	2,816	94,825	429,804
_	_	7,317	38,087
74,965	109,777	1,068,921	1,927,974
11,321	—	15,142	26,463
_	70,347	117,571	187,918
—	222,659	2,756,002	4,415,933
—	—	_	173,363
—	—	37,493	37,493
11,580	—	104,818	139,917
42,560	—	130,566	202,626
20,845	24,183	167,586	878,994
86,306	317,189	3,329,178	6,062,707
161,271	426,966	4,398,099	7,990,681
4 (22		52 72 4	74.5(0)
4,622		52,734	74,569
1,310,360	(12,793)	651,962	3,534,685
_	_	13,128	94,454
_	16,984	200,246	217,230
_	175,413	629,143	804,556
—	—	390,515	407,868
_	1,396,470	1,002,281	2,398,751
—	—	46,977	46,977
	100.427		1,844,780
385,807	189,437	957,587	2,295,805
\$ 1,696,167	\$ 1,765,511	\$ 3,891,839	\$ 11,645,106

Statement of Activities Component Units For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

Geo. L. Smith II Georgia Georgia Environmental Georgia World Housing and Georgia Finance Congress Center Finance Lottery Authority Authority Authority Corporation Expenses 47,011 197,590 187,208 4,545,758 S \$ \$ **Program Revenues:** Sales and Charges for Services 32,668 66,004 87,787 4,553,368 Operating Grants and Contributions 122,416 13,349 125,496 Capital Grants and Contributions 6,790 Total Program Revenues 155,084 86,143 213,283 4,553,368 26,075 Net (Expenses) Revenue 108,073 (111,447) 7,610 **General Revenues:** Taxes 21,905 Unrestricted Investment Income/(Loss) Payments from the Primary Government Contributions to Permanent Endowments Total General Revenues 21,905 7,610 Change in Net Position 108,073 (89,542) 26,075 Net Position, July 1 - Restated (Note 3) 5,804 2,407,589 1,629,498 196,482 2,515,662 Net Position, June 30 1,539,956 222,557 13,414 \$ S

Georgia Ports Authority		orgia Tech undation, corporated	Nonmajor Component Units	 Total
\$ 304,938	\$	122,586	\$ 3,199,983	\$ 8,605,074
473,619		32,981	1,523,881	6,770,308
 7,498 21,151		137,048	 1,682,709 33,503	2,088,516 61,444
502,268		170,029	3,240,093	8,920,268
 197,330		47,443	 40,110	 315,194
			6,758	28,663
_		19,893	41,824	61,717
_			123,793	123,793
 		23,754	 57,200	 80,954
 		43,647	 229,575	 295,127
197,330		91,090	269,685	610,321
 1,498,837		1,674,421	 3,622,154	 11,034,785
\$ 1,696,167	\$	1,765,511	\$ 3,891,839	\$ 11,645,106



State of Georgia Notes to the Financial Statements Index



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Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation

The accompanying financial statements of the State have been prepared in conformity with U.S. Generally Accepted Accounting Principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). Preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates.

The fiscal year end for the primary government and component units is June 30, except for, VSU Auxiliary Service Real Estate Foundation, Inc. (component unit) and the Stone Mountain Memorial Association (component unit) which have a fiscal year end of December 31.

B. Financial Reporting Entity

For financial reporting purposes, the State reporting entity includes the primary government and its component units. The primary government consists of all the organizations that compose the legal entity of the State. All agencies, departments, authorities, commissions, courts, councils, boards, universities, colleges, foundations, retirement funds, associations and other organizations that are not legally separate are, for financial reporting purposes, considered part of the primary government. Component units are legally separate organizations for which the State's elected officials are financially accountable.

Financial accountability is the ability of the State to appoint a voting majority of an organization's governing board and to impose its will upon the organization or when there exists the potential for the organization to provide specific financial benefits or impose specific financial burdens on the primary government. When the State does not appoint a voting majority of an organization's governing body, GASB standards require inclusion in the financial reporting entity if: (1) an organization is fiscally dependent upon the State because its resources are held for the direct benefit of the State or can be accessed by the State *and* (2) the potential exists for the organization to provide specific financial benefits to, or impose specific financial burdens on the State. In addition, component units can be other organizations for which the nature and significance of their relationships with the primary government are such that exclusion would cause the financial statements to be misleading.

Where noted below, the State's component units issue their own separate audited financial statements which may be obtained from their respective administrative offices. The most recent financial statements for component unit organizations with "AUD" at the end of their descriptions below may be obtained from the Department of Audits and Accounts (DOAA) online at <u>www.audits.ga.gov</u>. Certain component units (with "NSR" at the end of their descriptions below) are not required to prepare or issue separate financial statements beyond the financial information included in this report. The financial statements for discretely presented higher education foundations and similar organizations can be obtained from their respective administrative offices or from the Board of Regents.

Blended Component Units

Blended component units have governing bodies substantively the same as the State, provide services entirely or almost entirely to the primary government or have total debt outstanding, including leases, that is expected to be paid entirely, or almost entirely, with resources of the State. As such, although they are legally separate entities, they are, in substance, part of the government's operations. GASB standards require this type of component unit to be reported as part of the primary government and blended into the appropriate funds.



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The State's blended component units, as described in the Nonmajor Governmental Funds and Internal Service Funds portions of the Supplementary Information – Combining and Individual Fund Statements category of the Financial Section, are as follows:

Special Revenue Funds

The following component units provide services entirely or almost entirely to the primary government and are therefore considered blended component units:

The **Georgia Aviation Authority** was created to provide oversight and efficient operation of state aircrafts and aviation operations, and ensure the safety of state air travelers and aviation property. (NSR)

The **State Road and Tollway Authority** (SRTA) is a legally separate public corporation created to finance transportation projects and operate toll facilities in the State of Georgia. SRTA's total debt outstanding is expected to be paid with resources of the Primary Government and therefore is considered a blended component unit. (AUD)

Debt Service Fund

The **State Road and Tollway Authority** uses a debt service fund for the payment of principal and interest on the debt of SRTA's governmental funds. SRTA issues bonded debt which finances State transportation infrastructure construction. (AUD)

Enterprise Funds

The following component units provide services entirely or almost entirely to the primary government and are therefore considered blended component units:

The **Georgia Higher Education Facilities Authority** is a legally separate public corporation created for the purpose of financing eligible construction, renovation, improvement, and rehabilitation or restoration projects for the University System of Georgia. The Authority issues debt and enters into lease agreements principally with the University System of Georgia Foundation, Inc. (discretely presented component unit). The costs of the Authority's debt are recovered through lease payments from the Foundation. The Authority provides services entirely or almost entirely to the Primary Government and is therefore considered a blended component unit. (AUD)

The State Employees' Assurance Department - Active (SEAD-Active) is used to account for the accumulation of resources for the purpose of providing survivors' benefits for eligible members of the Employees', Judicial, and Legislative Retirement Systems. SEAD-Active is a cost-sharing multiple employer life insurance plan created in 2007 by the Georgia General Assembly to amend Title 47 of the Official Code of Georgia Annotated, relating to retirement, so as to establish a fund for the provision of term life insurance to active members of ERS, LRS, and GJRS. (AUD)

The **State Road and Tollway Authority** uses an enterprise fund to account for tolling and transit activities, including the Xpress Commuter Bus Service, the I-75 South Metro Express Lanes, and all other facilities of the tolling system (i.e. the I-85 Express Lanes and six toll facilities under planning and/or construction). (AUD)



Internal Service Funds

The following component units all provide services entirely or almost entirely to the Primary Government and are therefore considered blended component units:

The **Georgia Building Authority** is responsible for all services associated with the management of State office buildings, maintaining the grounds within the State Capitol complex, maintaining the Governor's Mansion and operating parking facilities. (AUD)

The **Georgia Correctional Industries Administration** utilizes the inmate work force to manufacture products and provide services for the penal system, other units of state government and local governments. (NSR)

The **Georgia Technology Authority** was created to provide technology enterprise management and technology portfolio management to state and local governments. (NSR)

Discretely Presented Component Units

Discrete presentation entails reporting component unit financial data in a separate column and/or rows in each of the government-wide statements to emphasize that these component units are legally separate from the State. Except for Georgia Military College, the other component units are included in the reporting entity because, under the criteria established by GASB, the State has the ability to impose its will on these organizations.

The determination of major component units is based on any of the following factors: (a) the services provided by the component unit to the citizenry are such that separate reporting as a major component unit is considered essential to financial statement users, (b) there are significant transactions with the primary government, or (c) there is a significant financial benefit or burden relationship with the primary government.

The State's major discretely presented component units are described below:

The **Georgia Environmental Finance Authority (GEFA)** is a body corporate and politic. GEFA provides funding to eligible municipalities, counties, water and sewer authorities in the State for construction and expansion of public water, sewer, and solid waste facilities. The State periodically provides general obligation bond proceeds to GEFA to fund various loan programs for water and sewerage facilities. GEFA is governed by a board of directors consisting of three officials designated by statute and eight members appointed by the Governor. (AUD)

The Geo. L. Smith II Georgia World Congress Center Authority is a body corporate and politic and an instrumentality and public corporation of the State. The Authority is responsible for operating and maintaining a comprehensive international trade and convention center consisting of a complex of facilities suitable for multipurpose use. The Authority is governed by a board of directors composed of 15 members appointed by the Governor. (AUD)

The **Georgia Housing and Finance Authority (GHFA)** is a body corporate and politic. GHFA is responsible for facilitating housing, housing finance and financing for health facilities and health care services throughout the State. The powers of GHFA are vested in 18 members who also comprise the board of the Department of Community Affairs (DCA). Board members are appointed by the Governor and are composed of one member from each U.S. Congressional District in the State, plus four additional members from the State at large, and include elected officials of counties or municipalities, individuals with an interest or expertise in community or economic development, environmental issues, housing development or finance or citizens who in the judgment and discretion of the Governor would enhance the DCA board. (AUD)



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The **Georgia Lottery Corporation (GLC)** is a public body, corporate and politic. GLC operates lottery games to provide continuing entertainment to the public and maximize revenues, the net proceeds of which are utilized to support improvements and enhancements for educational purposes. Net proceeds are remitted to the State's General Fund and are appropriated to certain educational agencies through the State's budget process. GLC is governed by a board of directors composed of seven members, all of which are appointed by the Governor. The State is legally entitled to residual resources of GLC. (AUD)

The **Georgia Ports Authority (GPA)** is a body corporate and politic. The purpose of the Authority is to develop and improve the harbors or seaports of the State for the handling of waterborne commerce and to acquire, construct, equip, maintain, develop and improve said harbors, seaports and their facilities. The State has provided general obligation bond proceeds to GPA to finance projects and facilities. The Board consists of 13 members, all of which are appointed by the Governor. (AUD)

The **Georgia Tech Foundation, Incorporated** is a nonprofit organization established to promote, in various ways, the cause of higher education in the State, to raise and receive funds for the support and enhancement of the Georgia Institute of Technology (GIT), and to aid the GIT in its development as a leading educational institution. The individual financial statements may be obtained from the foundation at the following address: 760 Spring St. NW, Atlanta, GA 30308.

The State's nonmajor discretely presented component units are as follows:

Economic Development Organizations

The Economic Development organizations cultivate business for the State. These organizations are described below:

The **Georgia Development Authority** is a body corporate and politic. The Authority was created to assist agricultural and industrial interests by providing credit and servicing functions to better enable farmers and businessmen to obtain needed capital funds. The Authority is governed by a board of directors composed of 7 members; 4 are appointed by the Governor and 3 are State Agency heads. (AUD)

The **Georgia International and Maritime Trade Center Authority** is a body corporate and politic. The Authority was created to develop and promote the growth of the State's import and export markets through its ports and other transportation modes, and to construct, operate and maintain the Savannah International Trade and Convention Center. The Authority is governed by a board of directors composed of 12 members; 9 members of the board are appointed by the General Assembly. (AUD)

The **OneGeorgia Authority** is a body corporate and politic and an instrumentality and public corporation of the State. The purpose of the Authority is to promote the health, welfare, safety and economic society of the rural citizens of the State through the development and retention of employment opportunities in rural areas and the enhancement of the infrastructures that accomplish that goal. The six members of the Authority are State officials designated by statute. (NSR)

The **Georgia Higher Education Assistance Corporation** is a nonprofit public authority, body corporate and politic. The Corporation was created to improve the higher educational opportunities of eligible students by guaranteeing educational loan credit to students and to parents of students. The Corporation is governed by the Board of Commissioners of the Georgia Student Finance Commission. (AUD)

The **Georgia Military College (GMC)** is a body corporate and politic, and is an instrumentality and a public corporation of the State. GMC is dedicated to providing a high-quality military education to the youth of the State. The Board of



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Trustees consists of the mayor of the City of Milledgeville and six additional members, one of which is elected from each of the six municipal voting districts of the City, as required by statute. The government, control, and management of GMC are vested in the Board of Trustees. GMC receives any designated funds appropriated by the General Assembly through the Board of Regents of the University System of Georgia. Although GMC does not meet the fiscal dependency or financial benefit/burden criteria, due to the nature and significance to the State and the potential assumption that GMC is the same as other colleges reported within the state reporting entity, management has determined that it would be misleading to exclude GMC from the state reporting entity. (NSR)

The **Georgia Public Telecommunications Commission** is a body corporate and politic. The Commission is a public charitable organization created for the purpose of providing educational, instructional and public broadcasting services to citizens of Georgia. The budget of the Commission must be approved by the State. (AUD)

The **Georgia Regional Transportation Authority** is a body corporate and politic. Within its jurisdiction, the purpose of the Authority is to manage land transportation and air quality, review all Developments of Regional Impact (DRI), and approve the allocation of state and federal transportation resources in metro Atlanta via the Atlanta Transportation Improvement Program (TIP). The Authority also serves in an advisory capacity to the State Road and Tollway Authority related to the management and operations of the Xpress Commuter Bus Service. The Governor appoints all 15 Board Members of the Authority.

The **Georgia Student Finance Authority** is a body corporate and politic. The Authority was created for the purpose of improving higher educational opportunities by providing educational scholarship, grant and loan assistance. A substantial amount of funding is provided to the Authority by the State. (AUD)

The **REACH Georgia Foundation** is a nonprofit organization that was formed to ensure that Georgia's academically promising students have the academic, social and financial support needed to graduate from high school, access college and achieve postsecondary success. The REACH Georgia Program is the State of Georgia's first needs-based mentorship and college scholarship program and the Foundation's mission is to raise and invest funds. (AUD)

The **Regional Educational Service Agencies** were established to provide shared services to improve the effectiveness of educational programs and services of local school systems and to provide direct instructional programs to selected public school students. The State has 16 of these agencies. (NSR)

The **Superior Court Clerks' Cooperative Authority** is a body corporate and politic and an instrumentality and public corporation of the State created to provide a cooperative for the development, acquisition and distribution of record management systems, information, services, supplies and materials for superior court clerks of the State. (AUD)

Tourism / State Attractions

These organizations promote State interests or encourage visitation to the State through the operation and maintenance of various attractions. Organizations involved in such activities are described below:

The **Georgia Agricultural Exposition Authority** is a body corporate and politic. The Authority is responsible for provision of a facility for the agricultural community, for public events, exhibits and other activities and for promotion and staging of a statewide fair. (NSR)

The **Jekyll Island State Park Authority** is a body corporate and politic and an instrumentality and public corporation of the State. The Authority was created to operate and manage resort recreational facilities on Jekyll Island. The Authority includes its component unit, Jekyll Island Foundation, Inc. (NSR)



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The Lake Lanier Islands Development Authority is a body corporate and politic and an instrumentality and public corporation of the State. The purpose of the Authority is to manage, preserve and protect projects on Lake Lanier Islands. (NSR)

The **North Georgia Mountains Authority** is a body corporate and politic and an instrumentality and public corporation of the State responsible for the construction and management of recreation, accommodation and tourist facilities and services. (NSR)

The **Stone Mountain Memorial Association** is a body corporate and politic and an instrumentality and public corporation of the State. The Authority is responsible for maintenance and operation of Stone Mountain as a Confederate memorial and public recreational area. (AUD)

The **Higher Education Foundations and Similar Organizations** are nonprofit organizations established to secure and manage support for various projects including acquisitions and improvements of properties and facilities for units of the University System of Georgia. The following are the organizations included in the Higher Education Foundations:

Georgia Advanced Technology Ventures, Inc. and Subsidiaries AU Health System, Inc. Augusta University Foundation, Inc. and Subsidiaries Augusta University Research Institute, Inc. Georgia College & State University Foundation, Inc. and Subsidiaries Georgia Gwinnett College Foundation, Inc. Georgia Health Sciences Foundation, Inc. Georgia Southern University Housing Foundation, Inc. and Subsidiaries Georgia State University Athletic Association, Inc. Georgia State University Foundation, Inc. Georgia State University Research Foundation, Inc. Georgia Tech Athletic Association Georgia Tech Facilities, Inc. Georgia Tech Research Corporation Kennesaw State University Foundation, Inc. Medical College of Georgia Foundation, Inc. Middle Georgia State University Real Estate Foundation, Inc. and Subsidiaries University of Georgia Athletic Association, Inc. University of Georgia Foundation University of Georgia Research Foundation, Inc. and Subsidiaries University of North Georgia Real Estate Foundation, Inc. and Subsidiaries UWG Real Estate Foundation, Inc. University System of Georgia Foundation, Inc. and Affiliates VSU Auxiliary Services Real Estate Foundation. Inc.

Fiduciary Component Units

GAAP requires fiduciary component units to be reported as fiduciary funds of the primary government rather than as discrete component units. In accordance with GAAP, fiduciary funds and component units that are fiduciary in nature are excluded from the government-wide financial statements. The State's two most significant fiduciary component units are the Employees' Retirement System of Georgia (System) and the Teachers Retirement System of Georgia (TRS). Fiduciary component units are detailed in the Fiduciary Funds portion of the Supplementary Information – Combining and Individual Fund Statements category of the Financial Section.



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

C. Government-wide and Fund Financial Statements

Government-wide Financial Statements

The Statement of Net Position and Statement of Activities display information about the primary government and its component units. These statements include the financial activities of the overall government, except for fiduciary activities. Eliminations have been made to minimize the double-counting of internal activities. Governmental activities, which normally are financed through taxes, intergovernmental revenues, and other nonexchange revenues, are reported separately from business-type activities, which are financed in whole or in part by fees charged to external parties for goods or services. Likewise, the primary government is reported separately from its discretely presented component units.

The Statement of Net Position presents the State's non-fiduciary assets, liabilities and deferred outflows/inflows of resources, with the difference reported as net position. Net position is reported in three categories:

- Net Investment In Capital Assets consists of capital assets, net of accumulated amortization/depreciation and reduced by outstanding balances for bonds, notes and other debt that are attributed to the acquisition, construction or improvement of those assets. In addition, deferred outflows/ inflows of resources that are attributable to the acquisition, construction or improvement of capital assets or related debt are included in Net Investment in Capital Assets. If there are significant unspent related debt proceeds or deferred inflows of resources at the end of the reporting period, the portion of the debt or deferred inflows of resources attributable to the unspent amount are not included.
- Restricted net position results when constraints placed on net position use are either externally imposed by creditors, grantors, contributors, and the like, or imposed by law through constitutional provisions or enabling legislation.
- Unrestricted net position consists of net position that does not meet the definition of the two preceding categories. Unrestricted net position often is designated, indicating it is not available for general operations. Such designations have internally imposed constraints on resources, but can be removed or modified.

When both restricted and unrestricted resources are available for use, generally it is the State's policy to use restricted resources first. Other funds not otherwise remitted to the State Treasury, which may be available from restricted or unrestricted net position should be utilized next, prior to the use of State funds.

The Statement of Activities demonstrates the degree to which the direct expense of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable within a specific function. Program revenues include (a) charges to customers or applicants who purchase, use, or directly benefit from goods, services or privileges provided by a given function and (b) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function. Taxes and other items not meeting the definition of program revenues are instead reported as general revenues.

Fund Financial Statements

Separate financial statements are provided for governmental funds, proprietary funds, and fiduciary funds, even though fiduciary funds are excluded from the government-wide statements. Major individual governmental funds and major individual proprietary funds are reported as separate columns in the fund financial statements. All remaining

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

governmental and proprietary funds are aggregated and reported as nonmajor funds. Internal service funds are also aggregated and reported in a separate column on the proprietary funds financial statements.

D. Measurement Focus, Basis of Accounting, and Financial Statement Presentation

Basis of accounting refers to when revenues and expenditures or expenses are recognized in the accounts and reported in the financial statements. Basis of accounting relates to timing of the measurements made, regardless of the measurements focus applied.

The government-wide financial statements and the proprietary and fiduciary fund financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, with the exception of agency funds. Under the accrual basis of accounting, revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of cash flows. Grants and similar items are recognized as revenues in the fiscal year in which eligibility requirements imposed by the provider have been met. Unearned revenue is recorded when cash or other assets are received prior to being earned. Additionally, long-term assets and liabilities, such as capital assets and long-term debt, are included on the financial statements.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized when they become both measurable and available. "Measurable" means the amount of the transaction can be determined and "available" means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. For this purpose, the State generally considers taxes and other revenues to be available if the revenues are collected within 30 days after fiscal year-end. An exception to this policy is federal grant revenues, which generally are considered to be available if collection is expected within 12 months after year-end. All unearned revenue reported represents transactions for which assets have been received, but for which not all earning criteria have been met. Capital purchases are recorded as expenditures and neither capital assets nor long-term liabilities, such as long-term debt, are reflected on the balance sheet.

Expenditures generally are recorded when the related fund liability is incurred, as under the accrual basis of accounting. However, debt service expenditures, as well as expenditures related to compensated absences, claims and judgments, and other long-term liabilities, are recorded only when payment is due or (for debt service expenditures), when amounts have been accumulated in the debt service fund for payments to be made early in the subsequent fiscal year.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. Operating expenses for enterprise funds and internal service funds include the cost of sales and services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

The State's proprietary funds and discretely presented component units, other than certain higher education foundations and similar organizations, follow all GASB pronouncements, (including all National Council on Governmental Accounting (NCGA) Statements and Interpretations currently in effect). Certain higher education foundations and similar organizations report under the Financial Accounting Standards Board (FASB) standards; including FASB Codification Topic 958, *Not-for-Profit Entities*. As such, certain revenue recognition criteria and presentation features are different from GASB revenue recognition criteria and presentation features. The FASB reports were reclassified or reformatted, as applicable, to GASB presentation in these financial statements.



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

GAAP requires that revenues and expenses relating to summer school activities, the dates of which cross the State's fiscal year, are allocated between fiscal years rather than reported in a single fiscal year with the exception of teachers' salaries which are recorded in the fiscal year earned.

The State reports the following major funds:

Major Governmental Funds

General Fund – The principal operating fund of the State which accounts for all financial resources of the general government, except those required to be accounted for in another fund.

General Obligation Bond Projects Fund – Accounts for the financial resources to be used for the acquisition and construction of major capital facilities (other than those financed by proprietary funds) financed with general obligation bond proceeds, including educational facilities for county and independent school systems.

Major Enterprise Funds

Higher Education Fund – Accounts for the operations of State colleges and universities and State technical colleges.

State Health Benefit Plan (SHBP) – Administers self-insured program of health benefits for the employees of units of government of the State, units of county government and local education agencies located within the State.

Unemployment Compensation Fund – Accounts for the collection of employers' unemployment insurance tax and the payment of unemployment insurance benefits.

Additionally, the State reports the following fund types:

Governmental Funds

Special Revenue Funds – Account for specific revenue sources that are legally restricted to expenditures for specific purposes. The State's special revenue funds represent the blended component units that conduct general governmental functions and activities related to the Transportation Investment Act.

Debt Service Funds – Account for the payment of principal and interest on general long-term debt. The General Obligation Debt Sinking Fund, which is a legally mandated fund responsible for fulfilling annual debt service requirements on all general obligation debt, is included in this fund type, as is the SRTA Debt Service Fund.

Proprietary Funds

Enterprise Funds – Account for those activities for which fees are charged to external users for goods or services. These funds are also used when the activity is financed with debt that is secured by a pledge of the net revenues from fees and charges.

The State's nonmajor enterprise funds are Georgia Higher Education Facilities Authority, State Employees' Assurance Department and State Road and Tollway Authority.

Internal Service Funds – Account for the financing of goods or services provided by one department or agency to other State departments or agencies, or to other governmental entities, on a cost-reimbursement

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

basis. The predominant participant in internal service fund activity is the primary government. The activities accounted for in the State's internal service funds include risk management, prison industries, property management, technology, and personnel administration.

Fiduciary Funds

Pension and Other Employee Benefit Trust Funds – Account for the retirement systems and plans administered by the System, TRS, and for pension plans administered on behalf of a variety of local government officials and employees. These funds also include those used to report the accumulation of resources for, and payment of other postemployment benefits.

Investment Trust Funds – Account for the external portions of government-sponsored investment pools, including Georgia Fund 1 and Georgia Fund 1 Plus.

Private Purpose Trust Funds – Report resources of all other trust arrangements in which principal and income benefit individuals, private organizations, or other governments. Auctioneers Education Research and Recovery Fund, Real Estate Education, Research, and Recovery Fund and the Subsequent Injury Trust Fund are reported in this category.

Agency Funds – Account for the assets and liabilities for deposits and investments entrusted to the State as an agent for other governmental units, other organizations, or individuals. These funds include tax collections, child support recoveries, and correctional detainees' accounts.

E. Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources and Net Position/Fund Balances

Cash and Cash Equivalents

Cash and cash equivalents include currency on hand and demand deposits with banks and other financial institutions and short-term, highly liquid investments with maturity dates within three months of the date acquired, such as certificates of deposit, money market certificates and repurchase agreements. Cash and cash equivalents also include the holdings of the Board of Regents short-term fund.

Investments

Investments include financial instruments with terms in excess of three months from the date of purchase, certain other securities held for the production of revenue, and land and other real estate held as investments by endowments. Investments are presented at fair value. Changes in the fair value of land and other real estate held as investments by endowments are reported as investment income.

Pooled Investments with State Treasury

The Office of the State Treasurer (OST) manages the Local Government Investment Pool (LGIP) Trust. The LGIP Trust consists of 3 pools: Georgia Fund 1 ("GF1"), Georgia Fund 1 Plus ("GF1 Plus"), and Georgia Extended Asset Pool Plus ("GEAP Plus") and the LGIP Trust Reserve. For cash flow purposes, amounts reported in the Pooled Investments with State Treasury are considered cash equivalents.



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The State's External Investment Pools (described below) generally value investments as follows:

- All investments except repurchase agreements, non-negotiable certificates of deposit ("CD"), direct-issued commercial paper, and other such nonparticipating investments are priced at fair value.
- Repurchase agreements, non-negotiable CD's, direct-issued commercial paper, and other such nonparticipating investments are carried at cost because they are nonparticipating contracts that do not capture interest rate changes in their value.

Security transactions are accounted for on a trade date basis which means that the purchases and sales of securities are recorded on the day the trade takes place with a corresponding payable or receivable.

External Investment Pools

The State Depository Board may permit any department, board, bureau or other agency to invest funds collected directly by such organization in short-term time deposit agreements, provided that the interest income of those funds is remitted to the State Treasurer as revenues of the State. As a matter of general practice, however, demand funds of any department, board, bureau or other agency in excess of current operating expenses are required to be deposited with the State Treasurer for the purpose of pooled investment per Official Code of Georgia (OCGA) 50-17-63. Such cash is managed primarily in pooled investment funds to maximize interest earnings. The pooled investment funds "Georgia Fund 1, and "Georgia Fund 1 Plus" are also available on a voluntary basis to organizations outside of the State reporting entity. The funds in the local government investment pool may be consolidated with State funds under control of the State Treasurer for investment purposes, per OCGA 36-83-8.

Georgia Fund 1 – The (GF1 or the Primary Liquidity Portfolio's) primary objectives are safety of capital, investment income, liquidity and diversification while maintaining principal. It is managed as a stable Net Asset Value (NAV) pool. The Pool operates and reports to participants on an amortized cost basis. The income, gains and losses, net of administration fees of the pool are allocated to participants monthly on the ratio of the participant's share of the total funds in the pool based on the participant's average daily balance. This method differs from the fair value method used to value investments in these financial statements because the amortized cost method is not designed to distribute to participants all unrealized gains and losses in the fair values of the pool's investments. Per the Governmental Accounting Standards Board ("GASB") 79, to qualify for the use of amortized cost accounting for financial reporting purposes, an investment pool must meet all the criteria listed in GASB 79. GFI is managed as a stable NAV pool but does not comply with all the requirements listed in GASB 79; therefore, the investments of the pool are reported at fair value at fiscal year end.

Georgia Fund 1 Plus – (GF1 Plus) was established on July 1, 2016, and initially funded through redemptions in GF1. It is managed to maintain a stable Net Asset Value (NAV) of 1.00. For financial reporting purposes, the pool is reported at fair value. GF1 Plus was established as an additional LGIP investment option for the state, state agencies, and eligible municipalities looking to benefit from higher yields available by adding credit exposure.

Georgia Extended Asset Pool Plus – (GEAP Plus) was established on July 1, 2018 as an investment for the OPEB Trust funds. GEAP Plus was initially funded with OPEB Trust funds and received another contribution of OPEB funds in January 2019. In accordance with the OPEB Trust Policy, funds from each Target Maturity Portfolio (TMP) as they matured were partly distributed for reinvestment in equity investments managed by the Division of Investment Services of the Teachers Retirement System of Georgia with the remainder principal and interest reinvested in additional TMPs. For financial reporting purposes, investments of the pool are reported at fair value at fiscal year end.

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Other Investments

The State's Unemployment Compensation Fund monies are required by the Social Security Act to be invested in the U.S. Department of Treasury, Bureau of Public Debt Unemployment Trust Fund (BPDUTF), which is not registered with the Securities and Exchange Commission. The fair value of the position in the BPDUTF is the same as the value of the BPDUTF shares.

Receivables

Receivables in the State's governmental funds pertain primarily to the accrual of taxes, as well as to federal grants and to revenues related to charges for services. Receivables in all other funds have arisen in the ordinary course of business. Receivables are recorded, net of an allowance for uncollectible accounts, when either the asset or revenue recognition criteria (See Note 1-D) have been met. Receivables from the federal government are reasonably assured; an allowance for uncollectible accounts is not typically established for federal receivables. In the governmental fund financial statements, the portion considered "available" is recorded as revenue; the remainder is recorded as a deferred inflow of resources-unavailable.

Inventories and Prepaid Items

Inventories of supplies and materials are determined by physical count and/or perpetual inventory records and are valued at cost, weighted average cost, moving average cost, or lower of weighted average cost or market, using the first-in/first-out (FIFO) method, depending on the individual organization's preference. The costs of governmental fund inventories are recorded as expenditures when consumed rather than when purchased for larger agencies and agencies with material inventories. Other agencies may use either the purchase or consumption method.

Prepaid items include payments made to vendors and local government organizations for services that will benefit periods beyond the fiscal year-end. Also, the employer's portion of health insurance benefits applicable to coverage effective after the fiscal year-end is recorded as a prepaid item.

The fund balance of governmental funds is reported as nonspendable for inventories and prepaid items to indicate that these amounts do not represent expendable available financial resources.

Restricted Assets

Certain cash and cash equivalents, investments, and other assets are classified as restricted assets on the Balance Sheet and/or Statement of Net Position because their use is limited by applicable bond covenants, escrow arrangements or other regulations.

Capital Assets

Capital assets of governmental funds are recorded as expenditures at the time of purchase and capitalized in the governmental activities column of the government-wide Statement of Net Position. Capital assets of the State's proprietary funds and component units are capitalized in the fund in which they are utilized. Capital assets are stated at historical cost or, in some instances, estimated historical cost. Estimation methods include using historical sources to determine the cost of similar assets at the time of acquisition and indexing where the historical cost of an asset is estimated by taking the current cost of a similar asset and dividing it by an index figure which adjusts for inflation. Donated capital assets are stated at acquisition value at the time of donation and disposals are removed at recorded cost. Infrastructure and intangible assets, as defined by the State's policy, acquired after June 30, 1980, are reported.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

All acquisitions in the following asset categories are capitalized regardless of cost:

Land and non-depreciable land improvements

Bridges and roadways included in the State highway system

Works of art and collections, acquired or donated (unless held for financial gain)

Amounts for other asset categories are capitalized when the cost or value equals or exceeds the following thresholds. Items acquired through capital leases or donations are subject to these capitalization thresholds, using the classifications most closely related to the leased or donated assets.

Asset Category	Threshold
Infrastructure other than bridges and roadways in State highway system	\$1,000,000
Software	\$1,000,000
Intangible assets, other than software	\$ 100,000
Buildings and building improvements	\$ 100,000
Improvements other than buildings	\$ 100,000
Library collections – capitalize all if collection equals or exceeds	\$ 100,000
Machinery and equipment	\$ 5,000

The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives is not capitalized. The State holds certain assets such as works of art, historical documents, and artifacts that have not been capitalized or depreciated because either they are held for financial gain or they are protected and preserved for exhibition, education, or research and are considered to have inexhaustible useful lives. Major outlays for construction of bridges and roadways in the State highway system are capitalized as projects are constructed. All other major construction projects are capitalized when projects are completed. Interest incurred during construction is not capitalized in governmental funds. Interest incurred during the construction of proprietary fund assets is included in the capitalized value of the asset.

Capital assets are depreciated over their useful lives using the straight-line depreciation method. The governmentwide, proprietary fund and component unit financial statements report depreciation expense.

Capital assets without indefinite or inexhaustible useful lives are generally amortized or depreciated on the straightline basis over the following useful lives:

Infrastructure	10-100 years
Buildings and building improvements	5-60 years
Improvements other than buildings	15-50 years
Machinery and equipment	3-20 years
Software	3-10 years
Intangible assets, other than software	20 years
Library collections	10 years
Works of art and collections	5-40 years

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Deferred Outflows of Resources

In addition to assets, the government-wide and fund financial statements will sometimes report a separate section of deferred outflows of resources. This separate financial statement element represents a consumption of net position or fund balance that applies to future period(s) and so will not be recognized as an outflow of resources (expense/ expenditure) until then.

Compensated Absences

The compensated absences liability is accrued for the estimated value of leave payments (e.g., for vacation, holiday deferrals, FLSA compensatory time, etc.) using pay rates in effect at the balance sheet date.

Full-time employees earn annual leave ranging from 10 to 14 hours each month depending upon the employee's length of continuous State service with a maximum accumulation of 360 hours. Employees are paid for unused accumulated annual leave upon retirement or termination of employment. Funds are provided in the appropriation of funds each fiscal year to cover the cost of annual leave of terminated or retired employees.

Employees earn 10 hours of sick leave each month with a maximum accumulation of 720 hours. Sick leave does not vest with the employee. There is no liability for accumulated sick leave because the State has no obligation to pay sick leave upon termination or retirement of employment. Unused accumulated sick leave is forfeited upon retirement or termination of employment. However, certain employees who retire with 120 days or more of forfeited annual and sick leave are entitled to additional service credit in the Employees' Retirement System. No liability is recorded for rights to receive sick pay benefits.

Overtime for non-exempt employees is governed by the provisions of the Fair Labor Standards Act (FLSA). Overtime worked by non-exempt employees will normally be credited as FLSA compensatory time at a rate of one and one-half hours of compensatory time for each hour of overtime worked. Employees receive pay for overtime in lieu of FLSA compensatory time as provided in statewide policy or upon exceeding the accumulation limits of FLSA compensatory time and upon separation from employment.

Long-term Obligations

Long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities column or business-type activities column on the government-wide Statement of Net Position and on the proprietary fund Statement of Net Position in the fund financial statements. Bond discounts and premiums are deferred and amortized over the life of the bonds using a method that approximates the effective interest method or the straight-line method. Bonds payable are reported net of the unamortized bond premium or discount. Bond issuance costs are recognized during the current period.

In the fund financial statements, governmental funds recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

Principal and interest payments on long-term debt usually should be reported as expenditures under the modified accrual basis of accounting when due. When notes and loans payables become due and payable the liabilities are recorded in the fund from which payment will be made. When bonds or notes are a direct obligation and/or expected to be repaid from proprietary resources, they are recorded as a liability of the proprietary fund at face value.



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The *Tax Reform Act of 1986* requires governmental organizations issuing tax-exempt bonds to refund to the U.S. Treasury, interest earnings on bond proceeds in excess of the yield on those bonds. Governmental organizations must comply with arbitrage rebate requirements in order for their bonds to maintain tax-exempt status. Organizations are required to remit arbitrage rebate payments for non-purpose interest to the federal government at least once every five years over the life of the bonds. Arbitrage liability is treated as an expense in the government-wide statements when the liability is recognized. In the fund financial statements, governmental funds report arbitrage (other debt service) expenditures when the liability is due.

Pollution remediation obligations are recorded when the State knows that a site is polluted and one or more obligating events have occurred. The amount recorded is an estimate of the current value of potential outlays for the cleanup, calculated using the "expected cash flows" measurement technique.

Lease obligation that transfers substantially all the benefits and risks inherent to ownership of the property or equipment is accounted for as a capital lease by the lessee. The recording of a capital lease reflects the acquisition of a capital asset and the incurrence of a long-term liability. All other leases are classified as operating leases.

Governmental funds recognize periodic payments on capital and operating leases as expenditures in the period incurred. State organizations reported as governmental funds are also recording other financing sources and capital outlay expenditures for the net present value of the minimum lease payments. This applies in the initial year of the lease term only. Principal amounts of lease payments due within 12 months are recorded as a current liability.

Proprietary funds, fiduciary funds, component units using the accrual basis, and the government-wide financial statements are reporting capital assets as well as long and short-term payables on the statement of net position. Therefore, for capital leases, a capital asset and lease obligation are recorded at inception of the lease and periodic lease payments are recorded as interest expense and a reduction to the capital lease obligation. Additionally, depreciation expense related to the leased capital asset are recorded.

Deferred Inflows of Resources

In addition to liabilities, the government-wide and fund financial statements will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position or fund balance that applies to future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

Net Position

The difference between assets, deferred outflows of resources, liabilities and deferred inflows of resources is "Net Position" on the government-wide, proprietary fund and fiduciary fund financial statements.

Net position is reported as net investment in capital assets, restricted or unrestricted. "Net Investment in Capital Assets" consists of capital assets, net of accumulated amortization/depreciation and reduced by outstanding balances for bonds, notes and other debt that are attributed to the acquisition, construction or improvement of those assets. In addition, deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction or improvement of capital assets or related debt are included in Net Investment in Capital Assets. If there are significant unspent related debt proceeds or deferred inflows of resources at the end of the reporting period, the portion of the debt or deferred inflows of resources attributable to the unspent amount are not included.



NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Restricted net position results when constraints placed on net position use are either externally imposed by creditors, grantors, contributors, and the like, or imposed by law through constitutional provisions or enabling legislation.

Unrestricted net position consists of net position that does not meet the definition of the two preceding categories may be designated, indicating it is not available for general operations. Such designations have internally imposed constraints on resources, but can be removed or modified.

When both restricted and unrestricted net position are available for use, it is the State's policy to first utilize federal funds available from restricted net position. Other funds not otherwise remitted to the State Treasury, which may be available from restricted or unrestricted net position should be utilized next, prior to the use of State funds.

Fund Balances

Generally, fund balance represents the difference between the assets, deferred outflows of resources, liabilities and deferred inflows of resources under the current financial resources measurement focus of accounting. In the fund financial statements, governmental funds report fund balance classifications that comprise a hierarchy based primarily on the extent to which the government is bound to honor constraints on the specific purposes for which amounts in those funds can be spent. Fund balances are classified as follows:

Nonspendable – Fund balances are reported as nonspendable when amounts cannot be spent because they are either (a) not in spendable form (i.e., items that are not expected to be converted into cash or (b) legally or contractually required to be maintained intact, such as inventory, prepaid items, and the principal in a permanent fund.

Restricted – Fund balances are reported as restricted when there are limitations imposed on their use either through constitutional provisions or enabling legislation adopted by the State or through the external restrictions imposed by creditors, grantors or laws or regulations of other governments.

Committed – Fund balances are reported as committed when they can be used only for specific purposes pursuant to constraints imposed by formal actions of both the Governor and the General Assembly. The Georgia Legislature and Governor represent the State's highest level of decision-making authority. Formal action consists of legislation passed by both the House and Senate and signed by the Governor and is required to establish, modify or rescind a limitation.

Assigned – Fund balances are reported as assigned when amounts are constrained by the State's intent that they be used for specific purposes, but they are neither restricted nor committed. Assignments may be made under statutory authority of management of the reporting organizations in the State.

Unassigned – The residual amount of fund balance is reported as unassigned for balances that do not meet the above constraints. The government reports positive unassigned fund balance only in the general fund. Negative unassigned fund balances may be reported in all funds.

As with net position, when both restricted and unrestricted (committed, assigned, unassigned) fund balances are available for use, it is the State's policy to first utilize federal funds available from restricted fund balance. Other funds not otherwise remitted to the State Treasury, which may be available from restricted, committed or assigned fund balance should be utilized next, prior to the use of State funds when expenditures are incurred for purposes for which amounts in any of those funding sources could be used. Within unrestricted fund balance, after the above consideration of funding source, the State's policy is that committed amounts generally should be reduced first, followed by assigned amounts and then unassigned amounts when expenditures are incurred for purposes for which amounts in any of those unrestricted fund balance classifications could be used.



Interfund Activity and Balances

Equally offsetting asset and liability accounts (due from/to other funds) are used to account for amounts owed to a particular fund by another fund for obligations on goods sold or services rendered.

As a general rule, the effect of interfund activity has been eliminated from the government-wide financial statements with the exception of activities between governmental activities and business-type activities. In the fund financial statements, transfers represent flows of assets without equivalent flows of assets in return or requirements for repayment.

In addition, transfers are recorded when a fund receiving revenue provides it to the fund which expends the resources. Transfers of balances between funds are made to accomplish various provisions of law.

Interfund payables and receivables have been eliminated from the Statement of Net Position except for amounts due between governmental and business-type activities. These amounts are reported as internal balances on the Statement of Net Position.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 2 - CHANGES IN FINANCIAL ACCOUNTING AND REPORTING

A. Implementation of New Accounting Standards

In fiscal year 2019, the State implemented the following GASB Statements:

GASB Statement No. 83, *Certain Asset Retirement Obligations*, establishes uniform guidance for accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. This Statement requires that recognition occur when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates a government to perform asset retirement activities. Laws and regulations may require governments to take specific actions to retire certain tangible capital assets at the end of the useful lives of those capital assets, such as decommissioning nuclear reactors and dismantling and removing sewage treatment plants. Other obligations to retire tangible capital assets may arise from contracts or court judgments. Adoption of this Statement did not have a significant impact on the financial statements.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements,* improves the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. Adoption of this Statement did not have a significant impact on the financial statements.

B. Change in Accounting Principles

Primary Government

Management has decided to report the State Road and Tollway Authority's financial position and activities on a oneyear lag. This change resulted in a decrease to net position of \$14.5 million.

Component Units

During the fiscal year, it was determined that the Georgia Tech Facilities, Inc., part of the Higher Education Foundations discretely presented component unit, decreased net position by \$5.9 million due to changes related to revenue recognition, bond issuance cost accounting policy, and investment in sales-type lease policy.



NOTE 2 - CHANGES IN FINANCIAL ACCOUNTING AND REPORTING (continued)

C. Correction of Prior Year Errors

Primary Government

Unamortized premiums and deferred outflows were not appropriately adjusted for instances in which original bond offerings were partially refunded. This error resulted in a decrease of \$70.0 million to deferred outflows of resources and an increase of \$68.4 million to unamortized premiums for a net prior period adjustment of \$1.5 million.

An adjustment was made to Higher Education Fund, an Enterprise fund, for correction of prior year errors relating to capital assets, lease purchase obligations, accounts receivable and deferred outflows of resources. These adjustments resulted in an increase to beginning net position by \$1.0 million.

Component Units

During prior years, the Georgia International and Maritime Trade Center Authority operated under a policy of recording expense relating to its agreement to reimburse the Georgia World Congress Center Authority (GWCCA) for employees' rights to receive compensation for future absences based upon services already rendered. This obligation related to vesting of annual leave, compensated leave and banked holiday leave. It was determined that such earned, but unpaid compensated absences should remain the obligation of the GWCCA. As a result, the Authority recorded an entry adjusting beginning net position totaling an increase of \$0.1 million.

During the fiscal year, VSU Auxiliary Services Real Estate Foundation, part of the Higher Education Foundations discretely presented component unit, restated net position due to prior year errors in receivables. An adjustment was made in fiscal year 2019 to increase beginning net position by \$2.0 million.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 3 - FUND EQUITY RECLASSIFICATIONS AND RESTATEMENTS

Reclassifications and Restatements consisted of the following (amount in thousands):

	6/30/2018 As Previously Reported		As Previously Accounting		Correction of Prior Year Errors		6/30/2018 (Restated)
Governmental Funds and Activities							
Major Funds:							
General Fund	\$	8,109,811	\$	—	\$	—	\$ 8,109,811
General Obligation Bond Projects Fund		1,141,832		_		_	1,141,832
Nonmajor Funds:							
Special Revenue Funds		371,762		(28,551)		_	343,211
Debt Service Fund		64,016		(63,746)		_	270
Total Governmental Funds		9,687,421		(92,297)		—	9,595,124
Government-wide Adjustments							
Capital Assets, net of depreciation		22,637,242		9,235			22,646,477
Other Noncurrent Assets and Liabilities		(644,126)		144,215			(499,911)
Deferred Inflows/Outflows of Resources		1,241,674		(3,871)		(69,962)	1,167,841
Long-Term Liabilities Related to Debt		(10,686,267)		(131,707)		68,422	(10,749,552)
OPEB Assets/Liabilities		(2,842,826)		(213)		_	(2,843,039)
Pension Assets/Liabilities		(3,126,971)		692		_	(3,126,279)
Inclusion of Internal Service Funds in							
Governmental Activities		562,016	_			_	 562,016
Total Governmental Funds and Activities	\$	16,828,163	\$	(73,946)	\$	(1,540)	\$ 16,752,677
Proprietary Funds and Business-type Activities							
Major Funds:							
Higher Education Fund	\$	1,660,674	\$	_	\$	1,039	\$ 1,661,713
State Health Benefit Plan		689,872		_		_	689,872
Unemployment Compensation Fund		2,203,261		_		_	2,203,261
Nonmajor Funds:							
Enterprise Funds		158,464		59,488		_	217,952
Internal Service Funds		404,967		_		_	404,967
Internal Service Funds Look-Back Adjustments							
Removal of Internal Service Funds Relating to							
Governmental Activities		(562,016)	_	_		_	 (562,016)
Total Proprietary Funds and Business-type Activities	\$	4,555,222	\$	59,488	\$	1,039	\$ 4,615,749
Fiduciary Funds							
Pension and Other Employee Benefit Trust Funds	\$	97,209,279	\$	_	\$	_	\$ 97,209,279
Investment Trust Funds		7,358,335		_		_	7,358,335
Private Purpose Trust Funds		224,195	_	_		_	 224,195
Total Fiduciary Funds	\$	104,791,809	\$		\$		\$ 104,791,809
Discretely Presented Component Units	\$	11,038,477	\$	(5,858)	\$	2,166	\$ 11,034,785
Total Reporting Entity	\$	137,213,671	\$	(20,316)	\$	1,665	\$ 137,195,020

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



A. Fund Balances

The specific purposes of the governmental funds fund balances, classified as other than unassigned, at June 30, 2019 are as follows (amount in thousands):

		General Fund	0	General bligation nd Projects Fund	Gov	onmajor ernmental Funds		Total
Nonspendable Fund Balance Inventories and Prepaid Amounts	\$	20,780	\$	_	\$	16,770	\$	37,550
inventories and riteplater informs		20,700			•	10,770		01,000
Restricted Fund Balance								
Capital Projects	\$	—	\$	1,384,813	\$	_	\$	1,384,813
Guaranteed Revenue Debt								
Common Reserve Fund		53,776		_		_		53,776
Emission Regulation		5,102		_		_		5,102
Healthcare Facility Regulation		17,321		—		—		17,321
Health Care Access and Improvement		23,095		—		—		23,095
Indigent Care Trust Fund		8,643		_		_		8,643
Jasper Ocean Terminal Project		7,551		_		_		7,551
Lottery For Education		1,354,631		_		_		1,354,631
Roads and Bridges (Motor Fuel Tax Funds)		3,414,944		_		94,017		3,508,961
Unclaimed Property		39,977		_		_		39,977
Underground Storage Tank Trust Fund		75,297		_		_		75,297
Unissued Debt/Debt Service		157,201		_		64,016		221,217
Help America Vote Act		13,177		_		·		13,177
Victims of Violent Crime Emergency Fund		21,234		_		_		21,234
Health and Welfare								-
Behavioral Health		2,461		_		_		2,461
Community Health		13,115		_		_		13,115
Human Services		853		_		_		853
Public Health		13,646		_		_		13,646
Transportation		116,914		_		303,772		420,686
Public Safety		7,531		_				7,531
Economic Development and Assistance		3,640		_		_		3,640
Culture and Recreation		59,684		_		_		59,684
Other		28,815		69,960		_		98,775
Total Restricted Fund Balance	\$	5,438,608	\$	1,454,773	\$	461,805	\$	7,355,186
Committed Fund Balance								
Administrative Services Fleet Management Billeting Funding	\$	7,898 1,173	\$		\$		\$	7,898 1,173
Other Total Committed Fund Balance	<u>م</u>	314	¢		¢		<u> </u>	314
Total Committed Fund Balance	\$	9,385	\$		\$		\$	9,385 (continued)



NOTE 4 - NET POSITION AND FUND BALANCES (continued)

	 General Fund	Oł Bon	General Digation d Projects Fund	Gove	onmajor ernmental Funds	 Total
Assigned Fund Balance						
General Government	\$ 198,625	\$	28,539	\$	2,896	\$ 230,060
Education	26,258		_		_	26,258
Health and Welfare	151,852		_		_	151,852
Transportation	36,130		_		_	36,130
Public Safety	81,598		_		_	81,598
Economic Development and Assistance	10,710		_		_	10,710
Culture and Recreation	10,638		_		_	10,638
Conservation	 6,462				41,361	 47,823
Total Assigned Fund Balance	\$ 522,273	\$	28,539	\$	44,257	\$ 595,069

B. Restricted Net Position

The State's net position restricted by enabling legislation represents resources which a party external to a government, such as citizens, public interest groups, or the judiciary, can compel the government to use only for the purpose specified by the legislation. The government-wide Statement of Net Position reports \$9.6 billion of restricted net position.

C. Deficit Net Position

The governmental activities of the State ended the year with an unrestricted net position deficit of \$7.7 billion. The deficit is a result of pension and Other Postemployment Benefit (OPEB) liabilities and the continued practice of incurring debt for the purposes of capital acquisition and construction on behalf of county and independent school systems, business-type activities and State schools. As of June 30, 2019, outstanding general obligation bonds applicable to these projects was \$5.7 billion. Since the occurrence of this debt does not result in capital asset acquisitions for governmental activities, the debt is not reflected in the net position category, Net Investment in Capital Assets, but rather in the unrestricted net position category. The unrestricted deficit balance of the primary government however has been adjusted for the governmental activities outstanding debt balances related to capital assets reported in business-type activities in the amount of \$3.2 billion. GASB 68, as related to pensions required the State to recognize its proportional share of the net pension liability of the pension plans applicable to said standard. As of June 30, 2019, the liability resulted in a \$3.0 billion impact to unrestricted net position. GASB 75, as related to OPEB required the State to recognize its proportional share of the net OPEB liability of the OPEB plans applicable to said standard. As of June 30, 2019, the liability resulted in a \$2.5 billion impact to unrestricted net position.

The business-type activities of the State ended the year with an unrestricted net position deficit of \$6.2 billion, which is primarily due to the recognition of net pension and OPEB liabilities. The higher education fund has deficit balances due to pension and OPEB. GASB 68, as related to pensions, required the State to recognize its proportional share of the net pension liability of the pension plans applicable to said standard. As of June 30, 2019, the liability resulted in a \$2.6 billion impact to unrestricted net position. GASB 75, as related to OPEB, required the State to recognize its proportional share of the net OPEB liability of the OPEB plans applicable to said standard. As of June 30, 2019, the liability resulted in a \$4.8 billion impact to unrestricted net position. The State Road and Tollway Authority's deficit of \$263.7 million in unrestricted net position of business-type activities is primarily a result of \$256.7 million in outstanding balances for the TIFIA and Design Building finance loans related to the I-75 Northwest Corridor project and \$34.1 million in outstanding balances for the transportation revenue bonds related to the I-75S express Lanes project.

NOTE 5 - DEPOSITS AND INVESTMENTS

Cash and cash equivalents and investments as of June 30, 2019 are classified in the accompanying financial statements as follows (amount in thousands):

	-	Primary overnment d Fiduciary Funds	C	Component Units	Total
Primary Government					
Cash and Cash Equivalents	\$	5,504,028	\$	732,726	\$ 6,236,754
Pooled Investments with State Treasury		5,504,354		1,626,783	7,131,137
Investments		3,761,707		1,156,086	4,917,793
Restricted Assets					
Cash and Cash Equivalents		2,769,053		424,097	3,193,150
Pooled Investments with State Treasury		359,843		99,527	459,370
Investments		250,495		3,522,081	3,772,576
Fiduciary Funds					
Cash and Cash Equivalents		2,995,253			2,995,253
Pooled Investments with State Treasury		11,366,960			11,366,960
Investments		96,730,648			96,730,648
Restricted Assets					
Pooled Investments with State Treasury		626			 626
Total Cash and Investments	<u>\$</u>	129,242,967	\$	7,561,300	\$ 136,804,267

Cash on hand, deposits and investments as of June 30, 2019 consist of the following (amount in thousands):

	Primary Government nd Fiduciary Funds	С	omponent Units	Total
Cash on Hand	\$ 1,909	\$	55	\$ 1,964
Deposits with Financial Institutions (Note 5A)	4,211,654		958,028	5,169,682
Investments (Note 5B)	105,430,759		4,748,018	110,178,777
Pooled Investments with State Treasury (Note 5D)	17,231,784		1,726,310	18,958,094
Unemployment Compensation Funds with U.S. Treasury	2,495,750			2,495,750
Assets Held at the Board of Regents				
on Behalf of Other Organizations	 (128,889)		128,889	
Total Cash and Investments	\$ 129,242,967	\$	7,561,300	\$ 136,804,267

A. Deposits

Deposits include certificates of deposit and demand deposit accounts. The State Depository Board (Board) has authority to determine collateral requirements for State demand deposit accounts. Beginning in October 2008, in response to the U.S. financial crisis, the Board required all uninsured State deposits to be fully collateralized until September 2012. Its investment policy was amended to permit the Office of the State Treasurer (OST) to diversify its portfolio to include



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

investments in deposit agreements that are with highly rated U.S. banks classified to be low or very low risk, as measured by the OST counterparty risk assessment model.

The Board permits OST to invest in deposit agreements in approved banks as an alternative to purchasing commercial paper and corporate notes issued by highly rated U.S. banks because of the clear preference of all depositor claims, insured and uninsured, over general creditors. OST has been advised that there is a clear and significant difference in favor of deposits over commercial paper in the event of insolvency or liquidation of a U.S. bank thus, OST gives preference to interest-bearing demand deposits due to both a preference in safety of capital and daily liquidity. For any single financial institution, investments deposit agreements, in approved banks that are not collateralized or secured as described below, together with purchases of commercial paper, cannot exceed 5% of total portfolio assets invested by OST.

Other than the deposit agreements referenced above, State demand deposits, time deposits and other certificates of deposit must be secured by eligible collateral, a Federal Home Loan Bank letter of credit, or a surety bond approved by the Board. There are currently no issuers of surety bonds that have been approved by the Board. Eligible collateral includes any one or more of the following securities as enumerated in OCGA 50-17-59:

- 1) Bonds, bills, certificates of indebtedness, notes or other direct obligations of the United States or of the State.
- 2) Bonds, bills, certificates of indebtedness, notes or other obligations of the counties or municipalities of the State.
- 3) Bonds of any public authority created by the laws of the State, providing that the statute that created the authority authorized the use of the bonds for this purpose, the bonds have been duly validated and they are not in default.
- 4) Industrial revenue bonds and bonds of development authorities created by the laws of the State, for which bonds have been duly validated and they are not in default.
- 5) Bonds, bills, certificates of indebtedness, notes or other obligations of a subsidiary corporation of the U.S. Government, which are fully guaranteed, both as to principal and interest and debt obligations issued, or securities guaranteed by the Federal Land Bank, the Federal Home Loan Bank, the Federal Intermediate Credit Bank, the Central Bank for Cooperatives, the Farm Credit Banks, the Federal Home Loan Mortgage Corporation and the Federal National Mortgage Association.

The Board is authorized in OCGA 50-17-58 to allow agencies of the State the option of exempting demand deposits from the collateral requirements. Currently, the Board has only authorized OST to waive collateral on special accounts approved by the Board, as referenced above, in accordance with its investment policy. The Board requires all other State demand deposits, time deposits and certificates of deposits to be collateralized in an amount equal to and not less than 110% of any deposit not insured by the FDIC. In addition, the Board instituted a requirement to limit total State deposits at any State depository to not exceed 100% of the depository's equity capital. The Board may temporarily increase the total State deposit limit at any State depository to 125% of equity capital to allow for fluctuation in demand deposit balances. Credit unions are not authorized to serve as State depositories.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Custodial Credit Risk – Deposits

The custodial credit risk for deposits is the risk that, in the event of a bank failure, the State's deposits may not be recovered. The OST Investment Policy specifies safety of capital as the first priority in investing funds and liquidity as the second priority, followed by investment return and diversification. In adherence to these objectives, OST maintains balances in deposit agreements in approved banks for investment unless commercial paper issued by those financial institutions offers a risk-adjusted advantage. OST closely monitors the credit of U.S. banks having deposit agreements.

Beginning in 2018, the Board implemented the Secure Deposit Program (SDP), a multi-bank pledging pool. The SDP requires participating banks that accept public deposits in Georgia to operate under the policy and procedures of the program. The State Treasurer sets the collateral requirements and pledging level for each covered depository. There are four tiers of collateralization levels specifying percentages of eligible securities to secure covered Deposits: 25%, 50%, 75%, and 110%. The SDP also provides for collateral levels to be increased to amount of up to 125% if economic or financial conditions warrants. The program lists the type of eligible collateral. The State Treasurer approves authorized custodians.

In accordance with the SDP, if a covered depository defaults, losses to public depositors are first satisfied with any applicable insurance, followed by demands of payment under any letters of credit or sale of the covered depository's collateral. If necessary, any remaining losses are to be satisfied by assessments made against the other participating covered depositories. Therefore, for disclosure purposes, all deposits of participants in the SDP are considered to be fully insured.

At June 30, 2019, bank balances of the primary government and its component units' deposits not included in the SDP totaled \$3.5 billion. It includes balances reported in fiduciary funds other than Pension and Other Employee Benefit Trust Funds as these balances are not separable from the holdings of the primary government. Of these bank balances, \$308.7 million were exposed to custodial credit risk as follows (amount in thousands):

	Primary Government and Fiduciary Funds		Component Units		Total
Uninsured and uncollateralized	\$	28,847	\$	134,952	\$ 163,799
Uninsured and collateralized with securities					
held by the pledging financial institutions		1,412		549	1,961
Uninsured and collateralized with securities held					
by the pledging institutions' trust departments					
or agents, but not in the State's name		59,407		83,543	142,950
Total deposits exposed to custodial credit risk	\$	89,666	\$	219,044	\$ 308,710

The carrying amounts of deposits of certain higher education foundations which utilize FASB standards were \$414.9 million. These deposits are not included in the balances reflected above.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

B. Investments

Investment Policies

Primary Government

The predominant portions of the primary government's investments are managed by OST and the University System of Georgia (USG). OST's and USG's investment policies are therefore presented as the investment policies of the primary government.

The State Depository Board has adopted two investment policies to govern State investments:

- 1) The Investment Policy for the Office of the State Treasurer (OST Investment Policy) dictates investment of assets managed by OST.
- 2) The Investment Policy for Approved State Investment Accounts (Investment Policy for Approved Agency Accounts) governs investments managed by organizations other than OST.

OST Investment Policy

OST is the only organization approved by the Board to invest funds pursuant to the OST Investment policy. The State Treasurer shall invest all funds with the degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment. OST is to invest all funds prudently, considering first, the probable safety of capital and then probable income, while meeting daily cash flow requirements and conforming to all statutes governing the investment of public funds.

OST is authorized to invest in securities and other investments as permitted in OCGA Sections 36-83-2, 50-5A-7, 50-17-2, 50-17-27 and 50-17-63. Authorized investments are subject to certain restrictions pursuant to the OST Investment Policy and specific guidelines for the individual portfolios managed by OST. Authorized investments and related restrictions and guidelines are described below:

a) Repurchase agreements – Repurchase agreements and reverse repurchase agreements may be transacted with authorized institutions that are rated investment grade by one or more nationally recognized rating agency or are determined by the Treasurer to have adequate capital and liquidity, with maximum exposure per institution determined by the Treasurer and adjusted as needed due to the financial condition of such institutions, the size of the OST investment portfolios, and in accordance with the OST counterparty risk assessment model. Repurchase agreements must be collateralized by obligations of the United States and its subsidiary corporations and instrumentalities or entities sanctioned or authorized by the United States government or other securities authorized for investment by the Treasurer in subsection (b) of Code of Section 50-17-63. Collateral comprised of obligations of the United States government must have a market value of at least 102% of the investment and other eligible collateral must have a market value of 105% of the investment. Collateral must be held by a third party custody of collateral or collateral requirements may be approved by the Treasurer for authorized institutions if necessary on occasion. All counterparties, and exceptions to custody and collateral requirements shall be reported by the Treasurer



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

to the State Depository Board. All reverse repurchase agreements shall be approved in advance by the Treasurer.

- b) Certificates of deposit (CD's) The maximum term of CD's shall not exceed five years. OST shall not place funds in non-negotiable CD's at any depository if such placement of funds will result in total state deposits at such depository in excess of 100% of total equity capital. Provided, however, that the Treasurer may authorize placement of funds in CD's at a depository if such placement of funds will result in total state deposits not to exceed 125% of total equity capital on an as needed basis to allow for fluctuations in demand deposit balances. All CD's must be fully insured by the FDIC or secured by collateral permitted by statute. Surety bonds acceptable as security for CD's shall require approval by the State Depository Board with such credit constraints or limitations it determines. Pledged securities shall be held by a third party custodian approved by OST. Pledged securities shall be marked-to-market at least monthly with depositories required to initially pledge to OST, and thereafter maintain upon notification or any shortfall, collateral having a market value equal to 110% of CD's or be secured through the Georgia multibank pledging pool program (Secure Deposit Program) with "Required Collateral" as defined therein.
- c) Commercial paper (CP) CP issued by domestic corporations carrying ratings no lower than P-1 by Moody's Investors Service and A-1 by Standard & Poor's Corporation, in an amount, including the balance of any bank deposit held for investment purposes described in (d) (4), below, that does not exceed 5% of portfolio assets for any single issuer.
- d) Bank deposits held for investment purposes (formerly referred to as negotiated investment deposit agreements). Deposit agreements with banks that are (1) secured by collateral permitted by statute, held by a third party custodian, marked-to-market daily, and having a market value equal to or exceeding 110% of the deposit; (2) secured through the Georgia multibank pledging pool program (Secure Deposit Program) with "Required Collateral" as defined therein; (3) fully secured by a letter-of-credit issued by a Federal Home Loan Bank; (4) fully secured by a surety bond issued by a financial institution approved by the State Depository Board; (5) fully insured by the FDIC; or, (6) subject to funds being available upon demand, with U.S. banks carrying ratings no lower than P-2 by Moody's Investors Service or A-2 by Standard & Poor's Corporation, are determined by the Treasurer to have adequate capital, with maximum exposure per institution determined by the Treasurer and adjusted as needed due to the financial condition of such institutions, the size of the OST investment portfolios, and in accordance with the OST counterparty risk assessment model in an amount, including any CP issued by the respective financial institution.
- e) Prime bankers acceptances Bankers acceptances must carry the highest rating assigned to such investments by a nationally recognized rating agency.
- f) Obligations issued by this state or its agencies or other political subdivisions of this state. Such investments, if meeting statutory investment requirements, may be approved for investment by the Treasurer with the requirement that they are of high credit quality and are reported to the State Depository Board.
- g) Obligations of corporations Obligations of domestic corporations including notes, bonds, negotiable CD's, and other marketable securities must be rated investment grade or higher by a nationally recognized rating agency.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

- h) Obligations issued by the government of any foreign country Direct obligations of the government of any foreign country must be rated A or higher by a nationally recognized rating agency.
- i) International Bank for Reconstruction and Development or the International Financial Corporation Obligations issued, assumed, or guaranteed by the International Bank for Reconstruction and Development or the International Financial Corporation must be rated A or higher by nationally recognized rating agency.
- j) Georgia Fund 1 (GF1), Georgia Fund 1 Plus, Georgia Extended Asset Pool (GEAP), Georgia Extended Asset Pool Plus (GEAP Plus), and any other funds comprising the local government investment pool in amounts necessary for prudent diversification, liquidity, and investment income.
- k) Asset-backed securities Pursuant to OCGA 50-5A-7(b), asset-backed securities rated AAA, having broad liquidity reflecting at least \$350 million of outstanding issuance and issued by an underlying credit rated A3/A or higher by Standard and Poor's Corporation or Moody's Investor Service.
- 1) Commercial mortgage-backed securities Pursuant to OCGA 50-5A-7(b), commercial mortgage-backed securities rated AAA by Standard and Poor's Corporation or Moody's Investors Service.
- m) Such other limitations as determined by the Treasurer to be necessary for the preservation of principal, liquidity, or marketability of any of the portfolios, including allowing investment in any single issuer of CP as described in (c) above or bank deposits held for investment purposes as described in (d) above to temporarily exceed 5% for a period not to exceed 10 business days to allow for efficient investment of accounts experiencing significant fluctuation of balances.

Investment Policy for Approved Agency Accounts

The OST Investment Policy does not authorize organizations other than OST to invest funds. OCGA 50-17-63(a) requires all demand funds held by any State organization to be deposited in accounts at State depositories approved by the Board. In the alternative, with prior approval of the Board, a state entity may be permitted to invest in time deposits, other permitted investments and any interest income from the invested funds must be remitted to the Treasurer as revenues of the State unless specific statutes provide otherwise. Therefore, the Board adopted the Investment Policy for Approved State Agency Investment Accounts to govern investment activity in accounts approved by the Board other than investments managed or overseen by OST or "excluded entities". These "excluded entities" include, but are not limited to, the Georgia Higher Education Savings Plan, USG, the Employees' Retirement System (ERS), Teachers Retirement System (TRS), and the Georgia Lottery Corporation. Only organizations that are approved by the Board to establish and maintain investment accounts may rely on the Investment Policy for Approved Agency Accounts to governed by the Investment Policy for Approved Agency Accounts to governed by the Investment Policy for Approved Agency Accounts to invest funds. As of June 30, 2019, no State organizations had received Board approval to establish investment accounts governed by the Investment Policy for Approved Agencies.

Board of Regents Investment Policies

The USG serves as fiscal agent for various units of the University System of Georgia and affiliated organizations. The USG pools the monies of these organizations with the USG's monies for investment purposes. The investment pool is not registered with the SEC as an investment company. The fair value of the investments is determined daily. The pool does not issue shares. Each participant is allocated a pro rata share of each pooled investment fund balance at fair value along with a pro rata share of the pooled fund's investment returns.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

The USG maintains investment policy guidelines for each pooled investment fund that is offered to qualified University System participants. These policies are intended to foster sound and prudent responsibility each institution has to the citizens of Georgia and which conforms to the Board of Regents investment policy. All investments must be consistent with donor intent, Board of Regents policy, and applicable Federal and state laws.

Units of the University System of Georgia and their affiliated organizations may participate in the Pooled Investment Fund program. The overall character of the pooled fund portfolio should be one of above average quality, possessing at most an average degree of investment risk. The Board of Regents' pooled investment fund options are described below:

- 1. <u>Short-Term Fund</u> The Short-Term Fund is available to both University System of Georgia institutions and their affiliated organizations. The Fund provides a current return and stability of principal while affording a means of overnight liquidity for projected cash needs. Investments are in securities allowed under OCGA § 50-17-59 and 50-17-63. The average maturities of investments in this fund will typically range between daily and three years, and the fund will typically have an overall average duration of 9 months to 1 year. The overall character of the portfolio is of Agency quality, possessing a minimal degree of financial risk. The market value of the Short Term Fund at June 30, 2019 was \$608.8 million.
- 2. Legal Fund The Legal Fund is available to both University System of Georgia institutions and their affiliated organizations. The Fund provides an opportunity for greater return and modest principal growth to the extent possible with the securities allowed under OCGA § 50-17-59 and 50-17-63. The average maturities of investments in this fund will typically range between three and five years, with a maximum of 30 years for any individual investment. The overall character of the portfolio is Agency quality, possessing a minimal degree of financial risk. The market value of the Legal Fund at June 30, 2019 was \$11.8 million.
- 3. <u>Balanced Income Fund</u> The Balanced Income Fund is available to both University System of Georgia institutions and their affiliated organizations. The Fund is designed to be a vehicle to invest funds that are not subject to the state regulations concerning investing in equities. This pool is appropriate for investing longer term funds that require a more conservative investment strategy. Permitted investments in the fund are domestic US equities, domestic investment grade fixed income, and cash equivalents. The equity allocation shall range between 20% and 40%, with a target of 30% of the total portfolio. The fixed income (bond) portion of the portfolio shall range between 60% and 80%, with a target of 70% of the total portfolio. Cash reserves and excess income are invested at all times in the highest quality par stable (A1, P1) institutional money market mutual funds, or other high quality short term instruments. The market value of the Balanced Income Fund at June 30, 2019 was \$152.3 million.
- 4. <u>Total Return Fund</u> The Total Return Fund is available to both University System of Georgia institutions and their affiliated organizations. The Fund is another pool designed to be a vehicle to invest funds that are not subject to state regulations concerning investing in equities. This pool offers greater overall equity exposure and is appropriate for investing longer term funds such as endowments. Permitted investments in the fund are domestic US equities, domestic investment grade fixed income, and cash equivalents. The equity allocation shall range between 60% and 80%, with a target of 70% of the total portfolio. The fixed income (bond) portion of the portfolio shall range between 20% and 40%, with a target of 30% of the total portfolio. Cash reserves and excess income are invested at all times in the highest quality par stable (A1, P1) institutional money market mutual funds, or other high quality short term instruments. The market value of the Total Return Fund at June 30, 2019 was \$14.7 million.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

- 5. <u>Diversified Fund</u> The Diversified Fund is available to both University System of Georgia institutions and their affiliated organizations. The Fund is designed to provide improved return characteristics with reduced volatility through greater diversification. This pool is appropriate for investing longer term funds such as endowments. Permitted investments in the fund may include domestic, international and emerging market equities, domestic fixed income and global fixed income. The equity allocation shall range between 60% and 80% of the portfolio, with a target of 70% of the total portfolio. The fixed income (bond) portion of the portfolio shall range between 20% and 40%, with a target of 30% of the total portfolio. Cash reserves and excess income are invested at all times in the highest quality par stable (A1, P1) institutional money market mutual funds, or other high quality short term instruments. The market value of the Diversified Fund at June 30, 2019 was \$208.7 million.
- 6. <u>Diversified Fund for Foundations</u> The Diversified Fund for Foundations is available only to University System of Georgia affiliated organizations. Like the Diversified Fund, the fund is designed to provide improved return characteristics with reduced volatility through greater diversification and is appropriate for investing longer term funds such as endowments. Investments in the fund may include domestic, international and emerging market equities, domestic and global investment grade and non-investment grade fixed income and liquid alternative investments. The equity allocation shall range between 40% and 75% of the portfolio, with a target of 65% of the total portfolio. The fixed income (bond) portion of the portfolio shall range between 10% and 40% of the portfolio, with a target of 20% of the total portfolio. The alternatives portion of the portfolio shall range between 0% and 30% of the portfolio, with a target of 15% of the total portfolio. Cash reserves and invested income are invested at all times in the highest quality par stable (A1, P1) institutional money market funds, or other high quality short term instruments. The market value of the Diversified Fund for Foundations at June 30, 2019 was \$68.0 million.

Fiduciary Funds – Pension and Other Employee Benefit Trust Funds

In accordance with OCGA 47-20-83, Public Retirement Systems may invest in the following:

- 1) U.S. or Canadian corporations or their obligations with limits as to the corporations' size and credit rating.
- 2) Repurchase and reverse repurchase agreements for direct obligations of the U.S. Government and for obligations unconditionally guaranteed by agencies.
- 3) FDIC insured cash assets or deposits.
- 4) Bonds, notes, warrants, loans or other debt issued or guaranteed by the U.S. Government.
- 5) Taxable bonds, notes, warrants or other securities issued and guaranteed by any state, the District of Columbia, Canada or any province in Canada.
- 6) Bonds, debentures or other securities issued or insured or guaranteed by an agency, authority, unit, or corporate body created by the U.S. Government.
- 7) Investment grade collateralized mortgage obligations.
- 8) Obligations issued, assumed or guaranteed by the International Bank for Reconstruction and Development or the International Financial Corporation.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

- 9) Bonds, debentures, notes and other evidence of indebtedness issued, assumed, or guaranteed by any solvent institution existing under the laws of the U.S. or of Canada, or any state or province thereof, which are not in default and are secured to a certain level.
- 10) Secured and unsecured obligations issued by any solvent institution existing under the laws of the U.S. or of Canada, or any state or province thereof, bearing interest at a fixed rate, with mandatory principal and interest due at a specified time with additional limits.
- 11) Equipment trust obligations or interests in transportation equipment, wholly or in part within the U.S., and the right to receive determinate portions or related income.
- 12) Loans that are secured by pledge or securities eligible for investment.
- 13) Purchase money mortgages or like securities received upon the sale or exchange of real property acquired.
- 14) Secured mortgages or mortgage participation, pass-through, conventional pass-through, trust certificate, or other similar securities with restrictions.
- 15) Land and buildings on such land used or acquired for use as a fund's office for the convenient transaction of its own business with restrictions.
- 16) Real property and equipment acquired under various circumstances.
- 17) Shares of mutual funds registered with Securities and Exchange Commission.
- 18) Commingled funds and collective investment funds maintained by state chartered banks or trust companies.

In addition, large retirement systems have restrictions as to the concentration of investments in corporations and equities and additional stipulations exist related to decreases in a fund's asset value. The retirement systems have additional restrictions on the acquisition of securities of companies with activities in the Iran petroleum energy sector. A list of scrutinized companies with activities in the Iran petroleum energy sector has been compiled and is annually updated. This list is utilized to identify and potentially divest the retirement systems of such holdings.

In accordance with OCGA 47-20-87, certain eligible large retirement systems (excluding the Teachers Retirement System) are authorized to invest in alternative investments such as privately placed investment pools that include investments such as leveraged buyout funds, mezzanine funds, workout funds, debt funds, venture capital funds, merchant banking funds, funds of funds and secondary funds. In addition, these retirement systems are authorized to invest in private placements and other private investments such as leveraged buyouts, venture capital investment, equity investments such as preferred and common stock, warrants, options, private investments in public securities, receivables, debt and equity derivative instruments, etc. The amount invested by an eligible large retirement system in alternative investments may not in the aggregate exceed 5% of the eligible large retirement system's assets at any time.

Other Postemployment Benefits (OPEB)

In May of 2018, the State created an investment policy for state and school OPEB trust funds. The policy requires at least 25% of funds to be invested at State Treasury and be subject to OST policy. The remaining funds are invested by ERS in publicly traded equities permitted in accordance with OCGA 47-20-84.

NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Component Units

Component units follow applicable investing criteria as specifically authorized by statute or by the component unit's governing authority. Certain higher education foundations utilize FASB standards. Balances for those component units as of June 30, 2019, are as follows (amount in thousands):

	Fair
	Value
Bond Securities	\$ 192,424
Certificates of Deposit	1,000
Corporate Bonds	24,180
Equity Securities- Domestic	758,039
Equity Securities- International	402,338
Equity Mutual Funds - Domestic	98,151
Equity Mutual Funds - International	313,592
Government and Agency Securities	4,224
Investment Pools	57,034
Money Market Accounts	161,584
Mutual Bond Funds	81,013
Real Estate Investment Trusts	79,697
Real Estate Held for Investment Purposes	81,371
Repurchase Agreements	654
U.S. Treasuries	150,797
Other	1,479,801
Total Investments	\$ 3,885,899

The component unit disclosures that follow do not include these balances, with the exception of the fair value measurement tables.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment.

Primary Government

OST's policy for management of interest rate risk attempts to match investments with expected cash requirements. However, certificates of deposit may not have a term exceeding five years. The State Treasurer may establish duration or maturity limitations for other investments.

USG's policy for managing interest rate risk is attempts to match investments with expected cash requirements.

The following table provides information about the primary government's exposure to interest rate risk. It includes balances reported in fiduciary funds other than Pension and Other Employee Benefit Trust Funds as these balances are not separable from the holdings of the primary government (amount in thousands):

(Table on next page)



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

		Maturity Period									
	Total	Less than				More than					
	Fair Value	3 Months	4 - 12 Months	1 - 5 Years	6 - 10 Years	10 Years					
Asset-Backed Securities											
Domestic	\$ 4,689	\$ 2,203	\$ 1,750	\$ 736	\$	\$ —					
Bank Deposits Held for Investment Purposes	1,475,948	1,475,948	—	—		—					
Bond Securities	19	—	—	—		19					
Corporate Debt											
Domestic	211,178	10,338	62,539	137,763	538	—					
Money Market Mutual Funds	69,008	68,405	—	603	—	—					
Mortgage-Backed Securities											
Commercial	5,812	3,993	166	1,653		—					
Municipal Bonds	997	6	101	332	338	220					
Mutual Funds - Debt*	93,778	129	—	18,988	29,924	44,737					
Repurchase Agreements	3,297,250	2,529,250	768,000	—	—	—					
Sovereign Credit	25,007	—	9,999	15,008	—	—					
Supranational Obligations	381,000	109,973	42,841	228,186	—	—					
U.S. Agency Obligations	1,893,933	385,400	284,402	1,129,129	33,607	61,395					
U.S. Treasury Obligations	571,365	77,619	153,216	337,622	2,908						
Total Debt Securities	8,029,984	\$ 4,663,264	\$ 1,323,014	\$ 1,870,020	\$ 67,315	\$ 106,371					
Equity Mutual Funds											
Domestic	138,422										
International	2,650										
Equity Securities											
Domestic	156,957										
International	357										
Real Estate Held for Investments	6,345										
Real Estate Investment Trust	1,006										
Other	130										
Total Investments	\$ 8,335,851										
*Maturity Daried is weighted average maturity											

*Maturity Period is weighted average maturity.



Fiduciary Funds – Pension and Other Employee Benefit Trust Funds Administered by the Employees' and Teachers Retirement Systems

The Boards of the Employees' and Teachers Retirement Systems have elected to manage interest rate risk of these pension and other employee benefit trust funds using the effective duration method. This method is widely used in the management of fixed income portfolios and quantifies to a much greater degree the sensitivity to interest rate changes when analyzing a bond portfolio with call options, prepayment provisions, and any other cash flows. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows and is best utilized to gage the effect of a change in interest rates on the fair value of a portfolio. It is believed that the reporting of effective duration found in the table below quantifies to the fullest extent possible the interest rate risk of the funds' fixed income assets (amount in thousands):

	Effective
Total	Duration
Fair Val	lue (Years)
\$ 5,75	51,008 3.8
50	00,705 0.8
21,41	16,644 5.6
27,66	58,357
48,61	12,790
15,95	57,938
	8,114
33	35,306
1,76	51,203
\$ 94,34	13,708
	Fair Val \$ 5,75 50 21,41 27,60 48,61 15,95 33 1,70



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Fiduciary Funds – Pension and Other Employee Benefit Trust Funds Administered by Other than the Employees' and Teachers Retirement Systems

The Public Retirement System Investment Authority Law does not address specific policies for managing interest rate risk. The following table provides information about interest rate risks associated with these pension and other employee benefit trust funds' investments (amount in thousands):

		Maturity Period								
	Total	Less than				More than				
	Fair Value	3 Months	4 - 12 Months	1 - 5 Years	6 - 10 Years	10 Years				
Asset-backed Securities										
Domestic	\$ 51,572	\$ —	\$ 1	\$ 23,768	\$ 9,696	\$ 18,107				
International	3,214	—	—	509	2,208	497				
Corporate Debt										
Domestic	180,265	637	11,992	75,492	58,723	33,421				
International	11,211	—	455	7,626	2,420	710				
Exchange Traded Funds	6,191	6,191	—	—	—	—				
Guaranteed Investment Contracts	1,384	—	—	—	—	1,384				
International Government Obligations	257	—	—	28	—	229				
Money Market Mutual Funds	84,864	83,754	—	_	_	1,110				
Mortgage-backed Securities	119,624	—	—	586	2,534	116,504				
Municipal Bonds	957	—	—	174	—	783				
Mutual Funds - Debt*	134,531	26,967	—	16,326	36,463	54,775				
U.S. Agency Obligations	72,927	—	836	2,097	1,239	68,755				
U.S. Treasury Obligations	76,407	1,688	1,195	30,135	28,664	14,725				
Total Debt Securities	743,404	\$ 119,237	\$ 14,479	\$ 156,741	\$ 141,947	\$ 311,000				
Commingled Funds	122,374									
Equity Mutual Funds										
Domestic	522,840									
International	13,848									
Equity Securities										
Domestic	1,164,729									
International	82,585									
Exchange Traded Funds - Equity	2,853									
Private Equity	44,606									
Real Estate Investment Trust	53,075									
Other	882	_								
Total Investments	\$ 2,751,196	=								

*Maturity period is weighted average maturity.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Component Units

The component units follow the applicable investing criteria specifically authorized by statute or by the component unit's governing authority.

The component units' exposure to interest rate risk is presented below (amount in thousands):

		Maturity Period										
	Total	Less than				More than						
	Fair Value	3 Months	4 - 12 Months	1 - 5 Years	6 - 10 Years	10 Years						
Asset-Backed Securities												
Domestic	\$ 27	\$ —	\$ —	\$	\$ 8	\$ 19						
Certificate of Deposits	5,682	489	733	4,460	_	_						
Corporate Debt												
Domestic	134,534	10,175	10,672	83,007	13,056	17,624						
Insurance Contracts	17,243	_	_	_	_	17,243						
International Government												
Obligations	6,177	1,069	725	3,627	756							
Investment Agreements	14,638	_	_	5,468	2,354	6,816						
Money Market Mutual Funds	79,091	77,340	1,751	_	_	_						
Mortgage-Backed Securities	92,381	_	_	2,158	1,371	88,852						
Municipal Bonds	3,372	30	325	2,752	57	208						
Mutual Funds - Debt*	21,501	_	_	14,074	7,427	_						
Non-purpose investments	37,526	_	37,526	_	_	_						
Repurchase Agreements	58,377	52,612	_	_	_	5,765						
Strategic Income Opportunities Funds	24,851	_	_	24,851	_	_						
U.S. Agency Obligations	93,966	18,248	13,773	41,324	15,647	4,974						
U.S. Treasury Obligations	232,407	1,384	6,566	32,851	190,892	714						
Total Debt Securities	821,773	\$ 161,347	\$ 72,071	\$ 214,572	\$ 231,568	\$ 142,215						

Equity Mutual Funds	
Domestic	32,554
International	14,645
Equity Securities	
Domestic	25,841
International	10,180
Exchange Traded Funds	10,124
USG Investment Pool - Not LGIP	71,855
Other Investments	4,036
Total Investments	\$ 991,008

* Maturity Period is weighted average maturity.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the holder of the investment. The credit risk tables presented on the following pages have been prepared using Standard and Poor's Corporation ratings scales.

Primary Government

OST utilizes a counterparty risk assessment model to assess credit risk of financial institutions that have been approved to serve as counterparties and major depositories. OST has assigned credit limits to each financial institution based upon its counterparty risk assessment model which incorporates market indicators, default probabilities, issuer research and issuer ratings to determine maximum credit exposure per institution, term of investment for respective counterparties and collateralization requirements in accordance with the OST Investment Policy.

The University System of Georgia's policy for managing credit risk is contained in the investment policy guidelines for the various pooled investment funds:

- 1) In the Short-Term Fund and Legal Fund, all debt issues must be eligible investments under O.C.G.A § 50-17-59 and 50-17-63. Other investment portfolios of debt securities funds also must meet the eligible investment criteria under the same code section.
- 2) In the Balanced Income Fund, Total Return Fund, and Diversified Fund, total fixed income portfolios should have an average credit quality rating of at least A. Overnight investments shall be limited to high quality institutional money market mutual funds rated A1, P1 or other high quality short-term debt instruments rated at least AA+.
- 3) In the Diversified Fund for Foundations, fixed income investments include investment grade and high yield domestic bonds, dollar-and non-dollar denominated global bonds, and emerging market bonds. Overnight investments shall be limited to high quality institutional money market mutual funds rated A1, P1 or other high quality short-term debt instruments rated at least AA+.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

The exposure of the primary government's debt securities to credit risk is indicated below (amount in thousands):

	Total Fair Value	AAA	AA		А	BBB		BB		Short Term A-1		Not Rated	
Asset-Backed Securities		 			 								
Domestic	\$ 4,689	\$ 4,689	\$	_	\$ _	\$	_	\$	_	\$	_	\$	_
Bond Securities	19	_		_	_		19		_		_		_
Corporate Debt													
Domestic	211,178	1,746		2,918	203,306		3,197		_		_		11
Money Market Mutual Funds	69,008	3,722		—	—				—		_	65,2	286
Mortgage-Backed Securities													
Commercial	5,812	5,812		—	—				—		_		_
Municipal Bonds	997	322		389	276		10		—		_		_
Mutual Funds - Debt	93,778	381		47	46				25		_	93,2	279
Repurchase Agreements	1,822,753	62,412		141,641	655,864		949,017		—		13,819		_
Sovereign Credit	25,007	—		—	25,007				—		_		_
Supranational Obligations	381,000	381,000		—	—				—		_		_
U.S. Agency Obligations	1,657,492	 383,656	1	,273,836	 _		_		—		_		_
Total Credit Risk-Investments	4,271,733	\$ 843,740	\$1	,418,831	\$ 884,499	\$	952,243	\$	25	\$	13,819	\$158,5	576
								_					
Bank Deposit Held for													
Investment Purposes	1,475,948												
U.S. Agency Obligations													
Explicitly Guaranteed	236,441												
U.S. Treasury Obligations	571,365												
Repurchase Agreements Backed by:													
U.S. Treasury Obligations	204												
U.S. Agency Obligations													
Explicitly Guaranteed	1,474,293												
Total Debt Securities	\$ 8,029,984												

NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Fiduciary Funds – Pension and Other Employee Benefit Trust Funds

The credit risk of pension and other employee benefit trust funds is managed by restricting investments to those authorized by the Public Retirement System Investment Authority Law as previously described. The Boards of individual funds may elect to implement more restrictive policies. The pension and other employee benefit trust funds' debt securities exposure to credit risk is indicated below (amount in thousands):

	Total			A A BBB		DD	P	666	66	G	P	Not
	Fair Valu	le AAA	AA	A	BBB	BB	B	CCC	CC	С	D	Rated
Asset-backed Securities												
Domestic	\$ 51,5	72 \$ 32,862	\$ 2,752	\$ 2,796	\$ 4,238	\$ —	\$ —	\$ 500	\$273	\$150	\$373	\$ 7,628
International	3,2	14 3,214	—		_	—	_		—	—	—	
Corporate Debt												
Domestic	5,931,2	73 855,580	809,297	2,892,065	1,364,064	5,575	_	_	_	_	_	4,692
International	511,9	16 445	1,083	505,442	4,369	238	_	_	_	_	_	339
Exchange Traded Funds	6,1	91 —	_	_	_	_	_	_	_	_	_	6,191
Guaranteed Investment Contracts	1,3	84 —	_	_	_	_	_	_	_	_	_	1,384
International Government Obligations	2	57 —	229	_	28	_	_	_	_	_	_	_
Money Market Mutual Funds	84,8	64 2,783	_	387	_	_	_	_	_	_	_	81,694
Mortgage-backed Securities	119,6	24 43,997	18,606	13,390	6,968	777	1,031	1,343	212	80	_	33,220
Municipal Bonds	9	57 —	957		_	_	_		_	_	_	
Mutual Funds - Debt	134,5	31 —	_	_		_	_			_		134,531
U.S. Agency Obligations	66,3	97 —	2,441	_	252		_	_	_	_	_	63,704
Total Credit Risk -												
Investments	6,912,1	80 \$938,881	\$835,365	\$3,414,080	\$1,379,919	\$6,590	\$1,031	\$1,843	\$485	\$230	\$373	\$333,383

U.S. Agency Obligations

Explicitly Guaranteed 6,530 U.S. Treasury Obligations 21,493,051 \$28,411,761

NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Component Units

The component units follow the applicable investing criteria specifically authorized by statute or by the component unit's governing authority. The exposure of the component units' debt securities to credit risk is indicated below (amount in thousands):

	Total ir Value	AAA		AA	А		BBB		BB		ссс		A-1		Not Rated	
Asset-Backed Securities	 	 														
Domestic	\$ 26	\$ 	\$	26	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Certificate of Deposits	5,683	5,683		_		_		_		_		_		_		_
Corporate Debt																
Domestic	134,534	44,283		21,794		35,303		26,207		20		750		_		6,177
Insurance Contracts	17,243			_		_		_		—		—		_		17,243
International Government																
Obligations	6,177	300		619		2,336		2,842		80		_		_		_
Investment Agreements	14,637	8,076		_		6,561		_		—		—		_		—
Money Market Mutual Funds	79,091	71,660		_		_		_		—		—		2,831		4,600
Mortgage-Backed Securities	92,381	6,749		84,850		678		_		—		—		_		104
Municipal Bonds	3,373	45		2,008		1,320		_		_		_		_		_
Mutual Funds - Debt	21,502			736		3,610		3,817		—		—		_		13,339
Non-purpose investments	37,526			_		_		_		—		—		_		37,526
Strategic Income																
Opportunities Funds	24,851			_		_		_		—		—		_		24,851
Repurchase Agreements	58,377	5,765		_		_		_		_		_		_		52,612
U.S. Agency Obligations	 93,298	 45,113		48,185				_		_		_				
Total Credit Risk -																
Investments	588,699	\$ 187,674	\$	158,218	\$	49,808	\$	32,866	\$	100	\$	750	\$	2,831	\$	156,452
U.S. Treasury Obligations	232,408															
U.S. Agency Obligations																
Explicitly Guaranteed	668															
Total Debt Securities	\$ 821,775															

Custodial Credit Risk - Investments

Custodial credit risk for investments is the risk that, in the event of the failure of a counterparty to a transaction, the value of the investment or collateral securities in possession of a third party custodian may not be fully recovered by the State.

Primary Government

OST's policy for managing custodial credit risk for investments is:

- 1) OST has appointed a federally regulated banking institution, State Street, as its custodian. State Street performs its duties to the standards of a professional custodian.
- 2) All securities transactions are settled on a delivery versus payment basis through an approved depository institution such as the Federal Reserve or the Depository Trust Company.





NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

- 3) Repurchase agreements are collateralized by obligations of the United States and its subsidiary corporations and instrumentalities or entities sanctioned or authorized by the United States government or other securities authorized by the Treasurer in subsection (b) of Code Section 50-17-63 in accordance with the State Depository Board policy.
- 4) OST has retained an independent firm to serve as its liquidation agent in the event of a counterparty default.

The University System of Georgia's policy for managing custodial credit risk for investment is:

- The University System has appointed a federally regulated banking institution as custodian. The custodian
 performs its duties to the standards of a professional custodian and is liable to the University System of
 Georgia for claims, losses, liabilities and expenses arising from its failure to exercise ordinary care, its willful
 misconduct, or its failure to otherwise act in accordance with the contract.
- 2) All securities transactions are to be settled on a delivery vs. payment basis through an approved depository institution such as the Depository Trust Company or the Federal Reserve.
- 3) Repurchase agreements are to be collateralized by United States Treasury securities at 102% of the market value of the investment at all times.

Fiduciary Funds - Pension and Other Employee Benefit Trust Funds

The custodial credit risk of pension and other employee benefit trust funds is managed by restricting investments to those authorized by the Public Retirement System Investment Authority Law described above. At June 30, 2019, \$25.1 million of the pension and other employee benefit trust funds' investments were uninsured, unregistered and held by the counterparty or the counterparty's trust department, but not in the State's name.

Component Units

The component units follow the applicable investing criteria specifically authorized by statute or by the component unit's governing authority.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the State's investment in a single issuer.

Primary Government

To manage concentration risk, the OST Investment Policy requires diversification of investments to reduce overall portfolio risks while maintaining market rates of return. Investments in each portfolio shall be diversified to mitigate risk of loss from an over-concentration in a specific issuer, counterparty or depository. The State Treasurer establishes Investment Guidelines for each investment portfolio to assure that prudent diversification and adequate liquidity is maintained. OST utilizes a counterparty risk assessment model to determine maximum exposure to each approved financial institution.

The University System's policy for managing concentration requires diversification of investments to reduce overall portfolio risk while maintaining market rates of return.

At June 30, 2019, approximately 11.77%, 10.89%, 5.33%, 5.20% and 5.18% of business-type activity and fiduciary fund investments were investments in Federal National Mortgage Assoc. notes and pools, Government National



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Mortgage Assn. notes and pools, Vanguard Institutional Index Fund, Federal Home Loan Bank notes and pools, and Western Asset Core Bond Portfolio, respectively.

The Augusta University's Investment Policy and Guidelines for managing concentration of credit risk requires that stocks and debt issues be diversified. Augusta University also relies upon the concentration of credit risk policy of the individual investment vehicles related to plan assets. More than 5% of the Pension Plan's Investments are in Western Asset Core Plus Bond Fund, VanGuard Institutional Index Fund, and Vanguard Total Stock Market Exchange-traded Fund (ETF). These investments are 7.58%, 30.27%, and 19.93% respectively of the Plan's total investments.

At June 30, 2019, specifically for the Deferred Compensation Fiduciary Fund, approximately 31.98%, 20.37%, 16.54%, 8.26%, 7.90%, 5.49% and 5.31% of investments were invested in TIAA traditional annuity, TIAA Real Estate Fund, Fidelity Contrafund Fund, Fidelity Strategic Income Fund, Fidelity U.S. Bond Index Fund, Fidelity Low Priced Stock Fund, and Fidelity Investments Money Market Government Portfolio, respectively.

At June 30, 2019, approximately 72.2% of the primary government's total investments were investments in securities of U.S. agencies not explicitly guaranteed by the U.S. Government or Repurchase Agreements that were collateralized with investments in securities of U.S. agencies not explicitly guaranteed by the U.S. Government, and 5.6% was invested in supranational obligations.

Fiduciary Funds – Pension and Other Employee Benefit Trust Funds

The concentration of credit risk policy of pension limits investments to no more than 5% of total net investments in any one issuer of corporate bonds. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded from this requirement. At June 30, 2019, no more than 5% of the pension's total investments were investments in any single issuer other than the U.S. Government or its agencies.

Information related to Other Postemployment Benefit trust funds (OPEB) disclosures is included in the LGIP Trust Fund Financial Statement report issued by OST. For concentration of credit risk, refer to the report published on OST's website <u>ost.georgia.gov</u>. For the remaining funds invested by ERS, concentration of credit risk policy of OPEB limits investments to no more than 5% of total net investments in any one issuer of corporate bonds.

Component Units

The component units follow the applicable investing criteria specifically authorized by statute or by the component unit's governing authority. At June 30, 2019, 10.2% of the component units' total investments were investments in securities of U.S. agencies not explicitly guaranteed by the U.S. Government.

C. Fair Value Measurements

In accordance with GASB Statement No. 72 (GASB 72), some investments are measured using inputs divided into three fair value hierarchies:

- Level 1: Unadjusted quoted prices for identical assets or liabilities in active markets that a government can access at the measurement date.
- Level 2: Inputs, other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly.
- Level 3: Unobservable inputs for an asset or liability.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Fixed-income securities use price evaluations; other investments are exempt from GASB 72's disclosure requirement because they are not reported at fair value, but instead valued using cost based measures.

In general, investments were valued using the following techniques:

- Equity securities classified in Level 1 are valued using prices quoted in active markets for those securities. Equity securities classified in Level 2 are valued using prices quoted for similar instruments in active markets. Equity securities classified in Level 3 are valued using third party valuations not currently observable in the market.
- Debt securities classified in Level 1 are valued using prices quoted in active market. Debt securities classified in Level 2 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. These securities have nonproprietary information that are readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Debt securities classified in Level 3 are not currently observable in the market.
- Mutual funds and commingled funds classified in Level 1 are valued using prices quoted in active markets for those investments types. Mutual funds and commingled funds classified in Level 2 are valued using prices quoted for similar instruments in active markets.
- Investments classified in Level 3 include real estate funds that invest primarily in U.S. commercial real estate. The fair values of the investment in this category have been estimated using the net asset value of the University System of Georgia's (USG) ownership interest in partners' capital. Real estate investments are less liquid and, generally, cannot be redeemed with the funds through normal redemption procedures. Distributions from real estate investment funds will be received as the underlying investments of a fund are liquidated. Guaranteed investment contracts are valued by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit worthiness of the issuer.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Primary Government

The following table provides information about the primary government's investments in regards to GASB 72 (amount in thousands):

Investments by fair value levels	 Total		Level 1	 Level 2	I	Level 3	Net Ass	set Value
Asset-backed Securities	\$ 4,689	\$	1,990	\$ 2,699	\$	_	\$	_
Bond Securities	19		19			_		
Corporate Debt	211,178		11	211,167				
Equity Mutual Fund								
Domestic	138,422		138,422	_		_		_
International	2,650		2,650	_				
Equity Securities								
Domestic	156,957		156,805	—				152
International	357		119	238				—
Money Market Mutual Funds	69,008		69,008	_		_		
Municipal Bonds	997		997	_		_		
Mutual Funds - Debt	93,778		93,778	_		_		_
Mortgage Backed Securities	5,812		3,993	1,819		_		_
Real Estate Investment Trusts	1,006		1,006	_		_		_
Real Estate Held for Investment Purposes	6,345		_	_		6,345		_
Sovereign Credit	25,007			_		25,007		_
Supranational Obligations	381,000			381,000		_		_
U.S. Agencies	1,893,933		95,634	1,798,299		_		_
U.S. Treasuries	571,365		571,365					_
Other	130		130	_		_		_
	 3,562,653	\$	1,135,927	\$ 2,395,222	\$	31,352	\$	152
Reconciling Items:		_						
Bank Deposits Held for Investment Purposes	1,475,948							
Repurchase Agreements	3,297,250							
	\$ 8,335,851							



Fiduciary Funds

The following table provides information about the fiduciary investments in regards to GASB 72 (amount in thousands):

Investments by fair value levels	 Total	 Level 1	 Level 2	 Level 3	Net Asset Value	
Asset-backed Securities						
Domestic	\$ 51,572	\$ _	\$ 51,572	\$ _	\$	_
International	3,214	_	3,214	_		_
Commingled Funds	1,883,577	79,080	1,804,497	_		_
Corporate Debt						
Domestic	5,931,273	_	5,931,273	_		_
International	511,916	_	511,916	_		_
Equity Securities						
Domestic	49,777,519	49,777,519		—		
International	16,040,523	15,887,131	153,392	—		
Exchange Traded Funds	9,044	9,044		—		—
Guaranteed Investment Contracts	1,384	—		1,384		—
International Government Obligations	257	—	257	—		—
Money Market Mutual Funds	84,864	8,184	76,680	—		
Mortgage Backed Securities	119,624		119,624	—		
Municipal bonds	957		957	—		
Mutual Funds-Debt	134,531	134,531		_		_
Mutual Fund Equities						
Domestic	530,954	368,846	162,108	—		—
International	13,848	13,848	_	—		—
Private Equities	379,912	_	—	—		379,912
Real Estate Investment Trust	53,075	53,075		—		
U.S. Agencies Obligations	72,927	—	72,927	—		
U.S. Treasuries Obligations	21,493,051	21,421,834	71,217	—		—
Other	 882	 882	 	 		
	\$ 97,094,904	\$ 87,753,974	\$ 8,959,634	\$ 1,384	\$	379,912

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Component Units

The following table provides information about the component unit investments in regards to GASB 72 (amount in thousands):

Investments by fair value levels	Total	Level 1	Level 2	Level 3	Net Asset Value
Asset-backed Securities	\$ 26	\$	\$ 26	\$	\$
Bond Securities	192,424	141,100	21,999	_	29,325
Certificate of Deposits	5,683	5,683	_	_	_
Corporate Debt	158,714	47,753	110,961	_	_
Equity Mutual Funds- Domestic	130,705	129,990	715	_	_
Equity Mutual Funds- International	328,237	288,543	7,337	_	32,357
Equity Securities- Domestic	783,880	610,056		173,456	368
Equity Securities- International	412,516	364,197	_	_	48,319
Exchange Traded Funds	10,124	10,124	_	_	_
Insurance Contracts	17,243	_	_	_	17,243
International Government Obligations	6,177	6,177	_	_	_
Investment Agreements	14,638	_	_	14,638	_
Money Market Mutual Funds	240,675	239,049	1,626	_	_
Municipal Obligations	3,373	_	3,373	_	_
Mutual Bond Funds	102,514	43,053	46,206	13,255	_
Mortgage Backed Securities	92,381	92,381		—	
Non Purpose Investments	37,526	_	37,526	_	_
Real Estate Held for Investment Purposes	81,371	_	_	81,371	_
Real Estate Investment Trusts	79,697	44,425	_	_	35,272
Strategic Income Opportunity fund	24,851	24,851	_	_	_
US Agencies	98,190	85,633	12,557	_	_
US Treasuries	383,204	162,590	220,614	—	
Other	1,483,838	90,583	8,245	19,575	1,365,435
	4,687,987	\$ 2,386,188	\$ 471,185	\$ 302,295	\$ 1,528,319
Repurchase Agreements	59,031				
	\$ 4,747,018				



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment.

Fiduciary Funds - Pension and Other Employee Benefit Trust Funds

The State's currency risk exposures, or exchange rate risks, primarily reside within the retirement system's international equity investment holdings. The retirement systems' foreign exchange risk management policy is to minimize risk and protect the investments from negative impact by hedging foreign currency exposures with foreign exchange instruments when market conditions and circumstances are deemed appropriate.

As of June 30, 2019, the State's exposure to foreign currency risk in U.S. Dollars are highlighted in the tables below (amounts in thousands):

(Table on next page)

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



	Employ	yees' Retirement	System of G	eorgia	Teachers Retirement System of Georgia								
Currency	Cash & Cash Equivalents	Equities	Fixed Income	Total	Cash & Cash Equivalents	Equities	Fixed Income	Total					
Australian Dollar	\$ —	\$ 42,445	\$ _	\$ 42,445	\$ —	\$ 205,801	\$ —	\$ 205,801					
Brazilian Real	_	26,253	_	26,253	—	126,557	_	126,557					
British Pound	_	103,475	_	103,475	—	487,348	_	487,348					
Canadian Dollar	_	34,070	_	34,070	—	168,556	_	168,556					
Chilean Peso	_	3,312	_	3,312	—	15,952	_	15,952					
Chinese Renminbi	19	8,000	_	8,019	91	39,077	_	39,168					
Columbian Peso	_	2,037	_	2,037	_	9,945	_	9,945					
Czech Krone	_	1,982	_	1,982	_	9,676	_	9,676					
Danish Krone	_	18,818	_	18,818	_	87,616	_	87,616					
Euro	_	287,497	_	287,497	_	1,362,125	_	1,362,125					
Hong Kong Dollar	_	95,446	_	95,446	_	453,948	_	453,948					
Indian Rupee	47	69,506	_	69,553	217	327,307	_	327,524					
Indonesian Rupiah	_	6,098	_	6,098	_	29,773	_	29,773					
Israeli Sheke		2,288	_	2,288	_	11,433	_	11,433					
Japanese Yen		194,315	_	194,315	_	932,129	_	932,129					
Malaysian Ringgit		14,066	_	14,066	_	68,347	_	68,347					
Mexican Peso		9,801	_	9,801	_	45,546	_	45,546					
New Taiwan Dollar		35,607	_	35,607	_	173,458	_	173,458					
Norwegian Krone		2,074	_	2,074	_	10,416	_	10,416					
Philippine Peso		4,619	_	4,619	_	22,951	_	22,951					
Polish Zloty		2,997	_	2,997	_	14,812	_	14,812					
Qatari Riyal		3,771	_	3,771	_	18,421	_	18,421					
Singapore Dollar		22,411	_	22,411	_	104,384	_	104,384					
South African Rand		32,631	_	32,631	_	154,997	_	154,997					
South Korean Won		62,573	_	62,573	_	300,711	_	300,711					
Swedish Krona	_	31,653	_	31,653	_	147,920	_	147,920					
Swiss Franc	_	31,739	_	31,739	_	149,532	_	149,532					
Thailand Baht	_	26,527	_	26,527	_	126,757	_	126,757					
UAE Dirham	_	4,006	_	4,006	_	19,428	_	19,428					
Total Holdings subject to													
Foreign Currency Risk	66	1,180,017	_	1,180,083	308	5,624,923	_	5,625,231					
Investment Securities payable in U.S. Dollars		1,604,785	95,134	1,699,919		7,546,446	405,571	7,952,017					
Total International Investment Securities - at Fair Value	\$ 66	\$ 2,784,802	\$ 95,134	\$ 2,880,002	<u>\$ 308</u>	\$ 13,171,369	\$ 405,571	\$ 13,577,248					

International Investment Securities at Fair Value as of June 30, 2019



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Othe	r Pension and	Emp	ployee Benefit Tr	ust Funds	
Australian Dollar	\$ –	- :	\$ 1,741	\$	\$ 1,741
British Pound	9	91	25,423	—	25,514
Canadian Dollar	-	_	1,528	—	1,528
Euro	6	57	4,275	—	4,342
Japanese Yen		1	149	—	150
Norwegian Krone	-	_	643	—	643
Swedish Krona			1,133		1,133
Total Holdings subject to Foreign Currency Risk	15	9	34,892	_	35,051
Investment Securities payable in U.S. Dollars	_		16,758	1,708	18,466
Total International Investment Securities -					
at Fair Value	\$ 15	<u>9</u>	\$ 51,650	\$ 1,708	\$ 53,517

D. Pooled Investments with State Treasury

As of the end of the year, the state operates three local government investment pools managed by OST and is comprised of Georgia Fund 1, Georgia Fund 1 Plus, and Georgia Extended Asset Pool Plus (GEAP Plus). GEAP Plus was established in July of 2018 as an investment for the OPEB Trust. GEAP Plus is managed by a subadvisor overseen by OST. The pools invest funds of the State and funds of other governmental entities. The local government investment pools jointly maintain a reserve consisting of members' administrative fees. This reserve can be used to stabilize the investment pools and to fund the administrative expenses for managing the pools. Separate reports on the State's investment pools are issued. Refer to the OST website <u>ost.georgia.gov</u> for additional information on the Georgia Fund 1, Georgia Fund 1 Plus, and GEAP Plus pools.

E. Securities Lending Program

The State is presently involved in securities lending programs with major brokerage firms. The State lends equity and fixed income securities for varying terms and receives a fee based on the loaned securities' value. During a loan, the State continues to receive dividends and interest as the owner of the loaned securities.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

Fiduciary Funds – Pension and Other Employee Benefit Trust Funds

In the pension and other employee benefit trust funds' securities lending agreements, the brokerage firms pledge collateral securities consisting of U.S. Government and agency securities, mortgage-backed securities issued by a U.S. Government agency, and U.S. corporate bonds. The collateral value must be equal to at least 102% to 109% of the loaned securities value, depending on the type of collateral security.

Securities loaned totaled \$26.3 billion at June 30, 2019, and the collateral value was equal to 104.3%. The loaned securities are in the accompanying note disclosures based on the custodial arrangements for the collateral securities. Loaned securities are included in the accompanying Statement of Net Position because the State maintains ownership. The related collateral securities are not recorded as assets on the Statement of Fiduciary Net Position, and a corresponding liability is not recorded, since the State does not pledge or trade the collateral securities. In accordance with the criteria set forth in GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, the State is deemed not to have the ability to pledge or sell collateral securities, since the State's lending contracts do not address whether the lender can pledge or sell the collateral securities without a borrower default. The State has not previously demonstrated that ability, and there are no indications of the State's ability to pledge or sell collateral securities.

F. Other Investments

The State's Unemployment Compensation Fund monies are required by the Social Security Act to be invested in the U.S. Department of Treasury, Bureau of Public Debt Unemployment Trust Fund (BPDUTF), which is not registered with the SEC. The fair value of the position in the BPDUTF is the same as the value of the BPDUTF shares.

The Commissioner of the Department of Agriculture is directed by statute to require dealers in certain agricultural products and livestock to make and deliver to the Department a surety or cash bond to secure the faithful accounting for and payment to producers of the proceeds of agricultural products or livestock handled or sold by the dealer. Cash bonds are required to designate the Department as trustee of the funds and may take the form of certificates of deposit, letters of credit, money orders or cashiers' checks. At June 30, 2019, the Department held surety bonds in the amount of \$59.4 million, and cash bonds in the amount of \$15.2 million. These bonds are not recorded on the Statement of Net Position.

Securities are held by the Commissioner of Insurance pursuant to statutes that require licensed insurance companies to deposit securities prior to issuance of a certificate of authority to transact insurance. These securities remain in the name of the licensed insurance company as long as the company has a pending claim in the State or until a proper order of a court of competent jurisdiction has been issued to the receiver, conservator, rehabilitator, or liquidator of the insurer or to any other properly designated official or officials who succeed to the management and control of the insurer's assets. The purchase and redemption of such securities are allowed as long as the required levels of deposits are maintained. At June 30, 2019, securities valued at \$187.3 million were held by the Department of Insurance. These securities are not recorded on the Balance Sheet.

Statutes require that surety bonds be provided for State public works contracts. The Department of Transportation holds surety bonds in the amount of \$901.0 million for construction performance to ensure proper completion and complete performance of construction contracts, and \$837.2 million for construction payment to ensure that payments are made by the general contractor to all subcontractors. These bonds are not recorded on the Statement of Net Position.



NOTE 5 - DEPOSITS AND INVESTMENTS (continued)

The Georgia State Financing and Investment Commission (GSFIC) State Construction Manual policies require that surety bonds be provided for payment and performance of all State projects of \$0.1 million or more. The Department of Corrections holds surety bonds in the amount of \$19.7 million for construction performance to ensure proper completion and complete performance of construction contracts. These bonds are not recorded on the Statement of Net Position.

For any organization that elects to assume the liability for unemployment compensation payments in lieu of making contributions to the Unemployment Compensation Fund, the Commissioner of the Department of Labor is authorized by statute to require such organization to execute and file with the Commissioner a cash deposit or surety bond. Cash deposits are held on behalf of such organizations in the Department's name, and are reported as agency funds. At June 30, 2019, the Department held surety bonds in the amount of \$70.5 million, and cash bonds in the amount of \$2.2 million. These bonds are not recorded on the Statement of Net Position.



NOTE 6 - DERIVATIVE INSTRUMENTS

Derivative Instruments are utilized by some of the higher education foundations (reported as component units) and consist primarily of interest rate swap agreements. Certain foundations (component units) have elected to apply FASB provisions and therefore the disclosure information for these foundations is presented separately. Details of the long term liabilities associated with the interest rate swap derivatives are within *Note 10 – Long-term Liabilities*.

Component Units – GASB Organizations

The fair value balances and notional amounts of hedging derivative investments outstanding as reported in the fiscal year 2019 financial statements for higher education foundations reported as component units reporting under GASB provisions are as follows (amount in thousands):

	Change in Fair Val		June 30, 2019							
	Classification	1	Amount	Classification		Amount		Notional		
Component unit activities - GASB										
Cash flow hedges:										
AU Health System Inc.										
2014A&B - Interest Rate Swap	Investment Revenue	\$	(5,267)	Debt	\$	(20,084)	\$	106,340		
University of Georgia Athletic Association, Inc.										
2005B - Interest Rate Swap	Deferred outflow of resources		(953)	Debt		(3,738)		20,685		
					\$	(23,822)				

	Change in Fair Val		Fair Value at 06/30/18							
	Classification		Amount	Classification		Amount	1	Notional		
Component unit activities - GASB		_								
Cash flow hedges:										
AU Health System Inc.										
2014A&B - Interest Rate Swap	Investment Revenue	\$	5,994	Debt	\$	(14,819)	\$	108,380		
University of Georgia Athletic Association, Inc.										
2005B - Interest Rate Swap	Deferred outflow of resources		(1,177)	Debt		(2,784)		21,565		
					\$	(17,603)				

Interest Rate Swap Derivatives

AU Health System, Inc.

AU Health System, Inc. (The Health System) entered into a variable-to-fixed interest rate swap (the Swap) to convert Health Systems's variable interest rate concurrent with the 2008 bond issuance to a synthetic fixed rate of 3.302%.

The Swap matures on July 1, 2037. The notional amount of the Swap at June 30, 2019 and 2018, was \$106.3 and \$108.4 million, respectively. The notional amount decreased from the initial notional amount of \$135.0 million. The notional value of the Swap declines in conjunction with payments of bond principal such that the outstanding balance of the 2014A and 2014B Bonds approximate the notional amount of the Swap at all times. Under the Swap, the Health System pays the counterparty interest at a fixed rate of 3.302% and receives interest payments at a variable rate computed as 68% of LIBOR.



NOTE 6 - DERIVATIVE INSTRUMENTS (continued)

The fair value of the Swap is recorded as an asset or liability, depending on whether the termination of the Swap would result in amounts due to the Health System or the Swap counterparty. At June 30, 2019 and 2018, the fair value of the Swap represented a liability to the Health System in the amount of \$20.1 and \$14.8 million, respectively. The Health System or the Swap counterparty is required to post collateral with the other party in the event that the fair value of the Swap exceeds certain thresholds, as defined. At June 30, 2019 and 2018, the Health System had \$20.2 and \$15.0 million posted cash and investment collateral with the Swap counterparty, respectively, which is included in other assets in the accompanying statements of net position.

As of June 30, 2019 and 2018, the Health System was exposed to credit risk in the amount of the fair value of the Swap. The Health System has two Swap counterparties. As of June 30, 2019 and 2018, the Swap counterparties were rated A+ and A by Fitch Ratings, A1 and A2 by Moody's Investors Services and A+ and A by Standard & Poor's. To mitigate the potential for credit risk, various levels of collateralization by the counterparty may be required should the counterparty's credit rating be downgraded and the fair value of the Swap be in a liability position at a level above certain thresholds specified in the Swap agreement.

The Health System or the counterparty may terminate the Swap if the other party fails to perform under the terms of the agreement. If the Swap is terminated, the variable rate bonds would no longer carry a synthetic fixed interest rate. Also, if at the time of termination, the Swap has a negative fair value (unfavorable to the Health System), the Health System would be liable to the counterparty for a payment equal to the Swap's fair value.

University of Georgia Athletic Association, Inc. (UGAA)

For derivative transactions, unless otherwise specified, Bank of America Merrill Lynch ("BOAML") furnishes a single value for each transaction, even if comprised of multiple legs. Unless otherwise specified, valuations for derivative instruments represent, or are derived from, mid-market values. For some derivative instruments, mid-market prices and inputs may not be observable. Instead, valuations may be derived from proprietary or other pricing models based on certain assumptions regarding past, present, and future market conditions. Some inputs may be theoretical, not empirical, and require BOAML to make subjective assumptions and judgments in light of its experience. For example, in valuing OTC equity options where there is no listed option with a corresponding expiration date, BOAML must estimate the future share price volatility based on realized volatility of the underlying shares over periods deemed relevant, implied volatilities of the longest dated listed options available on the underlying shares or major indices and other relevant factors. Valuations of securities with embedded derivatives may be based on assumptions as to the volatility of the underlying security, basket or index, interest rates, exchange rates, dividend yields, correlations between these or other factors, the impact of these factors upon the value of the security (including the embedded options), as well as issuer funding rates and credit spreads (actual or approximated) or additional relevant factors. While BOAML believes that the methodology and data it uses to value derivatives and securities with embedded derivatives are reasonable and appropriate, other dealers might use different methodology or data and may arrive at different valuations.

<u>Objective and Terms</u> - As a means of interest rate management, the Association entered into an interest rate swap transactions with Bank of America, N.A. (the "Counterparty") relating to its variable rate tax-exempt Series 2005B Bonds. Pursuant to an ISDA Master Agreement and Schedule to ISDA Master Agreement, each dated as of January 27, 2005, between the Association and the Counterparty and the Confirmation, the Association has agreed to pay to the Counterparty a fixed rate of interest in an amount equal to 3.48% per annum multiplied by the notional amount that is equal to the principal amount of the Series 2005B Bonds until August 2033. In return, the Counterparty has agreed to pay to the Association a floating rate of interest in an amount equal to 67% of LIBOR multiplied by the notional amount that is equal to the principal amount of the Series 2005B Bonds until July 2035.



Fair Value - The Association will be exposed to variable rates if the Counterparty to a swap defaults or if a swap is terminated. A termination of the swap agreement may also result in the Association's making or receiving a termination payment.

As of June 30, 2019, the fair value of the interest rate swap agreements was \$3.7 million, indicating the amount that the Association would be required to pay the Counterparty to terminate the swap agreements.

<u>Swap Payments and Associated Debt</u> - As of June 30, 2019, debt service requirements of the variable rate debt and net swap payments, assuming current interest rates remain the same for their term, were as follows. As rates vary, variable rate bond interest payments and net swap payments will vary

		Variable F	Rate	Bonds	In	terest Rate					
]	Principal		Interest	S	waps, Net		Total			
Years ending:											
2020	\$	910	\$	317	\$	372	\$	1,599			
2021		945		301		354		1,600			
2022		980		286		336		1,602			
2023		1,010		269		316		1,595			
2024		1,045		253		297		1,595			
2025-2029		5,800		992		1,165		7,957			
2030-2034		6,890		476		560		7,926			
2035-2036		3,105		25		30		3,160			
Total	\$	20,685	\$	2,919	\$	3,430	\$	27,034			

<u>Credit Risk</u> - As of June 30, 2019, the fair value of the swaps represents the Association's exposure to the Counterparty. Should the Counterparty fail to perform in accordance with the terms of the swap agreement and variable interest rates remain at the current level, the Association could see a possible gain equivalent to \$4.0 million less the cumulative fair value of \$3.7 million.

As of June 30, 2019, the Counterparty was rated as follows by Moody's and S&P:

	Moody's	S&P
Bank of America, N.A.	Aa2	A+

<u>Basis Risk</u> - The swaps expose the Association to basis risk. The interest rate on the Series 2003 Bonds and the Series 2005B Bonds is a tax-exempt interest rate, while the LIBOR basis on the variable rate receipt on the interest rate swap agreements is taxable. Tax-exempt interest rates can change without a corresponding change in the 30-day LIBOR rate due to factors affecting the tax-exempt market that do not have a similar effect on the taxable market. The Association will be exposed to basis risk under the swaps to the extent that the interest rates on the tax-exempt bonds trade at greater than 67% of LIBOR for extended periods of time. The Association would also be exposed to tax risk stemming from changes in the marginal income tax rates or those caused by a reduction or elimination in the benefits of tax exemption for municipal bonds.



<u>Termination Risk</u>- The interest rate swap agreement uses the International Swap Dealers Association Master Agreement, which includes standard termination events, such as failure to pay and bankruptcy. The Association or the Counterparty may terminate the swap if the other party fails to perform under the terms of the contract. If the swap is terminated, the variable rate bonds would no longer carry a synthetically fixed interest rate. Also, if at the time of termination, the swap has a negative fair value, then the Association would be liable to the Counterparty for a payment equal to the swap's fair value.

Component Units – FASB Organizations

The fair value balances and notional amounts of hedging derivative investments outstanding as reported in the fiscal year 2019 financial statements for higher education foundations reported as component units reporting under FASB provisions are as follows (amount in thousands):

	Change in Fa	ir Va	lue	Fair Value at 06/30/19							
	Classification		Amount	Classificatio	Amount			Notional			
Component unit activities - FASB				n							
Cash flow hedges:											
Georgia College & State											
University Foundation, Inc.	Investment Revenue	\$	(36)	Debt	\$	(1,219)	\$	20,600			
	Investment Revenue		(974)	Debt		(5,271)		69,820			
University of Georgia Foundation	Investment Revenue		(334)	Debt		(1,518)		4,192			
	Investment Revenue		(722)	Debt		(808)		10,925			
VSU Auxillary Services											
Real Estate Foundation	Investment Revenue		968	Debt		(4,855)		27,130			
					\$	(13,671)					

Georgia College & State University Foundation, Inc. (GCSUF)

GCSUF maintains an interest rate risk management strategy that uses interest rate swap derivative instruments to minimize significant, unanticipated earnings fluctuations caused by interest rate volatility. GCSUF's specific goal is to lower (where possible) the cost of its borrowed funds.

In connection with the 2007 Series bonds, GCSUF entered into an interest rate swap transaction to convert its variablerate bond obligations to fixed rates. This swap is utilized to manage interest rate exposures over the period of the interest rate swap. The differential to be paid or received on all swap agreements is accrued as interest rates change and is recognized in interest expense over the life of the agreement. The swap agreements expire at various dates and have a fixed rate of 4.065%. The interest rate swap contains no credit-risk-related contingent features and is cross collateralized by certain assets of GCSUF.

On January 31, 2013, GCSUF modified the swap agreement to lower the interest rate from 4.715% to 4.065%. The present value of the interest savings over the life of the modified swap agreement is approximately \$6.9 million. The lease agreements with the Board of Regents was not modified as a result of the swap modification; however, 40% of the present value of the interest savings will be paid to the University annually. The deferred swap savings was \$1.8 million at June 30, 2019.



NOTE 6 - DERIVATIVE INSTRUMENTS (continued)

The University of Georgia Foundation (UGAF)

The Foundation has an outstanding interest rate swap agreement effectively converting the interest rate exposure on the \$6.2 million note payable from variable to a 5.95% fixed rate over the term of the note payable. During November 2017, the Foundation modified and extended the agreement which included a fixed rate fee payment of \$0.3 million. As of June 30, 2019 and 2018, the total notional amount of the swap was \$4.2 and \$4.3 million, respectively. As of June 30, 2018 and 2017, the fair value of this interest rate swap was a liability of \$1.5 and \$1.2 million, respectively. The Foundation recorded an unrealized gain on such swap of \$0.3 million and \$0.4 million for the years ended June 30, 2019 and 2018, respectively.

The Foundation has an outstanding interest rate swap agreement effectively converting the interest rate exposure on the \$12.5 million note payable from variable to a 3.37% fixed rate over the term of the note payable. As of June 30, 2019 and 2018, the total notional amount of the swap was \$10.9 and \$11.3 million, respectively. As of June 30, 2019 and 2018, the fair value of this interest rate swap was a liability of \$0.8 and \$0.1 million, respectively. The Foundation recorded an unrealized gain on such swap of \$0.7 and \$0.5 million for the years ended June 30, 2019 and 2018, respectively.

VSU Auxiliary Services Real Estate Foundation, Inc,

The Foundation has an outstanding interest rate swap agreement effectively changing the interest rate exposure on the Georgia & Reade, LLC bond payable from variable to a 3.7196% fixed rate over the term of the bond payable. As of December 31, 2018 and 2017, the total notional amount of the swap was \$27.1 and \$27.5 million, respectively. As of December 31, 2018 and 2017, the fair value of this interest rate swap was a liability of \$4.9 and \$5.8 million, respectively, in the accompanying consolidated statements of financial position. The Foundation recorded gains on the swap of \$1.0 and \$0.5 million for the years ended December 31, 2018 and 2017, respectively.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



Receivables at June 30, 2019, consisted of the following (amount in thousands):

		Taxes	ľ	Notes and Loans	Other			Inter- governmental Receivables		Gross eceivables	Allowance for es Uncollectibles		R	Total eceivables (Net)
Governmental Activities	_								_				_	
General Fund	\$	4,774,129	\$	—	\$	632,077	\$	1,865,384	\$	7,271,590	\$	(1,730,887)	\$	5,540,703
Nonmajor Governmental Funds		_		—		38,686		_		38,686		—		38,686
Total - Governmental Funds	_	4,774,129				670,763		1,865,384	_	7,310,276		(1,730,887)	_	5,579,389
Government-wide adjustments:														
Internal Service Funds		_		—		104,786		5,111		109,897		(493)		109,404
Total - Governmental Activities	\$	4,774,129	\$		\$	775,549	\$	1,870,495	\$	7,420,173	\$	(1,731,380)	\$	5,688,793
Business-type Activities														
Higher Education Fund	\$	_	\$	35,849	\$	396,949	\$	105,101	\$	537,899	\$	(54,962)	\$	482,937
State Health Benefit Plan		_		_		122,211		_		122,211		(3,919)		118,292
Unemployment Compensation Fund		_		_		136,885		56		136,941		(15,956)		120,985
Georgia Higher Education Facilities Authority		_		_		371		_		371		_		371
State Road and Tollway Authority		_		_		9,733		_		9,733		_		9,733
Government-wide adjustments:														
Other		_		_		72		_		72		_		72
Total - Business-type Activities	\$		\$	35,849	\$	666,221	\$	105,157	\$	807,227	\$	(74,837)	\$	732,390
Component Units														
Unrestricted:														
Georgia Environmental Finance Authority	\$	_	\$	1,473,389	\$	7,718	\$	1,716	\$	1,482,823	\$	_	\$	1,482,823
Georgia Geo. L. Smith II														
World Congress Center Authority		3,070		_		14,514		_		17,584		_		17,584
Georgia Housing and Finance Authority		_		862,936		752		_		863,688		(4,736)		858,952
Georgia Lottery Corporation		—		—		197,057		_		197,057		(3,994)		193,063
Georgia Ports Authority		—		—		74,641		_		74,641		(4,008)		70,633
Georgia Tech Foundation, Incorporated		—		700		138,196		_		138,896		_		138,896
Nonmajor Component Units		859		373,720		2,815,316		15,972		3,205,867		(118,985)		3,086,882
Total - Unrestricted		3,929		2,710,745		3,248,194		17,688		5,980,556		(131,723)	_	5,848,833
Restricted:													_	
Georgia Geo. L. Smith II														
World Congress Center Authority		—		—		105,931		_		105,931		(30,105)		75,826
Georgia Housing and Finance Authority		—		1,021,322		8,901		_		1,030,223		(4,500)		1,025,723
Georgia Tech Foundation, Incorporated		—		_		101,358		_		101,358		(8,348)		93,010
Nonmajor Component Units		_		_		126,685		_		126,685		(4,773)		121,912
Total - Restricted	_	_	_	1,021,322		342,875	_	_	_	1,364,197	_	(47,726)		1,316,471
Total - Component Units	\$	3,929	\$	3,732,067	\$	3,591,069	\$	17,688	\$	7,344,753	\$	(179,449)	\$	7,165,304

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 8 - INTERFUND BALANCES AND TRANSFERS

A. Due To/From Other Funds

Due To/From Other Funds at June 30, 2019, consist of the following (amount in thousands):

	Due From Other Funds													
	Nonmajor General Governmental Fund Fund		overnmental	Higher He Education Be			Benefit En		onmajor iterprise Funds	Internal Service Funds	Fiduciary Funds		Т	otal Due o Other Funds
Due To Other Funds														
General Fund	\$ —	\$	—	\$	—	\$	2,380	\$	—	\$ 593,549	\$	_	\$	595,929
General Obligation Bond Projects Fund	_		_		16,687		_		_	_		_		16,687
Nonmajor Governmental Funds	15,292		_		_		_		_	_		_		15,292
Higher Education Fund	1,953		_		_		2,326		_	240,676		—		244,955
Nonmajor Enterprise Funds	_		25,654				—		—	_		_		25,654
Internal Service Funds			_		—		_		_	12		_		12
Fiduciary Funds					_				72	17		478		567
Total Due From Other Funds	\$ 17,245	\$	25,654	\$	16,687	\$	4,706	\$	72	\$ 834,254	\$	478	\$	899,096

Interfund receivables and payables result from billings for goods/services provided between funds.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



B. Interfund Transfers

Interfund transfers at June 30, 2019, consist of the following (amount in thousands):

	Transfers In												
		Governmental I	unds				Proprietary	Func	ls				
	General Fund	General Obligation Bond Projects Fund		Nonmajor vernmental Funds	Higher Education Fund	on Compensation		Nonmajor Enterprise Funds		Internal Service Funds	ce Fiduciary		Total Transfers Out
Transfers Out:													
General Fund	\$	\$ 9,359	\$	1,573,881	\$2,806,962	\$	864	\$	11,644	\$ 15,065	\$	2,727	\$4,420,502
General Obligation Bond Projects Fund	16,200	_		432	_		_		_	_		_	16,632
Nonmajor Governmental Funds	37,261	_		34	_		_		3,016	_		_	40,311
Higher Education Fund	12,671	_		_	_		_		_	_		_	12,671
Internal Service Funds	3,201				97,645								100,846
Total Transfers In	\$ 69,333	\$ 9,359	\$	1,574,347	\$2,904,607	\$	864	\$	14,660	\$ 15,065	\$	2,727	\$4,590,962

Transfers are used to move revenues from the fund that statutes require to collect them to the fund that statutes require to expend them and to move unrestricted revenues collected in the General Fund to finance various programs accounted for in other funds in accordance with budgetary authorizations.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



A. Primary Government

Capital Asset activity for the fiscal year-ended June 30, 2019, was as follows (amount in thousands):

	Balance 7/1/2018 ated - Note 3)	Increases		Decreases		alance 30/2019
Governmental Activities	 ,					
Capital Assets Not Being Depreciated:						
Land	\$ 4,206,006	\$ 210,291	\$	(27,256)	5	4,389,041
Works of Art and Collections	1,391	12		(3)		1,400
Intangibles - Other Than Software	123,493	1,632		_		125,125
Construction in Progress	3,914,014	2,736,318		(3,249,374)		3,400,958
Total Capital Assets, Not Being Depreciated	 8,244,904	 2,948,253	_	(3,276,633)		7,916,524
Capital Assets Being Depreciated:						
Infrastructure	30,686,930	1,799,985		(22,842)		32,464,073
Buildings and Building Improvements	4,287,357	375,902		(239,199)		4,424,060
Improvements Other Than Buildings	149,407	27,396		_		176,803
Intangibles - Other than Software	1,383	261		_		1,644
Machinery and Equipment	1,099,035	126,195		(84,858)		1,140,372
Software	549,581	59,926		(8,622)		600,885
Total Capital Assets Being Depreciated	 36,773,693	2,389,665		(355,521)		38,807,837
Less Accumulated Depreciation For:						
Infrastructure	18,686,119	919,797		(14,326)		19,591,590
Buildings and Building Improvements	2,149,092	128,231		(85,560)		2,191,763
Improvements Other Than Buildings	61,960	3,563		(99)		65,424
Intangibles - Other Than Software	1,054	148		(1)		1,201
Machinery and Equipment	820,115	105,885		(63,850)		862,150
Software	281,846	35,264		(77)		317,033
Total Accumulated Depreciation	 22,000,186	1,192,888		(163,913)		23,029,161
Total Capital Assets, Being Depreciated, Net	 14,773,507	 1,196,777		(191,608)		15,778,676
Governmental Activities Capital Assets, Net	\$ 23,018,411	\$ 4,145,030	\$	(3,468,241)	6	23,695,200

NOTE 9 - CAPITAL ASSETS (continued)

	Balance 7/1/2018 ated - Note 3)		Increases	Decreases	Balance 6/30/2019
Business-type Activities	 				
Capital Assets Not Being Depreciated:					
Land	\$ 482,654	\$	38,032	\$ (28)	\$ 520,658
Works of Art and Collections	52,015		4,971	(1,742)	55,244
Construction in Progress	275,011		200,760	(241,935)	233,836
Total Capital Assets, Not Being Depreciated	 809,680		243,763	 (243,705)	 809,738
Capital Assets Being Depreciated:					
Infrastructure	357,921		55,157	(1,104)	411,974
Buildings and Building Improvements	13,501,931		863,444	(35,758)	14,329,617
Improvements Other Than Buildings	353,326		28,184	(1,437)	380,073
Machinery and Equipment	2,123,371		198,444	(81,102)	2,240,713
Software	130,375		44,381	_	174,756
Library Collections	959,851		32,945	(9,010)	983,786
Works of Art and Collections	6,711		10	(116)	6,605
Total Capital Assets Being Depreciated	 17,433,486		1,222,565	 (128,527)	 18,527,524
Less Accumulated Depreciation For:					
Infrastructure	139,621		17,118	(615)	156,124
Buildings and Building Improvements	4,504,702		358,593	(24,234)	4,839,061
Improvements Other Than Buildings	177,452		14,787	(620)	191,619
Machinery and Equipment	1,575,777		145,790	(44,917)	1,676,650
Software	44,430		21,675	_	66,105
Library Collections	781,468		41,343	(9,010)	813,801
Works of Art and Collections	1,672		159	_	1,831
Total Accumulated Depreciation	 7,225,122	_	599,465	 (79,396)	 7,745,191
Total Capital Assets, Being Depreciated, Net	 10,208,364		623,100	 (49,131)	 10,782,333
Business-type Activities, Capital Assets, Net	\$ 11,018,044	\$	866,863	\$ (292,836)	\$ 11,592,071

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 9 - CAPITAL ASSETS (continued)

Current period depreciation expense was charged to functions of the primary government as follows (amount in thousands):

Governmental Activities	Business-type A	ctivities		
General Government	\$ 29,929	Higher Education Fund	\$	587,775
Education	9,253	Nonmajor Enterprise Funds		11,685
Health and Welfare	71,263	Depreciation Expense - Business-type Activities	\$	599,460
Transportation	937,578			
Public Safety	74,397			
Economic Development	17,974			
Culture and Recreation	17,247			
Conservation	7,590			
Internal Service Funds				
(Depreciation on capital assets held by the State's internal service funds are charged to the various functions based on their usage of assets)	 27,657			
Depreciation Expense - Governmental Activities	\$ 1,192,888			

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

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NOTE 9 - CAPITAL ASSETS (continued)

B. Component Units

Capital Asset activity for the fiscal year-ended June 30, 2019, was as follows (amount in thousands):

	Jı	Balance Ily 1, 2018 ated - Note 3)	Increases		Decreases	Ju	Balance June 30, 2019	
Component Units								
Capital Assets Not Being Depreciated:								
Land	\$	389,680	\$ 24,780	\$	(12,839)	\$	401,621	
Works of Art and Collections		1,670	—		—		1,670	
Construction in Progress		186,869	252,547		(146,809)		292,607	
Total Capital Assets, Not Being Depreciated		578,219	 277,327	_	(159,648)		695,898	
Capital Assets Being Depreciated:								
Infrastructure		349,816	3,646		(44)		353,418	
Buildings and Building Improvements		2,749,680	96,105		(4,770)		2,841,015	
Improvements Other Than Buildings		748,386	68,421		(552)		816,255	
Machinery and Equipment		1,131,181	69,084		(9,213)		1,191,052	
Software		35,101	2,597		_		37,698	
Library Collections		4,364	255		_		4,619	
Works of Art and Collections		71	_		_		71	
Total Capital Assets Being Depreciated		5,018,599	240,108		(14,579)		5,244,128	
Less Accumulated Depreciation For:								
Infrastructure		168,685	10,783		(51)		179,417	
Buildings and Building Improvements		502,909	126,661		(4,310)		625,260	
Improvements Other Than Buildings		359,435	33,384		(509)		392,310	
Machinery and Equipment		635,600	73,070		(5,983)		702,687	
Software		27,926	1,736		_		29,662	
Library Collections		3,107	267		(1)		3,373	
Works of Art and Collections		21	1		_		22	
Total Accumulated Depreciation		1,697,683	 245,902	_	(10,854)		1,932,731	
Total Capital Assets, Being Depreciated, Net		3,320,916	 (5,794)		(3,725)		3,311,397	
Component Units Capital Assets, Net*	\$	3,899,135	\$ 271,533	\$	(163,373)	\$	4,007,295	

*Certain higher education foundations and other similar organizations utilize FASB standards.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 9 - CAPITAL ASSETS (continued)

As of June 30, 2019, the capital assets balances of FASB organizations are as follows:

Capital Assets Not Being Depreciated:	
Land	\$ 152,548
Works of Art and Collections	2,876
Construction in Progress	60,254
Total Capital Assets, Not Being Depreciated	215,678
Capital Assets Being Depreciated	
Infrastructure	4,225
Buildings and Building Improvements	345,897
Improvements Other Than Buildings	10,848
Machinery and Equipment	32,233
Software	83
Total Capital Assets Being Depreciated	 393,286
Less: Accumulated Depreciation	 (144,709)
Total Capital Assets, Being Depreciated, Net	 248,577
Capital Assets, Net (FASB presentation)	 464,255
Total Capital Assets, Net - All Component Units	\$ 4,471,550



NOTE 10 - LONG-TERM LIABILITIES

A. Changes in Long-term Liabilities

Primary Government

Changes in long-term liabilities for the fiscal year ended June 30, 2019, are as follows (amount in thousands):

	Balance 7/1/2018 (Restated - Note 3) Additions Reductions		Balance 6/30/2019	Amounts Due Within One Year			
Governmental Activities	<u> </u>						
General Obligation Bonds Payable	\$	8,994,040	\$ 1,228,625	\$ (833,870)	\$ 9,388,795	\$	852,750
Revenue Bonds Payable		244,555	—	(41,980)	202,575		44,105
GARVEE Bonds Payable		469,980	349,765	(451,840)	367,905		123,220
Net Unamortized Premiums/(Discounts):							
General Obligation Bonds		981,027	95,163	(112,382)	963,808		_
Revenue Bonds		18,883	_	(5,513)	13,370		_
GARVEE Bonds		12,059	38,614	(20,753)	29,920		_
Total Bonds Payable		10,720,544	1,712,167	(1,466,338)	 10,966,373		1,020,075
Notes and Loans Payable - Direct Borrowings		62,317	6,554	(8,521)	60,350		3,958
Notes and Loans Payable - Other		11,824	_	(2,912)	8,912		2,941
Capital Lease Obligations		233,395	16,304	(30,440)	219,259		22,097
Compensated Absences Payable		372,294	 198,813	 (184,111)	 386,996		166,889
Total Governmental Activities	\$	11,400,374	\$ 1,933,838	\$ (1,692,322)	\$ 11,641,890	\$	1,215,960
Business-type Activities							
Revenue Bonds Payable	\$	261,066	\$ 60,610	\$ (89,970)	\$ 231,706	\$	5,580
Net Unamortized Premiums/(Discounts):							
Revenue Bonds		2,869	7,837	(409)	10,297		_
Total Bonds Payable		263,935	 68,447	 (90,379)	 242,003		5,580
Notes and Loans Payable		254,602	41,493	(26,636)	269,459		36,141
Capital Lease Obligations		2,915,354	166,176	(225,321)	2,856,209		112,661
Compensated Absences Payable		263,456	203,431	(201,657)	265,230		174,530
Other Liabilities		1,431	—	(291)	1,140		291
Total Business-type Activities	\$	3,698,778	\$ 479,547	\$ (544,284)	\$ 3,634,041	\$	329,203

Internal service funds predominantly serve the governmental funds. Accordingly, long-term liabilities for these funds are included as part of the above total for governmental activities. The following long-term liabilities of internal service funds were included in the above balance as of June 30, 2019: capital leases of \$40.7 million, compensated absences of \$4.9 million and notes payable of \$12.6 million. Of these amounts, \$5.6 million, \$2.1 million and \$3.9 million, respectively, are due within one year. In general, the capital leases and compensated absences of the governmental activities are liquidated by the general fund.



Component Units

Changes in long-term liabilities for the fiscal year ended June 30, 2019, are as follows (amount in thousands):

	-	Balance 7/1/2018 ated - Note 3)	Additions	Reductions	Balance 6/30/2019	nounts Due hin One Year
Component Units						
Revenue Bonds Payable	\$	2,936,586	\$ 211,755	\$ (154,237)	\$ 2,994,104	\$ 127,777
Mortgage Bonds Payable		1,329,635	236,640	(130,175)	1,436,100	38,385
Net Unamortized Premiums/(Discounts):						
Revenue Bonds		122,838	32,116	(12,405)	142,549	_
Mortgage Bonds		12,019	_	(2,677)	9,342	_
Total Bonds Payable		4,401,078	480,511	(299,494)	4,582,095	166,162
Notes and Loans Payable		280,784	134,757	(127,613)	287,928	98,072
Net Unamortized Premiums		(1,694)	11	(255)	(1,938)	—
Capital Lease Obligations		83,168	13,094	(12,391)	83,871	9,099
Compensated Absences Payable		33,315	12,834	(11,948)	34,201	26,469
Grand Prizes Payable		188,720	7,952	(18,658)	178,014	4,651
Derivative Instruments Payable		30,176	8,286	(969)	37,493	_
Other Liabilities		27,213	6,668	(5,574)	28,307	5,807
Total Component Units	\$	5,042,760	\$ 664,113	\$ (476,902)	\$ 5,229,971	\$ 310,260

B. Bonds and Notes Payable

At June 30, 2019, bonds and notes payable currently outstanding are as follows (amount in thousands):

	Interest Rates	Maturing Through Year	Original Issue Amount		Outstanding Amount	
Governmental Activities						
General Obligation Bonds						
General Government	0.30% - 5.75%	2038	\$	12,618,820	\$	6,654,605
General Government - Refunding	1.50% - 5.00%	2030		3,993,770		2,734,190
Revenue Bonds						
Transportation Projects	4.00% - 5.00%	2024		363,685		202,575
GARVEE Bonds	2.50% - 5.00%	2029		949,765		367,905
Notes and Loans Payable	1.00% - 5.92%	2034		89,918		69,262
Business-type Activities						
Revenue Bonds						
Georgia Higher Education Facilities Authority	2.00% - 6.25%	2041		438,880		197,575
Transportation Projects	6.25% - 7.00%	2049		26,070		34,131
Notes and Loans Payable	2.00% - 3.79%	2031		351,486		269,459
<u>Component Units</u>						
Revenue Bonds						
Higher Education Foundations	1.05% - 5.50%	2052		3,128,560		2,732,346
Georgia Tech Foundation	1.76% - 6.66%	2049		358,955		222,095
Other Revenue Bonds	4.16% - 5.28%	2031		218,505		39,663
Mortgage Bonds						
Georgia Housing and Financing Authority	0.15% - 5.00%	2049		2,041,640		1,436,100
Notes and Loans Payable						
Higher Education Foundations	0.00% - 6.55%	2040		220,124		150,633
Georgia Tech Foundation	0.00% - 5.04%	2029		153,152		126,371
Other Notes and Loans Payable	2.98% - 4.16%	2027		22,724		10,924

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NOTE 10 - LONG-TERM LIABILITIES (continued)

C. General Obligation Bonds

Primary Government

The State issues general obligation bonds to provide funds for the acquisition and construction of major capital facilities and equipment. On July 12, 2018, the State issued general obligation bonds, (Series 2018A and 2018B), totaling \$1.2 billion to provide funds for various capital outlay projects of the State, for county and independent school systems through the Department of Education, for county and local libraries through the Board of Regents, and to provide loans through the Georgia Environmental Finance Authority to local governments and local government entities for water and sewerage facilities. General obligation bonds are direct obligations of the State to which the full faith and credit of the State are pledged.

Bonds Authorized but Unissued

Authorized but unissued general obligation bonds as of June 30, 2019, are as follows (amount in thousands):

Purpose	ithorized ssued Debt
K-12 Education	\$ 229,075
Georgia World Congress Center	6,300
General Assembly	2,500
Agriculture	500
Total	\$ 238,375

Defeasance and Refunding of General Obligation Bonds

As of June 30, 2019, the State had total outstanding advance refunded bonds of \$216.2 million. The debt service for the refunded bonds is paid by a combination of cash and U.S. Treasury securities held irrevocably in escrow accounts. The escrow account assets and the liability for the defeased bonds are not included in the State's financial statements. There were no refunding bonds issued during fiscal year 2019.

Early Retirement of Debt

From funds received from the sale of state property and from interest earnings available for the advance retirement of debt, the State made two purchases of various series of State of Georgia General Obligation Bonds in the secondary market with a par value of \$0.4 million. The early retirements of the bonds will save the State \$0.7 million in future principal and interest appropriations. Since July 1, 2000 the early retirement program has saved the State over \$1.1 billion in future principal and interest appropriations.





NOTE 10 - LONG-TERM LIABILITIES (continued)

D. Revenue Bonds

Governmental Activities

State Road and Tollway Authority (SRTA) has issued Guaranteed Revenue Bonds for the purpose of financing certain road and bridge projects in the State. The guaranteed revenue bonds are secured by a joint resolution between Department of Transportation (DOT) (General Fund) and SRTA (Nonmajor Governmental Fund) whereby DOT has pledged to provide sufficient motor fuel tax funds to pay the principal and interest of the revenue bonds. According to the State Constitution, motor fuel tax funds are imposed and appropriated for all activities incident to maintaining an adequate system of roads and bridges in the State. In fiscal year 2019, the State collected \$1.8 billion of motor fuel tax funds, which exceeds the principal and interest due on the revenue bonds of \$54.0 million for the same fiscal year. Further, the State has guaranteed the full payment of the bonds and the interest.

SRTA has issued Federal Highway Grant Anticipation Revenue Bonds and Federal Highway Reimbursement Revenue Bonds (GARVEE's) of \$349.8 million. These bond proceeds will be used for the purpose of providing funds for an approved land public transportation project. These bonds are pledged and payable solely from grant and reimbursement revenues received from the Federal Highway Administration. These bonds do not constitute a pledge of the faith and credit of SRTA or the State.

Of the SRTA bonds issued, \$285.9 million were refunding bonds used to refund a total of \$298.6 million in outstanding principal from previous revenue bond issuances. The difference between the cash flows required to service the old debt, the new debt, and complete the refunding transactions is \$27.2 million. This amount is being netted against the new debt and amortized over the remaining life of the refunding debt.

Business-type Activities

SRTA has issued toll revenue bonds of \$26.1 million for the purpose of paying the costs of certain tolling infrastructure relating to the I-75 South Metro Express Lanes Project, financing a debt service reserve and paying the costs of issuance of the bonds. Interest on the bonds will not be paid on a current basis, but will be added to the principal amount of such bonds on each "accretion date," which is each June 1 and December 1, commencing December 1, 2014. Interest on these bonds ranges from 6.25% to 7.00%. As of June 30, 2019, the outstanding principal balance is \$34.1 million. These bonds are pledged and payable solely from I-75 South Metro Express Lanes toll revenue.

Georgia Higher Education Facilities Authority (GHEFA) has issued revenue bonds for the purpose of acquiring, constructing and equipping several projects on college campuses throughout the State. The bonds are secured solely by the related security deed and related assignment of contract documents. As of June 30, 2019, the outstanding principal for these revenue bonds is \$197.6 million.

Component Units

Higher Education Foundations have issued various revenue bonds to finance the costs of acquiring, renovating, constructing and equipping various facilities located on the campuses of the Board of Regents. The bond issues have interest rates ranging from 1.05% to 5.50% with maturity dates through fiscal year 2052. As of June 30, 2019, the outstanding principal for these revenue bonds was \$2.7 billion. These bonds are secured by lease arrangements for these various facilities with the Board of Regents.

NOTE 10 - LONG-TERM LIABILITIES (continued)

Georgia Tech Foundation, Inc. has issued various revenue bonds to finance the costs of acquiring, renovating, constructing and equipping various facilities located on the campus of The Georgia Institute of Technology. The bond issues have interest rates ranging from 1.76% to 6.66% with maturity dates through fiscal year 2049. As of June 30, 2019, the outstanding principal for these revenue bonds was \$222.1 million. These bonds are secured by lease arrangements for these various facilities with the Board of Regents.

Other component units had revenue bonds payable outstanding at June 30, 2019, of \$39.7 million as detailed below (amounts in thousands):

	A	mount
Georgia Environmental Finance Authority	\$	32,345
Lake Lanier Islands Development Authority		5,803
Regional Educational Service Agencies (RESA)		1,515
Total	\$	39,663

E. Mortgage Bonds

Component Units

Mortgage bonds outstanding of \$1.4 billion at June 30, 2019, were issued by the Georgia Housing and Finance Authority for financing the purchase of single-family mortgage loans for eligible persons and families of low and moderate income within the State. The bonds are secured by certain assets, which include mortgage loan purchased and certain cash and cash equivalents and investment securities in mortgage bond accounts, and any interest earned thereon.

F. Notes and Loans Payable

Governmental Activities

Notes and loans payable for direct borrowings in governmental activities as of June 30, 2019, were \$60.4 million.

• Of this amount, Energy Performance Contracts for the Department of Economic Development, the Department of Corrections and the Department of Natural Resources, attributed \$27.5 million, \$25.0 million, and \$4.2 million, respectively. These contracts contain provisions related to events of default. Significant to these provisions, an event of default occurs when: (a) the Primary Government fails to pay any payment of purchase price or other payment required to be paid when due, (b) the Primary Government has a breach in any material respect of the contract or failure of the Primary Government to observe or perform contract covenants for a period of 30 days after written notice, or (c) initiation by or against the Primary Government of a proceeding under any federal or state bankruptcy or insolvency seeking relief under such laws. Upon the occurrence of any event of default, the seller shall have the right to proceed by court action to enforce performance by the Primary Government of the applicable contract covenants or to recover for the the breach. The Primary Government would be responsible for attorney fees and expenses incurred by seller.





NOTE 10 - LONG-TERM LIABILITIES (continued)

• Georgia Technology Authority has total notes payable of \$3.6 million related to the Cyber Center Audio Visual with a 3.25% to 5.92% interest rate, and matures in 2023, and \$0.03 million in financing for equipment purchases with 4.6% interest rate and matures in 2019. Default occurs when payment is not made, at which point the assets revert back to the seller and additional penalties may be incurred.

Notes and loans payable - Other in governmental activities as of June 30, 2019, were \$8.9 million.

• Georgia Technology Authority has total notes payable \$8.9 million related to the Statewide Cost Allocation Plan for the fiscal years 2004 to 2009, and is payable to the U.S. Department of Health and Human Services with a 1.0% interest rate, and matures in 2022.

Business-type Activities

Notes and loans payable for business-type activities as of June 30, 2019, were as follows (amount in thousands):

	A	Amount
Transportation Projects	\$	256,698
Georgia Institute of Technology		11,684
University of Georgia		1,077
Total	\$	269,459

Transportation Projects Notes and Loans

The notes and loans payable balance in Transportation Projects primarily consists of a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan which is related to the I-75 Northwest Corridor Express Lanes Project. In November 2013, SRTA executed a TIFIA loan of up to \$275.0 million which proceeds, when drawn upon, will finance a portion of the costs for the project. During construction and for a period of up to five years following substantial completion, interest is compounded and added to the initial TIFIA loan. The TIFIA loan requires mandatory debt service payments at a minimum and scheduled debt service payments to the extent additional funds are available. TIFIA debt service payments are expected to commence in 2023, which is five years after substantial completion. The interest rate of the TIFIA loan is 3.79%. \$184.5 million was drawn on the TIFIA loan during fiscal year 2017. An additional \$27.3 million was drawn on the TIFIA loan.



NOTE 10 - LONG-TERM LIABILITIES (continued)

Component Units

Notes and loans payable for component units as of June 30, 2019, were as follows (amount in thousands):

	Amount
Higher Education Foundations	\$ 150,633
Georgia Tech Foundation, Inc.	126,371
Lake Lanier Islands Development Authority	8,292
Georgia Military College	2,379
Pioneer RESA	253
Total	\$ 287,928

Higher Education Foundations Notes and Loans

As of June 30, 2019 Georgia Tech Athletic Association has an unsecured notes payable representing the Association's obligation to Georgia Tech Foundation, Inc. with respect to the William C. Wardlaw Center, interest payable semiannually. Effective interest rate at June 30, 2019, is 4.25%. The outstanding balance at June 30, 2019 is \$0.5 million.

As of June 30, 2019 Georgia Tech Athletic Association has an secured notes payable by real property, interest payable quarterly at a variable rate of 30-day LIBOR plus 1.85% per annum (3.10% at June 30, 2019) with quarterly principal payment of \$ 0.9 million beginning July 2014 through July 2023. The outstanding balance at June 30, 2019 is \$13.6 million.

In October 2016, the University System of Georgia (USG) Real Estate IV, LLC purchased the FVSU WildCat Commons Phase I (a student housing dormitory) from the Fort Valley State University Foundation Property, LLC for \$40.4 million by issuing a two year interest-only bond anticipation note (BAN) payable. At maturity, the BAN payable will be refinanced with a 30 year low-interest fixed rate USDA loan. The terms of the BAN payable require the USG Real Estate Foundation IV, LLC to lease the related facilities to the Board of Regents through year-to-year rental agreements that have multi-year renewal options, in amounts necessary to maintain the properties, pay interest on the note, and retire the debt. The BAN payable will mature on October 1, 2018, bears interest at a fixed rate of 1.2%, and is payable semiannually on October 1 and April 1. Interest will accrue at the fixed rate until converted to another fixed rate in accordance with the Indenture. At maturity, the BAN payable was fully refinanced with five, individual 30-year lowinterest fixed rate USDA notes.

In November 2017, the University System of Georgia (USG) Real Estate V, LLC purchased the four real estate properties from various South Georgia State College (SGSC) LLC entities for \$35.6 million by issuing a two year interest-only BAN payable. At maturity, the BAN payable will be refinanced with a 30 year low-interest fixed rate USDA loan. The terms of the BAN payable require the USG Real Estate Foundation V, LLC to lease the related facilities to the Board of Regents through year-to-year rental agreements that have multi-year renewal options, in amounts necessary to maintain the properties, pay interest on the note, and retire the debt. The BAN payable will mature on December 1, 2019, bears interest at a fixed rate of 1.65% and is payable semiannually on June 1 and December 1. Interest will accrue at the fixed rate until converted to another fixed rate in accordance with the terms of the Indenture. The balance on the note at June 30, 2019 was \$35.6 million.



NOTE 10 - LONG-TERM LIABILITIES (continued)

In September 2019, the University System of Georgia (USG) Real Estate V, LLC fully refinanced the BAN payable with five individual, 30 year low-interest fixed rate notes payable with the USDA. The real estate on which the facilities are constructed will be leased to USG Real Estate Foundation IV, LLC by the Board of Regents pursuant to a ground lease for minimal rent. The USDA notes payable will all mature on September 20, 2037, with a fixed interest rate of 2.75%, and are payable annually. The outstanding balance at June 30, 2019 is 40.5 million.

During fiscal year 2007, the University of Georgia Foundation signed a 10 year \$6.2 million promissory loan. During November 2017, the Foundation amended the agreement and made a one-time principal payment of \$0.8 million, extending the maturity date of the remaining outstanding balance to November 1, 2032. Interest is charged at the bank's 30-day LIBOR plus 0.33% basis points; such rate was 2.77% at June 30, 2019. Principal and interest are payable monthly. The outstanding balance at June 30, 2019 was \$4.2 million.

During October 2014, the University of Georgia Foundation entered into a series of transactions, as follows: (1) The Foundation entered into a tax-exempt financing project with the Washington D.C. District Council for \$12.5 million involving tax-exempt bonds, which expire on November 1, 2039 and accrue interest at a per annum rate equal to 75.00% of the sum of one-month LIBOR plus 1.60% payable monthly, (2) the University of Georgia Foundation entered into a loan agreement with a bank in which the Foundation fully repaid its obligation under the newly acquired tax-exempt bonds in exchange for a promissory loan relating to the same principal. The promissory loan agreement expires on November 1, 2039 and includes certain debt covenants and restrictions. Interest on the promissory loan agreement is charged at 75.00% of the sum of one-month LIBOR plus 1.60%; such rate was 3.03% at June 30, 2019. Principal and interest on the promissory loan agreement are payable quarterly. The outstanding balance at June 30, 2019 was \$10.8 million.

In October 2017, the University of Georgia Athletic Association, Inc. entered into a \$50.0 million revolving credit agreement, for a draw period of 18 months and a final maturity of five years. Borrowings under the revolving credit agreement bear interest at the bank's one month LIBOR plus 0.73%. At June 30, 2019, the rate applicable to the borrowings was 3.11%. The outstanding balance at June 30, 2019 was \$15.8 million.

In addition to the notes and loans discussed in the previous paragraphs, as of June 30, 2019, an additional \$29.6 million in notes was held by various higher education foundations.

Other Component Units Notes and Loans

The Georgia Tech Foundation, Inc. has \$46.0 million revolving lines of credit. One line of credit in the name of the Foundation totaling to \$ 5.0 million and two lines of credit totaling \$ 15.0 million. Interest is calculated using the 30-day LIBOR rate. This resulted in an average effective interest rate of 2.99% at June 30, 2019. As of June 30, 2019, the outstanding balance on the note was \$42.7 million.

In October 2016, the Georgia Tech Foundation, Inc. entered into a loan assumption and substitution agreement with the previous borrower and assumed a \$35.7 million note payable from a third party lender under terms of the existing loan agreement. The effective rate of interest at June 30, 2019 was 5.04%. As of June 30, 2019, the outstanding balance on the note was \$34.2 million.

In May 2017, the Georgia Tech Foundation, Inc. entered into a loan agreement with a bank, borrowing \$13.0 million. The effective interest rate at June 30, 2019 was 4.75%. As of June 30, 2019, the outstanding balance on the loan was \$12.4 million.



NOTE 10 - LONG-TERM LIABILITIES (continued)

In September 2018, the Georgia Tech Foundation, Inc. entered into a loan agreement with a bank, borrowing \$25.1 million. The effective interest rate at June 30, 2019 was 4.75%. As of June 30, 2019, the outstanding balance on the loan was \$25.1 million.

In November 2018, the Georgia Tech Foundation, Inc. entered into a loan agreement with a bank, borrowing \$24.0 million. The effective interest rate at June 30, 2019 was 0.00%. As of June 30, 2019, the outstanding balance on the loan was \$12.0 million.

G. Interest Rate Swaps

As a means of interest rate management, various higher education foundations have entered into interest rate swap agreements. For further details on these agreements, please refer to *Note 6-Derivative Instruments*.

H. Pollution Remediation

Pollution remediation obligations reflect estimates that have the potential to change due to such items as price increases or reductions, new technology, or changes in applicable laws or regulations.

Governmental Activities

Department of Natural Resources

Department of Natural Resources has recorded liabilities totaling \$60.5 million at June 30, 2019 for pollution remediation primarily related to sites included in the hazardous site inventory, Superfund sites where only operations and maintenance remains, and site containing underground storage tanks that are enrolled for remediation coverage in the Georgia Underground Storage Tank Program. The liabilities were determined by previous experience. Pollution remediation liability activity in fiscal year 2019 was as follows (amount in thousands):

_	Balance 7/1/2018 Additions		Re	ductions	_	alance 30/2019	Amounts Due Within One Year				
\$	31,534	\$	46,332	\$	17,360	\$	60,506	\$	220		



I. Debt Service Requirements

Annual debt service requirements to maturity for general obligation bonds, revenue bonds, GARVEE bonds, mortgage bonds, and notes and loans payable are as follows (amount in thousands):

Primary Government

							Governmen								
	 General Obli	gatio	on Bonds	Revenue Bonds				GARVEE Bonds				Notes and Loans Payable - Direct Borrowings			
Year	Principal		Interest	P	rincipal		Interest	I	Principal]	Interest	Principal			Interest
2020	\$ 852,750	\$	390,020	\$	44,105	\$	9,665	\$	123,220	\$	18,375	\$	3,958	\$	2,324
2021	822,675		352,117		46,335		7,436		129,385		12,213		4,094		2,163
2022	751,620		315,793		48,675		5,095		68,305		5,744		4,286		1,996
2023	707,965		283,495		21,545		2,634		4,930		2,339		4,124		1,820
2024	686,955		252,909		22,650		1,530		5,170		2,092		3,571		1,674
2025-2029	2,947,950		856,765		19,265		482		36,895		6,706		20,429		6,215
2030-2034	1,934,285		320,763		_		_		_		_		19,888		1,939
2035-2039	684,595		51,895		_		_		_		_		_		_
2040-2044	_		_		_		_		_		_		_		_
2045-2049	_		_		_		_		_		_		_		_
2050-2054	_		_		_		_		_		_		_		_
Total	\$ 9,388,795	\$	2,823,757	\$	202,575	\$	26,842	\$	367,905	\$	47,469	\$	60,350	\$	18,131

	G	overnmen	tal Acti	vities	Business-type Activities									
	Notes and Loans Payable - Other					Revenu	ıds	N	ayable					
Year	ear Principal		In	Interest		Principal *		Interest	Principal **		Iı	nterest		
2020	\$	2,941	\$	89	\$	5,580	\$	8,906	\$	36,141	\$	259		
2021		2,971		60		6,888		8,656		2,051		261		
2022		3,000		30		7,735		8,354		2,097		216		
2023		_		_		8,458		8,032		2,143		169		
2024		_		_		9,190		7,692		1,205		123		
2025-2029		_		_		46,572		42,922		3,244		345		
2030-2034		_		_		57,267		35,286		880		17		
2035-2039		_		_		70,440		22,349		_		_		
2040-2044		_		_		21,040		9,222		_		_		
2045-2049		_		_		14,175		4,435		_		_		
2050-2054		_		_		3,795		267		_		_		
Total	\$	8,912	\$	179	\$	251,140	\$	156,121	\$	47,761	\$	1,390		

* Includes accreted interest of \$19.4 million that will be recorded in future years to increase bonds payable as the interest accretes.

** A debt service schedule for the TIFIA loan will be provided after the last loan draw.



State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 10 - LONG-TERM LIABILITIES (continued)

Component Units

	Higher E Found			Georgi Found				Ot Compon		nits
	 Revenu	nds	 Revenu	nds	Revenue Bonds					
Year	 Principal		Interest	 Principal		Interest		Principal		Interest
2020	\$ 112,684	\$	138,829	\$ 12,065	\$	10,843	\$	3,028	\$	1,931
2021	90,893		134,215	12,850		10,163		1,051		1,865
2022	96,799		129,624	13,780		9,437		1,100		1,815
2023	130,236		123,852	12,430		8,721		606		1,762
2024	107,189		117,716	13,195		8,019		639		1,729
2025-2029	630,535		497,595	69,185		29,249		2,918		8,108
2030-2034	686,875		326,352	45,370		12,503		30,320		2,719
2035-2039	584,920		158,415	10,910		7,702		—		_
2040-2044	221,930		37,345	15,360		5,089		_		
2045-2049	53,790		11,264	16,950		1,487		_		_
2050-2054	16,495		1,410	_		_		_		_
Total	\$ 2,732,346	\$	1,676,617	\$ 222,095	\$	103,213	\$	39,662	\$	19,929
	 Higher E Found			Georgi Found				Ot Compon	her ent U	nits
	Notes and L	oans	Payable	 Notes and Lo	oans	Payable		Notes and L	oans 1	Payable
Year	 Principal		Interest	 Principal		Interest		Principal		Interest
2020	\$ 41,079	\$	3,033	\$ 55,613	\$	3,482	\$	1,380	\$	381
2021	5,002		2,726	973		3,436		1,408		337
2022	30,426		2,104	1,022		3,386		3,047		283
2023	4,828		1,773	1,473		3,328		1,150		171
2024	12,571		1,536	43,182		2,557		1,194		127
2025-2029	22,040		6,134	24,108		4,526		2,745		117
2030-2034	19,749		2,591	_		_		_		_
2035-2039	14,893		1,332	_		—		—		_
2040-2044	45		—	—		—		—		_
Total	\$ 150,633	\$	21,229	\$ 126,371	\$	20,715	\$	10,924	\$	1,416
	Georgia and Financ									
	 Mortgag	ge Bo	nds							
Year	 Principal		Interest							
2020	\$ 38,385	\$	48,618							
2021	42,755		47,385							
2022	41,255		46,326							
2023	39,950		45,246							
2024	37,315		44,184							
2025-2029	190,300		204,885							
2030-2034	262,065		169,417							
2035-2039	306,405		119,552							
	302,420		63,332							
2040-2044										
2040-2044 2045-2049	175,250		16,311							



A. Operating Leases

The State leases land, office facilities, office and computer equipment, and other assets. Some of these leases are considered for accounting purposes to be operating leases. Although lease terms vary, many leases are subject to appropriation from the General Assembly to continue the obligation. Other leases generally contain provisions that, at the expiration date of the original term of the lease, the State has the option of renewing the lease on a year-to-year basis. Leases renewed yearly for a specified time period, i.e. lease expires at 12 months and must be renewed for the next year, may not meet the qualification as an operating lease.

Total lease payments for the State's governmental activities, business-type activities, and component units were \$21.2 million, \$58.5 million, and \$26.5 million, respectively, for the year ended June 30, 2019. Future minimum commitments for operating leases as of June 30, 2019, are listed below (amount in thousands).

	Primary G				
Fiscal Year Ended June 30	ernmental ctivities	iness-type ctivities	Component Units		
2020	\$ 15,446	\$ 58,715	\$	30,464	
2021	11,091	53,144		29,628	
2022	7,505	48,023		26,221	
2023	5,573	46,352		23,497	
2024	4,588	43,166		14,622	
2025-2029	23,434	153,623		37,358	
2030-2034	6,914	91,207		12,022	
2035-2039	335	4,696		5,892	
2040-2044		806		474	
2045-2049		664		190	
2050-2054	_	265			
Total Future Minimum Commitments	\$ 74,886	\$ 500,661	\$	180,368	





NOTE 11 - LEASES (continued)

B. Capital Leases

The State acquires certain property and equipment through multi-year capital leases with varying terms and options. In accordance with OCGA 50-5-64, the majority of these agreements shall terminate absolutely and without further obligation at the close of the fiscal year in which it was executed and at the close of each succeeding fiscal year for which it may be renewed. These agreements may be renewed only by a positive action taken by the State. The agreements shall terminate immediately at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the State.

The expense resulting from the amortization of assets recorded under capital leases is included in depreciation expense. At June 30, 2019, the historical cost of assets acquired through capital leases was as follows (amount in thousands):

	Primary	Gove	ernment		
	Governmenta Activities	l B	Susiness-type Activities	Co	omponent Units
Land	\$	- \$	58,410	\$	
Infrastructure	—	_	39,705		—
Buildings	324,09	5	3,407,692		66,936
Improvements Other Than Buildings	—	_	6,458		—
Machinery and Equipment	13,29	0	35,728		529
Software	1,88	7			—
Less: Accumulated Depreciation	(182,33)	5)	(1,117,350)		(18,811)
Total Assets Held Under Capital Lease	\$ 156,93	7 \$	2,430,643	\$	48,654

State of Georgia Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 11 - LEASES (continued)

At June 30, 2019	, future commitments under ca	pital leases were as follows	(amount in thousands):
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	Primary Government					
Fiscal Year Ended June 30	Governmental Activities			ısiness-type Activities	Component Units	
2020	\$	56,319	\$	264,515	\$	13,446
2021		52,532		264,487		12,088
2022		54,769		264,126		11,318
2023		38,472		261,629		10,050
2024		35,796		260,620		8,469
2025-2029		203,310		1,301,502		30,056
2030-2034		26,120		1,121,403		25,455
2035-2039		5,853		768,358		2,069
2040-2044		2,993		181,445		_
2045-2049		30		27,964		_
2050-2054		30		2,322		
2055-2059		30				
2060-2064		_		_		_
2062-2066		_		_		
Total Capital Lease Payments		476,254		4,718,371		112,951
Less: Interest		(248,521)		(1,502,240)		(29,077)
Executory Costs		(8,474)		(359,922)		(3)
Present Value of Capital Lease Payments	\$	219,259	\$	2,856,209	\$	83,871

The future commitments for capital leases of the business-type activities include leases payable to higher education foundations (component units) for various facilities located on the campuses of the University System of Georgia.



NOTE 11 - LEASES (continued)

C. Leases Receivable

The State leases certain facilities and land for use by others for terms varying from 1 to 60 years. The leases are accounted for as operating leases; revenues for services provided and for use of facilities are recorded when earned.

Total revenues from rental of land and facilities for the State's governmental activities and component units were \$9.2 million, and \$73.9 million, respectively, for the year ended June 30, 2019. Minimum future revenues and rentals to be received under operating leases as of June 30, 2019, are as follows (amount in thousands):

	Primary Government					
Fiscal Year Ended June 30		Governmental Activities		C	Component Units	
2020	\$ 1	,099	\$	\$	67,284	
2021	1	,060			38,436	
2022	1	,052			35,234	
2023		430			29,339	
2024		407			27,923	
2025-2029	1	,957			113,310	
2030-2034	1	,606			97,571	
2035-2039	1	,536			69,258	
2040-2044	1	,229			63,336	
2045-2049		172			50,993	
2050-2054		6			43,364	
2055-2059		5			312,405	
2060-2064		4			14,819	
2065-2069		4			14,819	
2070-2074		4			14,819	
2075-2079		4	—		14,819	
Total Minimum Revenues	\$ 10	,575	\$	\$	1,007,729	

NOTE 11 - LEASES (continued)

Component Units

Foundations related to Higher Education have lease operations consisting of real estate leases to the Board of Regents. Minimum future payments to be received from these capital leases as of June 30, 2019, are as follows (amount in thousands):

Fiscal Year Ended June 30	Amount
2020	\$ 202,638
2021	204,349
2022	205,526
2023	204,279
2024	203,880
Thereafter	2,901,984
Total Minimum Revenues	3,922,656
Less: Unearned Income	(1,557,529)
Net Revenue	\$ 2,365,127

D. Related Parties

Primary Government

University System of Georgia Foundations

During fiscal year 2019, various foundations that are not included in the government-wide financial statements have entered into transactions with institutions of the University System of Georgia. The University System of Georgia institutions have capital leases payable to these foundations that are not included as component units in the amount of \$340.3 million as of June 30, 2019.





The State's donor restricted endowment funds reside primarily within the higher education institutions. The funds are pooled at the individual member institution level, unless required to be separately invested by the donor. There is no state law that governs endowment spending; rather, for University System of Georgia member institution controlled, donor-restricted endowments, where the donor has not provided specific instructions, the Board of Regents permits the individual member institution to develop policies for authorizing and spending realized and unrealized endowment income and appreciation as they determine to be prudent. Current year net appreciation for the endowment accounts was \$9.6 million and is reflected as restricted net position.

Changes in the endowment net position for the year ended June 30, 2019, are as follows (amount in thousands):

Component Units	Without Donor Restriction		With Donor Restriction		Total
Endowment net position, July 1 (Restated)	\$	270,306	\$ 2,695,210	\$	2,965,516
Contributions		9,987	111,840		121,827
Net realized and unrealized gains		11,864	144,054		155,918
Appropriation of endowment assets for expenditure		(7,741)	(103,710)		(111,451)
Transfers to comply with donor intent		(800)	(244)		(1,044)
Other		4,954	1,296		6,250
Endowment net position, June 30	\$	288,570	\$ 2,848,446	\$	3,137,016



NOTE 13 - SERVICE CONCESSION ARRANGEMENTS

A. Primary Government

University System of Georgia

During fiscal year ended June 30, 2015, the Board of Regents of the University System of Georgia (BOR) entered into a Service Concession Arrangement (SCA) with Corvias Campus Living-USG,LLC (Corvias), whereby Corvias manages, maintains and operates certain existing student housing resources on the campuses of nine institutions: Abraham Baldwin Agricultural College; Armstrong State University; Augusta University; College of Coastal Georgia; Columbus State University; Dalton State College; East Georgia State College; Georgia State University; and the University of North Georgia.

Pursuant to the contractual stipulations of this SCA, whereby the BOR and Corvias are the "parties" participating in this agreement, as of May 14, 2015, the institutions noted above transferred the housing resources covered by this SCA, along with associated capital lease obligations to the University System Office (USO) in fiscal year 2015 through special item transfer. In accordance with the SCA, in May 2015, Corvias provided \$311.6 million which the BOR used to retire the capital lease obligations transferred to the USO.

On February 23, 2018, the SCA contractual agreement with Corvias was amended. While performance measures and the operating agreement remain intact, the term of the agreement has changed. The SCA, which was originally for 65 years (780 months) to end in June 2080, will now end on June 30, 2055. This contract modification accelerates the amortization of the deferred inflows.

For the \$311.6 million that was originally received from Corvias in fiscal year 2015, \$8.0 million was amortized at June 30, 2018, leaving a remaining deferred inflow of resources balance of \$287.7 million at year end.

In addition to the existing student housing arrangement, Corvias designs and constructs authorized new housing projects that, once constructed, are similarly managed, maintained and operated on seven of the nine campuses with existing student housing resources. Two of these projects were completed in fiscal year 2016 and their fair market values were capitalized increasing Capital Assets by \$23.1 million. In fiscal year 2017, five additional housing projects were completed and their fair market values were capitalized increasing capital assets by \$154.4 million. The deferred inflows associated with these projects are being amortized over the remaining life of the SCA in accordance with the term revision noted above. At June 30, 2019, the USO amortized \$4.6 million of deferred inflows related to these seven projects, leaving a remaining deferred inflow of resources balance of \$166.9 million at year end.

Also, as part of this SCA, and beginning in fiscal year 2016, the USO receives \$8.0 million in Ground Rent and \$0.5 million in Supplemental Capital Repair and Replacement funds each year for the next ten years, with each amount escalating by 3% annually. The USO recorded accounts receivable and deferred inflow of resources in the amount of \$73.2 million representing the present value of this revenue stream based on the agreement terms and will amortize the deferred inflows over a ten-year period. For the year ended June 30, 2019, the USO amortized \$7.6 million and recognized \$1.7 million in associated interest income, leaving a deferred inflow balance of \$42.0 million as of June 30, 2019.

The USO also receives retained services funds each year as a percentage of gross revenues for that year.

The USO has no reportable future obligation for these services.

NOTE 13 - SERVICE CONCESSION ARRANGEMENTS (continued)

Georgia Gwinnett College

On May 13, 2014, Georgia Gwinnett College (GGC) entered into an agreement with Aramark Education Services, LLC (Aramark), whereby Aramark will operate food services operations from service participants. The agreement is renewable for each year for ten years.

Aramark is required to operate the food service facilities in accordance with the contractual agreement. The contract includes a period fixed fee ("Annual Fixed Fee") payable to Aramark in the amount of \$5.3 million per operating year. In the event that the amount paid to or retained by Aramark is less that the Annual Fixed Fee of \$5.3 million, then GGC shall remit the amount equivalent to the difference of the Annual Fixed Fee minus Actual Operating Retainage. In the event that the actual operation year retainage is greater than 199.9% (upper threshold amount) of the Annual Fixed Fee, then Aramark shall remit the difference of the Annual Fixed Fee minus the upper threshold amount to GGC. If the actual operation year retainage is more than the Annual Fixed Fee but less than the 199.9% of the Annual Fixed Fee, then neither party shall owe anything to the other. GGC and Aramark will review the annual Fixed Fee prior to the commencement of each operating year and a revised Annual Fixed Fee shall be set forth in a written supplemental contract.

Under the terms of the contract Aramark committed a lump sum upfront payment of \$0.4 million. The amortized revenue recorded related to the lump sum payment in fiscal year 2018 was \$36.0 thousand and the remaining deferred inflow was \$0.2 million.

Under terms of the original agreement Aramark also committed \$5.3 million in dining facility renovations. In fiscal year 2017, the contract amendment called for a return of outstanding unamortized amounts of \$1.6 million and for a reduction of \$0.7 million to deferred inflows for uncollected funds. The amortized revenue recorded in fiscal year 2019 for the remaining construction commitment was \$0.3 million leaving deferred inflow balance of \$1.6 million.

For Fiscal Year 2019, GGC reported a total remaining deferred inflow of resources of \$1.8 million related to the SCA.

Kennesaw State University

At June 30, 2019, Kennesaw State University (KSU) was a participant in four SCAs.

- In August 2001, KSU entered into an agreement with KSUF whereby Kennesaw State University Foundation, Inc. (KSUF) will operate and collect revenues for housing operations from students. KSUF is required to operate the residence hall ("University Place") in accordance with a contractual agreement between the two parties. Under the terms of the agreement, the Institution received no funds upfront from KSUF, but will take full ownership of the residence hall at the end of the operating agreement in June, 2031.
- 2. In August 2003, KSU entered into an agreement with KSUF whereby KSUF will operate and collect revenues for housing operations from students. KSUF is required to operate the housing ("University Village") in accordance with a contractual agreement between the parties. Under the terms of the agreement, the Institution received no funds upfront from KSUF, but will take full ownership of the housing at the end of the operating agreement in June 2034.
- 3. In August 2007, KSU entered into an agreement with KSUF whereby KSUF will operate and collect revenues for housing operations from students. KSUF is required to operate the housing ("University Suites") in accordance with a contractual agreement between the parties. Under the terms of the agreement, the Institution received no funds upfront from KSUF, but will take full ownership of the housing at the end of the operating agreement in June 2037.

NOTE 13 - SERVICE CONCESSION ARRANGEMENTS (continued)

4. In July 2017, KSU entered in to a lease agreement with a food service provider whereby the vendor will operate a restaurant in accordance with a contractual agreement between the two parties. Under the terms of the agreement, the Institution received no funds upfront, but will take full ownership of the equipment and lease improvements at the end of the operating agreement in June, 2027.

At June 30, 2019, the University reports the three housing residences and one retail space as capital assets with a net carrying value of \$57.0 million. For fiscal year 2019, the University reported a remaining deferred inflow of resources of \$57.0 million and amortized revenue of \$3.6 million.





Deferred Outflows and Inflows of Resources reported on the Statement of Net Position as of June 30, 2019, consisted of the following (amount in thousands):

	Primary Government							
		vernmental Activities	Business-type Activities		Total		(Component Units
Deferred Outflows of Resources								
Accumulated Decrease in Fair Value of Hedging Derivatives	\$	_	\$	_	\$	_	\$	3,738
Deferred Amount on Refundings of Bonded Debt		101,630		48,565		150,195		46,782
Deferred Outflows Relating to Other Postemployment Benefits:								
Difference between expected and actual experience		2,522		307,698		310,220		1,167
Change of assumptions		11,866		598		12,464		1,321
Net difference between projected and actual								
earnings on pension plan investments		49,123		7,355		56,478		1,591
Change in proportion		186,236		1,607		187,843		10,290
State contribution subsequent to								
the measurement date		436,238		218,131		654,369		6,347
Deferred Outflows Relating to Pensions:								
Difference between expected and actual experience		135,078		212,213		347,291		11,539
Change of assumptions		224,046		56,926		280,972		7,724
Net difference between projected and actual earnings on pension plan investments		585		882		1,467		5,703
Change in proportion		107,557		115,504		223,061		5,234
State contribution subsequent to the measurement date		664,499		463,514		1,128,013		35,987
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Total Deferred Outflows of Resources	\$	1,919,380	\$	1,432,993	\$	3,352,373	\$	137,423
Deferred Inflows of Resources								
Deferred Amount on Refundings of Bonded Debt	\$	854	\$	67,214	\$	68,068	\$	_
Deferred Service Concession Arrangement Receipts				555,391		555,391		_
Deferred Inflows Relating to Other Postemployment Benefits:								
Difference between expected and actual experience		167,115		21,722		188,837		5,220
Change of assumptions		770,327		595,761		1,366,088		20,573
Net difference between projected and actual								
earnings on pension plan investments		38,200		1,984		40,184		495
Change in proportion		145,652		21,165		166,817		5,384
Deferred Inflows Relating to Pensions:								
Difference between expected and actual experience		23,242		6,398		29,640		2,068
Change of assumptions		27,007		_		27,007		2,034
Net difference between projected and actual earnings on		115,604		93,636		209,240		4,132
pension plan investments				·				-
Change in proportion		129,355		73,466		202,821		11,249
Unavailable Revenue		37,162		29,118		66,280		23,414
Total Deferred Inflows of Resources	\$	1,454,518	\$	1,465,855	\$	2,920,373	\$	74,569
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NOTE 14 - DEFERRED INFLOWS AND OUTFLOWS (continued)

Of the \$1.9 billion of deferred outflows of resources reported in the governmental activities, \$686.0 million represent deferred outflows related to other postemployment benefits, of which \$7.0 million are reported in the internal service funds and \$1.1 billion represent deferred outflows relating to pensions, of which \$12.5 million are reported in the internal service funds. The remaining \$101.6 million represent deferred amounts on refundings of bonded debt.

Of the \$1.5 billion of deferred inflows of resources reported in the governmental activities, \$1.1 billion represent deferred inflows related to other postemployment benefits, of which \$16.8 million are reported in the internal service funds and \$295.2 million represent deferred inflows relating to pensions, of which \$3.0 million are reported in the internal service funds. Additionally, the U.S. Department of Justice settled an agreement with the Volkswagen Corporation in which an Environmental Mitigation Trust was established. The State has \$36.8 million in unavailable revenues to fund future eligible mitigation actions. The remaining \$1.2 million represent deferred amounts on refundings of bonded debt and unavailable revenue related to grant funds received before the period when those resources are permitted to be used.

Deferred outflows reported in business-type activities include \$1.4 billion which represent \$535.4 million relating to other postemployment benefits, \$849.0 million which represent deferred outflows relating to pensions and \$48.6 million, which represent deferred amounts on refundings of bonded debt.

Of the \$1.5 billion of deferred inflows of resources reported in the business-type activities, \$640.6 million represent deferred inflows relating to other postemployment benefits, \$173.5 million represent deferred inflows relating to pensions, \$555.4 million represent deferred service concession arrangement receipts described in *Note 13 - Service Concession Arrangements*, \$67.2 million represent deferred amounts on refundings of bonded debt and \$29.1 million in unavailable revenue represent grant funds received before the period when those resources are permitted to be used.

Of the \$137.4 million of deferred outflows of resources reported in the component units, \$20.7 million represent deferred outflows relating to other postemployment benefits, \$66.2 million represent deferred outflows relating to pensions and \$46.8 million represent deferred amounts on refundings of bonded debt.

Of the \$74.6 million of deferred inflows of resources reported in the component units, \$31.7 million represent deferred inflows relating to other postemployment benefits, \$19.5 million represent deferred inflows relating to pensions, and \$23.4 million in unavailable revenue represent grants funds received before the period when those resources are permitted to be used.

Under the modified accrual basis of accounting, governmental funds reported \$1.3 billion in unavailable revenue as deferred inflows of resources, which consisted primarily of taxes and interest received more than 30 days after close of the current fiscal year.



NOTE 15 - RETIREMENT SYSTEMS

The State administers various retirement plans. Two of the major retirement systems are: the Teachers Retirement System (TRS) and the Employees' Retirement System of Georgia (the System) which includes the Employees' Retirement System (ERS), the Public School Employees Retirement System (PSERS), the Georgia Judicial Retirement System (GJRS). The State also administers retirement plans for the State's peace officers and firefighters. Those plans are the Peace Officers' Annuity and Benefit Fund of Georgia (Peace Officers') and the Georgia Firefighters' Pension Fund (Firefighters'). The State is the plan sponsor (Plan) of these plans and in many cases the participating employer (Employer). The notes to the financial statements and required supplementary information that follow are presented from the perspective of the State as Plan sponsor and the State as Employer. In addition, the State is the only entity with a statutory requirement to contribute on behalf of the employer directly to many of these Plans creating a situation defined as a Nonemployer Contributing Entity in a Special Funding Situation (SFS).

Each of these systems issue separate publicly available financial reports that include the applicable financial statements and required supplementary information. The reports may be obtained by visiting the following websites:

Employees' Retirement System:	www.ers.ga.gov
Teachers Retirement System:	www.trsga.com
Peace Officers' Annuity and Benefit Fund of Georgia:	www.poab.georgia.gov
Georgia Firefighters' Pension Fund:	www.gfpf.org

In addition, the State administers the Regents Retirement Plan, which is an optional retirement plan for certain university employees.

The State's significant retirement plans are described below. More detailed information can be found in the plan agreements and related legislation. Each plan, including benefit and contribution provisions, was established and can be amended by State law.

A. Basis of Accounting

Retirement plan financial statements are prepared on the accrual basis of accounting, except for the collection of fines and forfeitures which are recognized when collected from the courts and insurance company premium taxes which are recognized annually, upon receipt. Contributions from the employers and members are recognized as additions when due, pursuant to formal commitments, as well as statutory or contractual requirements. Retirement benefits and refund payments are recognized as deductions when due and payable. The retirement plan's fiduciary net positions have been determined on the same basis as they are reported by the various plans.

B. Investments

Investments are reported at fair value and net asset value (NAV) as a practical expedient to fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price.



For the fiscal year ended June 30, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense for the System, is represented below, along with the TRS, Peace Officers', and Firefighters' plans.

Pension Plans	Net Annual Money- Weighted Rate
ERS/PSERS/GJRS	(1.80%)
Teacher's Retirement System	4.08 %
Peace Officers'	6.14 %
Firefighters'	5.11 %

For all plans mentioned above, the money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

ERS, PSERS, GJRS, TRS, Peace Officers' and Firefighters' have investment policies regarding the allocation of invested assets.

The ERS, PSERS, GJRS, and TRS policies are established on a cost basis in compliance with Georgia Statute. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through each pension plan.

Peace Officers' maintains an investment policy that may be amended by its Board of Commissioners both upon its own initiative and upon consideration of the advice and recommendations of its investment managers. The fund's policy in regard to the allocation of invested assets is established on a cost basis in compliance with Georgia Statute. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan.

Firefighters' policy in regard to the allocation of invested assets is established and may be amended by the fund's Board. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan.





NOTE 15 - RETIREMENT SYSTEMS (continued)

The following table summarizes the adopted asset allocation policy by plan at June 30, 2019:

Target Allocation									
Asset Class	ERS	PSERS	GJRS	TRS	Peace Officers'	Firefighters'			
Fixed Income	25% - 45%	25% - 45%	25% - 45%	25% - 45%	20% - 40%	19.5% - 49.5%			
Equities	55% - 75%	55% - 75%	55% - 75%	55% - 75%	30% - 75%	25.5% - 75.5%			
Alternative Investments	0% - 5%	0% - 5%	0% - 5%	_	0% - 5%	_			
Cash and Cash Equivalents	_	_	_	_	0% - 10%				
Other	_	_	—	—	—	5% - 25%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

C. Defined Benefit Plans Descriptions and Funding Policies

Employees' Retirement System of Georgia (The System)

The System is comprised of individual retirement systems and plans covering substantially all employees of the State except for teachers and other employees covered by TRS, Peace Officers', and Firefighters' funds. The System is administrated by a Board of Trustees that is comprised of active and retired members, ex-officio state employees, and appointees by the Governor.

Employees' Retirement System (ERS)

Plan Description: One of the plans within the System, also titled ERS, is a cost-sharing multiple-employer defined benefit pension plan that was established by the Georgia General Assembly during the 1949 Legislative Session for the purpose of providing retirement allowances for employees of the State and its political subdivisions. ERS is directed by a Board of Trustees and has the powers and privileges of a corporation. ERS acts pursuant to statutory direction and guidelines, which may be amended prospectively for new hires but for existing members and beneficiaries may be amended in some aspects only subject to potential application of certain constitutional restraints against impairment of contract.

Benefits Provided: The benefit structure of ERS is established by the Board of Trustees under statutory guidelines. Unless the employee elects otherwise, an employee who currently maintains membership with ERS based upon State employment that started prior to July 1, 1982, is an "old plan" member subject to the plan provisions in effect prior to July 1, 1982. Members hired on or after July 1, 1982, but prior to January 1, 2009, are "new plan" members subject to the modified plan provisions. Effective January 1, 2009, newly hired State employees, as well as rehired State employees who did not maintain eligibility for the "old" or "new" plan, are members of the Georgia State Employees' Pension and Savings Plan (GSEPS). Members of the GSEPS plan may also participate in the GSEPS 401(k) defined contribution component described below. ERS members hired prior to January 1, 2009, also have the option to irrevocably change their membership to the GSEPS plan.

Under the old plan, new plan, and GSEPS, a member may retire and receive normal retirement benefits after completion of 10 years of creditable service and attainment of age 60 or 30 years of creditable service regardless

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 15 - RETIREMENT SYSTEMS (continued)

of age. Additionally, there are some provisions allowing for early retirement after 25 years of creditable service for members under age 60.

Retirement benefits paid to members are based upon a formula adopted by the Board of Trustees for such purpose. The formula considers the monthly average of the member's highest 24 consecutive calendar months of salary, the number of years of creditable service, the applicable benefit factor, and the member's age at retirement. Postretirement cost-of-living adjustments may be made to members' benefits provided the members were hired prior to July 1, 2009. The normal retirement pension is payable monthly for life; however, options are available for distribution of the member's monthly pension, at reduced rates, to a designated beneficiary upon the member's death. Death and disability benefits are also available through ERS.

Contributions: Member contribution rates are set by law. Member contributions under the old plan are 4% of annual compensation up to \$4,200 plus 6% of annual compensation in excess of \$4,200. Under the old plan, the State pays member contributions in excess of 1.25% of annual compensation. Under the old plan, these State contributions are included in the members' accounts for refund purposes and are used in the computation of the members' earnable compensation for the purpose of computing retirement benefits. Member contributions under the new plan and GSEPS are 1.25% of annual compensation. The State is required to contribute at a specified percentage of active member payroll established by the Board of Trustees and determined annually in accordance with an actuarial valuation and minimum funding standards as provided by law. These State contributions are not at any time refundable to the member or his/her beneficiary.

Employer and nonemployer contributions required, as a percentage of covered payroll, for fiscal year 2019 were based on the June 30, 2016 actuarial valuation as follows:

Plan Segment	Contribution Rate 2019
Old Plan*	24.66%
New Plan	24.66%
GSEPS	21.66%

4.75% of which was paid by the State on behalf of old plan * members.

The State makes contributions to ERS on behalf of certain non-State employers as follows: Pursuant to The Official Code of Georgia Annotated (OCGA) 47-2-292(a) the Department of Revenue receives an annual appropriation from the Georgia General Assembly to be used to fund the employer contributions for certain local county tax commissioners and employees. Pursuant to OCGA 47-2-290(a) the Council of State Courts (CSC) and the Prosecuting Attorneys' Council (PAC) receive annual appropriations from the Georgia General Assembly for employer contributions of certain local employees in State Courts.

Members become vested after 10 years of service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member. However, if an otherwise vested member terminates and withdraws his/her member contributions the member forfeits all rights to retirement benefits.

NOTE 15 - RETIREMENT SYSTEMS (continued)

Public School Employees Retirement System (PSERS)

Plan Description: PSERS is also a plan within the System, and is a cost-sharing multiple-employer defined benefit pension plan established by the Georgia General Assembly in 1969, for the purpose of providing retirement allowances for public school employees who are not eligible for membership in the Teachers Retirement System of Georgia. The ERS Board of Trustees, plus two additional trustees, administers PSERS.

Benefits Provided: A member may retire and elect to receive normal monthly retirement benefits after completion of 10 years of creditable service and attainment of age 65. A member may choose to receive reduced benefits after age 60 and upon completion of 10 years of service. Upon retirement, the member will receive a monthly benefit of \$15.25, multiplied by the number of years of creditable service. Additionally, PSERS may make periodic cost-of-living adjustments to the monthly benefits. Death and disability benefits are also available through PSERS.

Contributions: Individuals who became members prior to July 1, 2012 contribute \$4 per month for nine months each fiscal year. Individuals who became members on or after July 1, 2012 contribute \$10 per month for nine months each fiscal year.

The State makes contributions to PSERS on behalf of certain non-State employers as follows: Pursuant to OCGA §47-4-29(a) and 60(b), the Georgia General Assembly makes an annual appropriation to cover the employer contribution to PSERS on behalf of local school employees (bus drivers, cafeteria workers, and maintenance staff). The annual employer contribution required by statute is actuarially determined and paid directly to PSERS by the State Treasurer. Contributions are expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability.

Employer contributions required for the year ended June 30, 2019 were \$777.04 per active member and were based on the June 30, 2016, actuarial valuation.

Members become vested after 10 years of creditable service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member. However, if an otherwise vested member terminates and withdraws his/her member contribution, the member forfeits all rights to retirement benefits.

Georgia Judicial Retirement System (GJRS)

Plan Description: Another plan within the System, GJRS, is a cost-sharing multiple-employer defined benefit pension plan established by the Georgia General Assembly in 1998 for the purpose of providing retirement allowances for judges and solicitors generals of the state courts and juvenile court judges in Georgia, and their survivors and other beneficiaries, superior court judges of the state of Georgia, and district attorneys of the state of Georgia. The ERS Board of Trustees and three additional trustees administer GJRS.

GJRS was also created to serve the members and beneficiaries of the Trial Judges and Solicitors Retirement fund, the Superior Court Judges Retirement System, and the District Attorneys Retirement System (collectively, the Predecessor Retirement Systems). As of June 30, 1998, any person who was an active, inactive, or retired member or beneficiary of the Predecessor Retirement Systems was transferred to GJRS in the same status effective July 1, 1998. All assets of the Predecessor Retirement Systems were transferred to GJRS as of July 1, 1998.

Benefits Provided: The normal retirement for GJRS is age 60, with 16 years of creditable service; however, a member may retire at age 60 with a minimum of 10 years of creditable service.



NOTE 15 - RETIREMENT SYSTEMS (continued)

Annual retirement benefits paid to members are computed as 66.67% of State paid salary at retirement for district attorneys and superior court judges and 66.67% of the average over 24 consecutive months for trial judges and solicitors, plus 1% for each year of creditable service over 16 years, not to exceed 24 years. Early retirement benefits paid to members are computed as the pro rata portion of the normal retirement benefit, based on service not to exceed 16 years. Death, disability, and spousal benefits are also available.

Contributions: Members are required to contribute 7.5% of their annual salary. Those who became members prior to July 1, 2012 must also contribute an additional 2.5% of their annual salary if spousal benefit is elected. Employer contributions are actuarially determined and approved and certified by the GJRS Board of Trustees.

The State makes contributions to GJRS on behalf of certain non-State employers as follows: Pursuant to OCGA 47-23-81 the employer contributions for state court judges and solicitors are funded by the State of Georgia on behalf of the local county employers and pursuant to OCGA 47-23-82 the employer contributions for juvenile court judges are funded by the State on behalf of local county employers.

Employer and nonemployer contributions required for year ended June 30, 2019 were 7.83% of compensation and were based on the June 30, 2016 actuarial valuation.

Members become vested after 10 years of creditable service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member. However, if an otherwise vested member terminates and withdraws his/her member contribution, the member forfeits all rights to retirement benefits.

Teachers Retirement System of Georgia (TRS)

Plan Description: TRS is a cost-sharing multiple-employer defined benefit plan created in 1943 by an act of the Georgia General Assembly to provide retirement benefits for qualifying employees in educational service. A Board of Trustees comprised of two appointees by the Board, two ex-officio State employees, five appointees by the Governor, and one appointee of the Board of Regents is ultimately responsible for the administration of TRS. All teachers in the state public schools, the University System of Georgia (except those professors and principal administrators electing to participate in an optional retirement plan), and certain other designated employees in educational-related work are eligible for membership.

Benefits Provided: TRS provides service retirement, disability retirement, and survivor's benefits. Title 47 of the OCGA assigns the authority to establish and amend the provisions of TRS to the State Legislature. A member is eligible for normal service retirement after 30 years of creditable service, regardless of age, or after 10 years of service and attainment of age 60. A member is eligible for early retirement after 25 years of creditable service.

Normal retirement (pension) benefits paid to members are equal to 2% of the average of the member's two highest paid consecutive years of service, multiplied by the number of years of creditable service up to 40 years. Early retirement benefits are reduced by the lesser of one-twelfth of 7% for each month the member is below age 60 or by 7% for each year or fraction thereof by which the member has less than 30 years of service. It is also assumed that certain cost-of-living adjustments, based on the Consumer Price Index, may be made in future years. Retirement benefits are payable monthly for life. A member may elect to receive a partial lump-sum distribution in addition to a reduced monthly retirement benefit. Options are available for distribution of the member's monthly pension, at a reduced rate, to a designated beneficiary on the member's death. Death, disability, and spousal benefits are also available.



NOTE 15 - RETIREMENT SYSTEMS (continued)

Contributions: TRS is funded by member, employer and nonemployer contributing entity (Nonemployer) contributions as adopted and amended by the Board of Trustees. Members become fully vested after 10 years of service. If a member terminates with less than 10 years of service, no vesting of employer contributions occurs, but the member's contributions may be refunded with interest. Member contributions are limited by State law to not less than 5% or more than 6% of a member's earnable compensation.

The State makes contributions to TRS on behalf of certain non-State employers as follows: Pursuant to OCGA 47-3-63, the employer contributions for certain full-time public school support personnel are funded on behalf of the employers by the State of Georgia.

Member contributions as adopted by the Board of Trustees for fiscal year 2019 were 6% of covered payroll. Employer and Nonemployer contributions required for fiscal year 2019 were 20.90% of annual salary as required by the June 30, 2016, actuarial valuation.

Peace Officers' Annuity and Benefit Fund of Georgia (Peace Officers')

Plan Description: Peace Officers' is a cost-sharing multiple-employer defined benefit pension plan established in 1950 by the General Assembly of Georgia for the purpose of paying retirement benefits to peace officers of the State of Georgia. The Board of Commissioners of the Peace Officers' fund is comprised of six members consisting of the Governor or his designee, an appointee of the Governor other than the Attorney General, the Commissioner of Insurance or his designee and three active or retired peace officers appointed by the Governor in accordance with OCGA 47-17-20.

Individuals eligible to apply for membership in the Peace Officers' fund are defined in the OCGA 47-17-1 and generally include: any individual employed by the State of Georgia or any municipality, county, or other political subdivision thereof for the preservation of public order, the protection of life and property or the detection of crime; wardens and correction officers of correctional institutions; full-time parole officers; other individuals employed full-time for the purpose of law enforcement; and full-time employees of the Peace Officers' fund.

Benefits Provided: The Peace Officers' fund provides retirement as well as disability and death benefits. Title 47 of the OCGA assigns the authority to establish and amend the provisions of the Peace Officers' fund to the State Assembly. A member is eligible to receive retirement benefits with 30 years of service, regardless of age. A member is also eligible to receive retirement benefits at age 55 with 10 years of service; however, members joining on or after July 1, 2010, must have 15 years of service to be eligible for benefits. A member must have terminated his or her active employment as a peace officer to receive benefits.

The monthly benefit is a single life annuity payable in monthly payments for the life of the member only. The monthly payment amount at June 30, 2019, was \$24.78 per month (plus 1/12 of this amount for each month of any partial year) for each full year of creditable service up to a maximum of 30 years of total service. The Board of Commissioners is authorized to provide for increases effective as of January 1 and July 1 of each year up to 1.5% of the maximum monthly retirement benefit then in effect. Members may elect, as an alternate to the benefit described above, to receive a 100% joint life annuity payable during the life of the member or the member's spouse, or a contingency life annuity with a 50% monthly payment to the surviving spouse. The amount of the benefit for these options is an actuarially reduced portion of the single life annuity benefit described above.

At any time before a member begins drawing retirement benefits, the member may request a refund of 95% of all member contributions paid into the Peace Officers' fund during creditable service. No interest is paid on these withdrawals.



NOTE 15 - RETIREMENT SYSTEMS (continued)

Contributions: The Peace Officers' fund is funded by member and nonemployer contributing entity (Nonemployer) contributions. Contribution provisions are established by statute and may be amended only by the General Assembly of Georgia. A description of contribution requirements is as follows:

Member Contributions: Member contribution requirements are set forth in OCGA 47-17-44 and are not actuarially determined. Each member must contribute \$20 per month, to be paid no later than the tenth day of each month.

Nonemployer Contributions: Pursuant to OCGA 47-14-60, the State makes contributions to the Peace Officers' fund on behalf of non-State employers through the collection of court fines and forfeitures.

The fines and forfeitures are considered employer contributions for the purpose of determining whether the Peace Officers' fund has met minimum funding requirements specified in OCGA 47-20-10. This statute also prohibits any action to grant a benefit increase until such time as the minimum annual contribution requirements meet or exceed legislative requirements. The actuarial valuation as of June 30, 2019, calculated the minimum employer contribution for the fiscal year ended June 30, 2019, as \$10.4 million. The fines and forfeitures revenue of \$14.4 million for the fiscal year ended June 30, 2019, did meet the minimum required fund contribution.

Administrative expenses are generally funded from current member and court fine and forfeiture contributions. Investment earnings may be utilized to fund any expenses in excess of contributions.

Georgia Firefighters' Pension Fund (Firefighters')

Plan Description: Firefighters' is a cost-sharing multiple-employer defined benefit pension plan established in 1955 by the General Assembly of Georgia for the purpose of paying retirement benefits to firefighters of the State of Georgia. The Board of Trustees of the pension fund is comprised of five members and consists of the Governor or his designee, the Commissioner of Insurance or his designee, two active members of the pension fund appointed by the Governor. Any person employed as a firefighter or enrolled as a volunteer firefighter within the State of Georgia or any regular employee of the pension fund is eligible for membership.

Benefits Provided: The Firefighters' fund provides retirement and death benefits. Disability benefits are provided under certain circumstances, and only as awarded to members prior to July 1, 1993. Benefit provisions and vesting requirements are established by statute and may be amended only by the General Assembly of Georgia. A member shall be eligible to receive retirement benefits at age 55 provided the member has 25 years of service. A member may be eligible to receive a pro rata share of benefits, at the latter of age 55 or at the member's termination as a firefighter or volunteer firefighter, after at least 15 years of service (amount received to be the maximum benefit amount times a ratio of years of service to 25 years). At age 50, a member may elect to receive a percentage of benefits to which the member would have been eligible to receive at age 55. Members may receive benefits and continue service as a volunteer firefighter as long as they receive no form of compensation for their volunteer department activity.

The maximum retirement benefit at June 30, 2019 is \$931 per month for the life of the member. The Board of Trustees is authorized to provide for ad hoc cost-of-living adjustments (COLAs) effective as of January 1 and July 1 of each year up to 1.5% of the maximum retirement benefit then in effect. Members retiring after July 1, 1984 with service in excess of 25 years are entitled to an additional 1% of the maximum benefit in effect at the time of retirement for each additional full year of service. Members retiring after July 1, 2002 with service in excess of 25 years are entitled to an additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional 2% of the maximum benefit in effect at the time of retirement for each additional full year of service.



NOTE 15 - RETIREMENT SYSTEMS (continued)

Members may elect, as an alternate to the benefit described above, to receive either an actuarially reduced benefit payable during the joint lifetime of the member and the member's spouse, continuing after the death of the member during the lifetime of the spouse or a 10 years' certain and life option where an actuarially reduced benefit is received during the member's lifetime and, in the event of the member's death within 10 years of retirement, the same monthly benefits shall be payable to the member's selected beneficiary for the balance of the 10 year period.

In the event a member terminates prior to receiving retirement benefits, 95% of the member's contribution will be returned. No interest is paid upon amounts so withdrawn.

Contributions: The Firefighters' fund is funded by member and nonemployer contributing entity (Nonemployer) contributions. Contribution provisions are established by statute and may be amended only by the General Assembly of Georgia. A description of contribution requirements is as follows:

Member Contributions: Member contributions are set forth in OCGA 47-7-60 and are not actuarially determined. Each member must contribute \$25 per month, to be paid no later than the tenth day of each month.

Nonemployer Contributions: Pursuant to OCGA 47-7-61, the State makes contributions to the Firefighters' fund on behalf of non-State employers as follows: Nonemployer contributing entity contributions consist of contributions from fire insurance companies, corporations or associations doing business within the State of Georgia. These contributions must be paid to the Firefighters' fund and are comprised of 1% of the gross premiums, written by such insurance companies, corporations, or associations for fire, lightning, or extended coverage, inland marine or allied lines, or windstorm insurance policies covering property within the State of Georgia.

In accordance with OCGA 47-20-10, the insurance premiums tax are considered employer contributions for the purpose of determining whether the Pension Fund has met minimum funding requirements. This statute also prohibits any action to grant a benefit increase until such time as the minimum annual contribution requirements meet or exceed legislative requirements. The actuarial valuation as of June 30, 2019, calculated the minimum tax revenue of \$37.9 million for the fiscal year ended June 30, 2019, meets the minimum required fund contribution.

Administrative expenses are generally funded from current member and insurance premium tax contributions. Investment earnings may be utilized to fund any expenses in excess of contributions.

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 15 - RETIREMENT SYSTEMS (continued)

D. Defined Benefit Plans Membership and Participating Employers

The following table summarizes the participating membership and participating employers at June 30, 2019:

Participating Membership by Plan										
June 30, 2019										
Plan Membership	ERS	PSERS	GJRS	TRS	Peace Officers'	Firefighters'				
Inactive plan members or beneficiaries currently receiving benefits	52,275	18,990	400	131,802	6,572	5,864				
Inactive plan members entitled to but not yet receiving benefits	60,574	49,213	64	14,060	1,576	336				
Inactive plan members not entitled to benefits	_	_	_	99,744	_	2,439				
Active plan members	59,207	34,768	521	226,387	13,103	13,520				
Total	172,056	102,971	985	471,993	21,251	22,159				
Number of Employers	420	187	93	316	659	430				

These counts treat each legal entity in the State reporting entity as one employer.

E. Defined Benefit Plans Net Pension Liability/(Asset) of Participating Employers and Nonemployer Contributing Entities

The following schedule is presented from the perspective of the State as the sponsor of the various Plans and summarizes the components of the Net Pension Liability (NPL)/ Net Pension Asset (NPA) of the participating employers and nonemployer contributing entities, as of June 30, 2019, by Plan (amount in thousands):

Components of the Net Pension Liability/(Asset)	ERS	PSERS	GJRS	TRS	Peace Officers'	Firefighters'
Total Pension Liability	\$17,744,003	\$ 1,107,496	\$ 440,041	\$ 100,291,641	\$ 802,169	\$ 1,103,481
Plan Fiduciary Net Position	13,617,472	941,588	479,372	78,788,937	825,675	934,352
Employers' and non- employer contributing entity's net pension liability/(asset)	\$ 4,126,531	\$ 165,908	\$ (39,331)	\$ 21,502,704	\$ (23,506)	\$ 169,129
Plan fiduciary net position as a percentage of the total pension liability	76.74%	85.02%	108.94%	78.56%	102.93%	84.67%





NOTE 15 - RETIREMENT SYSTEMS (continued)

F. Defined Benefit Plans Actuarial Methods and Assumptions

Actuarial Valuation Date

The total pension liability at June 30, 2019 is based upon the June 30, 2018 actuarial valuation for ERS, PSERS, GJRS, TRS, and Peace Officers, and upon the June 30, 2019 actuarial valuations for Firefighters', using generally accepted actuarial procedures/techniques.

Actuarial Assumptions

The total pension liability, as of June 30, 2019, for each plan was determined by an actuarial valuation date indicated in the table below using the following actuarial assumptions, applied to all periods included in the measurement:

(Table on next page)

State of Georgia Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 15 - RETIREMENT SYSTEMS (continued)

Plan	Valuation date	Inflation	Salary increases	Investment rate of return ¹	Cost of Living Adjustment	Mortality	Actuarial experience study
ERS	6/30/2018	2.75%	3.25% - 7.00%*	7.30%	N/A	Post-retirement mortality rates were based on the RP-2000 Combined Mortality Table with future mortality improvement projected to 2025 with the Society of Actuaries' projection scale BB (set forward two years for both males and females) for service retirements and dependents beneficiaries. The RP-2000 Disabled Table with future mortality improvement projected to 2025 with the Society of Actuaries' projection scale BB (set back seven years for males and set forward three years for females) was used for death after disability retirement. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.	7/1/2009- 6/30/2014
PSERS	6/30/2018	2.75%	N/A	7.30%	1.5% semi- annually	Post-retirement mortality rates were based on the RP-2000 Blue Collar Mortality Table projected to 2025 with projection scale BB (set forward for three years for males and two years for females) for the period after service retirement and dependent beneficiaries. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward five years for both males and females) was used for death after disability retirement. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.	7/1/2009- 6/30/2014
GJRS	6/30/2018	2.75%	4.50%*	7.30%	N/A	Mortality rates were based in the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward two years for both males and females) for the period after retirement and for dependent beneficiaries. For the period after disability retirement, the RP-2000 Disability Mortality Table projected to 2025 with projection scale BB (set back seven years for males and set forward three years for females) is used. Rates for mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projected scale BB.	7/1/2009- 6/30/2014
TRS	6/30/2018	2.50%	3.00% - 8.75%*	7.25%	1.5% semi- annually	Post-retirement mortality rates were based on the RP-2000 White Collar Mortality Table for future mortality improvement projected to 2025 with the Society of Actuaries' projection scale BB (set forward one year for males) for service retirements and dependents beneficiaries. The RP-2000 Disabled Mortality Table with future mortality improvement projected to 2025 with Society of Actuaries projection scale BB (set forward two years for males and four years for females) was used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the plan. The numbers of expected future deaths are 8-11% less than the actual number of deaths that occurred during the study period for healthy retirees and 9-11% less than expected under the selected table for disabled retirees. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projected scale BB.	7/1/2009- 6/30/2014
Peace Officers'	6/30/2018	1.90%	N/A	6.50%	1.5%	Mortality rates were based on the RP 2014 Healthy Mortality Table with blue collar adjustments and generational mortality projection using Conduent modified MP-2016 scale for healthy lives and the RP-2014 Disabled Retiree Mortality Table with generational mortality projection using the Conduent modified MP-2016 scale for disabled lives.	6/30/2008- 6/30/2015
Firefighters'	6/30/2019	2.75%	N/A	6.00%	N/A	Mortality rates for pre-retirement were based on the RP-2000 Employee Mortality Table projected to 2025 with Projection Scale BB. Mortality rates for post-retirement and for dependent beneficiaries were based on the RP-2000 Blue Collar Mortality Table projected to 2025 with projection scale BB (set forward one year for males and set forward four years for females). For current disability retirees, mortality rates are based on the RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB (set forward five years for males and set forward three years for females), however there are no longer any disability benefits in the plan. 80% of active members are assumed to be married with the male three years older than his spouse.	7/1/2009- 6/30/2015

¹Investment rate of return is net of pension plan investment expense, including inflation. *Includes respective inflation assumptions.

NOTE 15 - RETIREMENT SYSTEMS (continued)

The actuarial assumptions used in the valuations are based on the results of the most recent actuarial experience studies dates noted in the table, with the exception of the investment rate of return for the ERS, PSERS, GJRS, and TRS plans. The investment rate of return for ERS, PSERS, and GJRS was updated as reported in the June 30, 2017 actuarial valuation and at the June 30, 2018 measurement date, based on funding policy changes. Also, as reported in the June 30, 2018 actuarial valuation for TRS, the assumed investment rate of return was updated based on a funding policy change, and the annual rate of inflation was updated.

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using either a log-normal distribution analysis, a building-block method or a Monte Carlo simulation in which best-estimate ranges of expected future real rates of return (expected nominal returns, net of pension plan investment expense and the assumed rate of inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized by plan in the table below:

(Table on next page)



State of Georgia Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



	Target Allocation												
Asset Class	ERS		PSERS		GJRS		TRS		Peace Officers'		Firefighters'		
	Target allocation	Long- term expected real rate of return*											
Investment Grade Corporate Credit	_	_	_	_	_	_	_	_	_	_	12.0%	3.2%	
Mortgage Backed Securities	_	_	_			_		_			12.0%	1.2%	
Fixed Income	30.0%	(0.1%)	30.0%	(0.1%)	30.0%	(0.1%)	30.0%	(0.1%)	6.6%	2.9%	—	—	
Fixed Income - Domestic	_	_	_	_	_	_	_	_	22.6%	3.9%	_	_	
Fixed Income - International	_	_	_	_	_	_	_	_	_	_	_	_	
Core Bonds	_	—	_	_	_	_	_	—	_	—	10.5%	1.7%	
Domestic large equities	46.2%	8.9 %	46.2%	8.9 %	46.2%	8.9 %	51.0%	8.9 %	31.6%	8.6%	15.5%	5.8%	
Domestic mid equities	_	—	_	—	_	_	_	_	13.8%	9.7%	_	_	
Domestic small equities	1.3%	13.2 %	1.3%	13.2 %	1.3%	13.2 %	1.5%	13.2 %	11.0%	9.1%	—	—	
Global equities	_	—	—	—	—	—	—	—	—	—	—	—	
Small/mid cap equities	—	—	—	—	—	—	—	—	—	—	15.5%	6.5%	
International developed market equities	12.4%	8.9 %	12.4%	8.9 %	12.4%	8.9 %	12.4%	8.9 %	_		_	_	
International emerging market equities	5.1%	10.9 %	5.1%	10.9 %	5.1%	10.9 %	5.1%	10.9 %	_		6.5%	9.5%	
International equity funds	_	_	_	_	_	_	_	_	9.4%	8.5%	13.0%	6.6%	
Private equity	_	_	_	_	_	_	_	_		_	5.0%	10.5%	
Real estate	_	_	_	_	—	_	—	—	5.0%	6.8%	5.0%	4.1%	
Real Assets (liquid)	_	_	_	_	_	_	_	_	_	_	5.0%	4.7%	
Commodities		—	_	—	—	—	—	—	—		—	—	
Alternatives	5.0%	12.0 %	5.0%	12.0 %	5.0%	12.0 %		_		—		_	
Total	100.0%		100.0%		100.0%		100.0%		100.0%		100.0%		

* Rates shown are net of the 2.75% assumed rate of inflation with the exception of TRS and Peace Officers', which assume a 2.50% and 1.90% rate of inflation, respectively.

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 15 - RETIREMENT SYSTEMS (continued)

Discount Rate

The discount rate used for ERS, PSERS, and GJRS to measure the total pension liability, as of June 30, 2019, was 7.30%. The discount rate used for TRS to measure the total pension liability was 7.25%, as compared with last year's rate of 7.50%. The projection of cash flows used by each plan to determine the discount rate was assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, each pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The discount rate used to measure the total pension liability, as of June 30, 2019, for the Peace Officers' plan was 6.50%. The projection of cash flows used to determine the discount rate assumes revenues will remain level. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The discount rate used to measure the total pension liability, June 30, 2019, for the Firefighters' plan was 6.00% The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that nonemployer contributing entity contributions will remain at the level contributed the previous fiscal year. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.



<u>Sensitivity of the Participating Employers and Nonemployer Contributing Entities NPL/(NPA) to Changes</u> <u>in the Discount Rate</u>

The following schedule is presented from the perspective of the State as the sponsor of the various Plans and summarizes the NPL/(NPA) of the employer and nonemployer contributing entities, as of June 30, 2019. The NPL/(NPA) is calculated using the determined discount rate as well as what the NPL/(NPA) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate by the Plan (amount in thousands):

Sensitivity of the Plan Participating Employer and Nonemployer Contributing Entities Net Pension Liability (Asset) to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase	
	(6.30%)	(7.30%)	(8.30%)	
ERS's Net Pension Liability	\$ 5,864,180	\$ 4,126,531	\$ 2,645,214	
	(6.30%)	(7.30%)	(8.30%)	
PSERS's Net Pension Liability	\$ 287,322	\$ 165,908	\$ 63,677	
	(6.30%)	(7.30%)	(8.30%)	
GJRS's Net Pension Liability/(Asset)	\$ 1,681	\$ (39,331)	\$ (75,029)	
	(6.25%)	(7.25%)	(8.25%)	
TRS's Net Pension Liability	\$ 34,905,182	\$ 21,502,704	\$ 10,481,105	
	(5.50%)	(6.50%)	(7.50%)	
Peace Officers' Net Pension Liability/(Asset)	\$ 75,945	\$ (23,506)	\$ (105,897)	
	(5.00%)	(6.00%)	(7.00%)	
Firefighters' Net Pension Liability	\$ 315,762	\$ 169,129	\$ 48,033	

NOTE 15 - RETIREMENT SYSTEMS (continued)

The following information is from the perspective of the State as the employer.

G. State's Proportionate Share of Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The State reported a liability as the Employer for its proportionate share of the NPL associated with the plans listed below. In addition, the State reported a liability for its proportionate share of the NPL as a result of its statutory requirement to contribute to certain plans. These contributions were made by the State as the Nonemployer Contributing Entity in a Special Funding Situation.

The following schedule is presented from the perspective of the State as the Employer and/or nonemployer contributing entity and details the proportional share of the pension amounts for each plan as of June 30, 2019 is as follows (amount in thousands):

Aggregate Pension Amounts - All Plans

	Primary overnment	(Component Units
Pension liabilities	\$ 7,367,096	\$	202,626
Pension assets	\$ 100,647	\$	9,420
Deferred outflows of resources related to pensions	\$ 1,980,804	\$	66,187
Deferred inflows of resources related to pensions	\$ 468,708	\$	19,483
Pension expense/expenditures	\$ 935,380	\$	27,238





The information below includes all significant plans and funds administered by the State of Georgia.

The NPL and NPA for each plan was measured as of June 30, 2018. The total pension liability/asset used to calculate the NPL/NPA for each plan was based on an actuarial valuation as of June 30, 2017 for ERS, PSERS, GJRS, TRS, Peace Officers' and as of June 30, 2018 for Firefighters'.

Employees' Retirement System

State's Proportionate Share of Net Pension Liability and Pension Expense

Primary Government: At June 30, 2019, the State reported a liability of \$3.7 billion, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension liability to June 30, 2018. The State's proportion of the net pension liability was based on contributions to ERS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion for the ERS plan as Employer was 88.948204%, which was an increase of 0.53261% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized pension expense of \$489.3 million.

At June 30, 2019, the State reported a liability of \$69.7 million, for its proportionate share of the net pension liability, based on contributions to ERS during the fiscal year ended June 30, 2018, for certain Local County Tax Commissioners and the CSC and PAC employees in certain counties. At June 30, 2018, the State's proportion was 1.696518% for certain Local County Tax Commissioners and the CSC and PAC employees in certain counties. For the year ended June 30, 2019, the State recognized expense of \$1.3 million.

Component Units: At June 30, 2019, the State reported a liability of \$56.3 million, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension liability to June 30, 2018. The State's proportion of the net pension liability was based on contributions to ERS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion for the ERS plan as Employer was 1.369623%, which was a decrease of 0.132012% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized pension expense of \$4.9 million.



NOTE 15 - RETIREMENT SYSTEMS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (amount in thousands):

	Primary Government									Component Units			
		State as E	mpl	oyer	5	State as Nor Contributi		State as Employer					
	DeferredDeferredOutflows ofInflows ofResourcesResources		Deferred Inflows of		Deferred Outflows of Resources		Deferred Inflows of Resources		Deferred Outflows of Resources		eferred flows of sources		
Differences between expected and actual experience	\$	113,526	\$		\$	2,169	\$		\$	1,753	\$		
Changes of assumptions		171,839		_		3,286				2,652		_	
Net difference between projected and actual earnings on pension plan investments		_		84,066		_		1,607		_		1,296	
Changes in proportion and differences between State contributions and proportionate share of contributions		101,652		83,843		208		7,181		303		3,905	
State contributions subsequent to the measurement date		578,876				10,404				9,369			
Total	\$	965,893	\$	167,909	\$	16,067	\$	8,788	\$	14,077	\$	5,201	

Primary Government: State contributions as employer and nonemployer subsequent to the measurement date of \$578.9 million and \$10.4 million are reported as deferred outflows of resources and will be recognized as a reduction of the NPL in the year ended June 30, 2020.

Component Units: State contributions as employer subsequent to the measurement date of \$9.4 million are reported as deferred outflows of resources and will be recognized as a reduction of the NPL in the year ended June 30, 2020.

NOTE 15 - RETIREMENT SYSTEMS (continued)

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amount in thousands):

		Prima	Component Units		
Year ended June 30:	State	as Employer	State as Nonemployer Contributing Entity	State	as Employer
2020	\$	(288,124)	\$ (82)	\$	(1,854)
2021		(109,523)	(183)		(386)
2022		140,081	2,672		2,157
2023		38,458	718		576
2024		_	—		
Thereafter		_	_		

Public School Employees Retirement System

State's Proportionate Share of Net Pension Liability and Pension Expense

Primary Government: At June 30, 2019, the State reported a liability of \$158.0 million, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension liability to June 30, 2018. The State's proportion of the net pension liability was based on contributions to PSERS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion as nonemployer contributing entity was 100% for the PSERS plan for certain local school employees (bus drivers, cafeteria workers, and maintenance staff). For the year ended June 30, 2019, the State recognized pension expense of \$36.6 million.



Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 15 - RETIREMENT SYSTEMS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (amount in thousands):

	Primary Government				
	State as Nonemployer Contributing Entity				
	Deferred Outfl of Resource		Deferred Inflo Resources		
Differences between expected and actual experience	\$	_	\$	2,779	
Changes of assumptions	12	,456		—	
Net difference between projected and actual earnings on pension plan investments				8,412	
Changes in proportion and differences between State contributions and proportionate share of contributions				_	
State contributions subsequent to the measurement date	30	,263			
Total	\$ 42	,719	\$ 1	1,191	

Primary Government: State contributions as nonemployer subsequent to the measurement date of \$30.3 million are reported as deferred outflows of resources and will be recognized as a reduction of the NPL in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amount in thousands):

	Primary Government
Year ended June 30:	 State as Nonemployer Contributing Entity
2020	\$ 12,385
2021	2,424
2022	(10,640)
2023	(2,904)
2024	_
Thereafter	—

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 15 - RETIREMENT SYSTEMS (continued)

Georgia Judicial Retirement System

State's Proportionate Share of Net Pension Asset and Pension Expense

Primary Government: At June 30, 2019, the State reported an asset of \$22.0 million, for its proportionate share of the net pension asset. The net pension asset was measured as of June 30, 2018. The total pension asset used to calculate the net pension asset was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension asset to June 30, 2018. The State's proportion of the net pension asset was based on contributions to GJRS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion for the GJRS plan as Employer was 57.814059%, which was a decrease of 1.156281% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized pension expense of \$1.7 million.

At June 30, 2019, the State reported an asset of \$16.0 million, for its proportionate share of the net pension asset, based on contributions to GJRS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion was 42.185941% for certain State court judges and solicitors general and for certain juvenile court judges. For the year ended June 30, 2019, the State recognized an expense of \$1.1 million.

NOTE 15 - RETIREMENT SYSTEMS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (amount in thousands):

	Primary Government								
		State as E	mplo	yer	State as Nonemployer Contributing Entity				
	Ou	eferred tflows of sources	Inf	eferred flows of sources	Out	eferred tflows of sources	Deferred Inflows of Resources		
Differences between expected and actual experience	\$	4,850	\$	1,799	\$	3,538	\$	1,313	
Changes of assumptions		3,486		1,106		2,544		807	
Net difference between projected and actual earnings on pension plan investments		_		2,614		_		1,907	
Changes in proportion and differences between State contributions and proportionate share of contributions		486		224		905		1,167	
State contributions subsequent to the measurement date		2,741		_		2,065			
Total	\$	11,563	\$	5,743	\$	9,052	\$	5,194	

Primary Government: State contributions as employer and nonemployer subsequent to the measurement date of \$2.7 million and \$2.1 million are reported as deferred outflows of resources and will be recognized as an addition to the net pension asset in the year ended June 30, 2020.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amount in thousands):

		Primary Government								
Year ended June 30:	State a	s Employer		State as Nonemployer Contributing Entity						
2020	\$	1,947	\$	1,397						
2021		1,146		717						
2022		(1,238)		(1,029)						
2023		899		503						
2024		325		205						
Thereafter										



NOTE 15 - RETIREMENT SYSTEMS (continued)

Teachers Retirement System of Georgia

State's Proportionate Share of Net Pension Liability and Pension Expense

Primary Government: At June 30, 2019, the State reported a liability of \$3.2 billion, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension liability to June 30, 2018. The State's proportion of the net pension liability was based on contributions to TRS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion for the TRS plan as Employer was 17.011357%, which was an increase of 0.125692% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized pension expense of \$347.4 million.

At June 30, 2019, the State reported a liability of \$41.0 million, for its proportionate share of the net pension liability, based on contributions to TRS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion was 0.220738% for certain full-time public school support personnel. For the year ended June 30, 2019, the State recognized expense of \$(5.8) million.

Component Units: At June 30, 2019, the State reported a liability of \$103.8 million, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension liability to June 30, 2018. The State's proportion of the net pension liability was based on contributions to TRS during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion for the TRS plan as Employer was 0.558992%, which was a decrease of 0.005747% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized pension expense of \$9.1 million.

NOTE 15 - RETIREMENT SYSTEMS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (amount in thousands):

	Primary Government									Component Units			
		State as E	mplo	oyer		State as No Contributi		State as Employer					
	Oi	Deferred Itflows of esources	of Inflows of		Ou	eferred tflows of esources	Deferred Inflows of Resources		Deferred Outflows of Resources		Deferred Inflows of Resources		
Differences between expected and actual experience	\$	209,021	\$	6,508	\$	2,713	\$	84	\$	6,870	\$	214	
Changes of assumptions		47,643		_		618		_		1,566		_	
Net difference between projected and actual earnings on pension plan investments		_		86,329		_		1,120		_		2,836	
Changes in proportion and differences between State contributions and proportionate share of contributions		114,810		69,565		5,000		40,841		4,931		7,344	
State contributions subsequent to the measurement date		434,861				5,414				14,338			
Total	\$	806,335	\$	162,402	\$	13,745	\$	42,045	\$	27,705	\$	10,394	

Primary Government: State contributions as employer and nonemployer subsequent to the measurement date of \$434.9 million and \$5.4 million are reported as deferred outflows of resources and will be recognized as a reduction of the NPL in the year ended June 30, 2020.

Component Units: State contributions as employer subsequent to the measurement date of \$14.3 million are reported as deferred outflows of resources and will be recognized as a reduction of the NPL in the year ended June 30, 2020.



NOTE 15 - RETIREMENT SYSTEMS (continued)

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amount in thousands):

		Prima	Component Units		
Year ended June 30:	State	as Employer	State as Nonemployer Contributing Entity	State as	Employer
2020	\$	182,103	\$ (7,725)	\$	4,101
2021		94,469	(8,738)		2,348
2022		(74,423)	(10,956)		(3,281)
2023		3,506	(5,828)		(276)
2024		3,417	(467)		81
Thereafter			_		

Peace Officers' Annuity and Benefit Fund of Georgia

State's Proportionate Share of Net Pension Asset and Pension Expense

Primary Government: At June 30, 2019, the State reported an asset of \$14.0 million, for its proportionate share of the net pension asset. The net pension asset was measured as of June 30, 2018. The total pension asset used to calculate the net pension asset was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total pension asset to June 30, 2018. The State's proportion of the net pension asset was based on contributions to Peace Officers' during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion was 100% for the Peace Officers' plan for local government Peace Officers. For the year ended June 30, 2019, the State recognized expense of \$12.9 million.



Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 15 - RETIREMENT SYSTEMS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (amount in thousands):

	Primary Government					
	State as	Employer				
	Deferred Outflows of Resources	Deferred Inflows of Resources				
Differences between expected and actual experience	\$	\$ 6,549				
Changes of assumptions	6,677	22,141				
Net difference between projected and actual earnings on pension plan investments	_	2,323				
Changes in proportion and differences between State contributions and proportionate share of contributions	_	_				
State contributions subsequent to the measurement date	14,444					
Total	\$ 21,121	\$ 31,013				

Primary Government: State contributions subsequent to the measurement date of \$14.4 million are reported as deferred outflows of resources and will be recognized as an addition to the NPA in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amount in thousands):

	Primary Government
Year ended June 30:	 State as Employer
2020	\$ 2,656
2021	(3,883)
2022	(13,790)
2023	(8,613)
2024	(706)
Thereafter	—



NOTE 15 - RETIREMENT SYSTEMS (continued)

Georgia Firefighters' Pension Fund

State's Proportionate Share of Net Pension Liability and Pension Expense

Primary Government: At June 30, 2019, the State reported a liability of \$171.1 million, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2018. The State's proportion of the net pension liability was based on contributions to Firefighters' during the fiscal year ended June 30, 2018. At June 30, 2018, the State's proportion was 100% for the Firefighters' plan for local government Firefighters. For the year ended June 30, 2019, the State recognized expense of \$43.3 million.

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (amount in thousands):

	Primary Government				
		State as I	Employer		
	D	eferred Outflows of Resources	Deferred Infl Resource		
Differences between expected and actual experience	\$	7,073	\$	8,984	
Changes of assumptions		29,493		—	
Net difference between projected and actual earnings on pension plan investments		_		8,790	
Changes in proportion and differences between State contributions and proportionate share of contributions		_			
State contributions subsequent to the measurement date		37,902			
Total	\$	74,468	\$	17,774	





Primary Government: State contributions subsequent to the measurement date of \$37.9 million are reported as deferred outflows of resources and will be recognized as a reduction of the NPL in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amount in thousands):

]	Primary Government
Year ended June 30:		State as Employer
2020	\$	11,093
2021		3,639
2022		(4,335)
2023		3,526
2024		3,764
Thereafter		1,105

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 15 - RETIREMENT SYSTEMS (continued)

H. Actuarial Methods and Assumptions (GASB 68)

The total pension liability, as of June 30, 2018, for each plan was determined by an actuarial valuation date indicated in the table below using the following actuarial assumptions, applied to all periods included in the measurement:

Plan	Valuation date	Inflation	Salary increases	Investment rate of return ¹		Mortality	Actuarial experience study
ERS	6/30/2017	2.75%	3.25% - 7.00%*	7.30%	N/A	Post-retirement mortality rates were based on the RP-2000 Combined Mortality Table with future mortality improvement projected to 2025 with the Society of Actuaries' projection scale BB (set forward two years for both males and females) for service retirements and dependents beneficiaries. The RP-2000 Disabled Table with future mortality improvement projected to 2025 with the Society of Actuaries' projection scale BB (set back seven years for males and set forward three years for females) was used for death after disability retirement. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.	7/1/2009- 6/30/2014
PSERS	6/30/2017	2.75%	N/A	7.30%	1.5% semi- annually	Post-retirement mortality rates were based on the RP-2000 Blue Collar Mortality Table projected to 2025 with projection scale BB (set forward for three years for males and two years for females) for the period after service retirement and dependent beneficiaries. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward five years for both males and females) was used for death after disability retirement. Rates of mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.	7/1/2009- 6/30/2014
GJRS	6/30/2017	2.75%	4.50%*	7.30%	N/A	Mortality rates were based in the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward two years for both males and females) for the period after retirement than for dependent beneficiaries. For the period after retirement, the RP-2000 Disability Mortality Table projected to 2025 with projection scale BB (set back seven years for males and set forward three years for females) is used. Rates for mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projected scale BB.	7/1/2009- 6/30/2014
TRS	6/30/2017	2.75%	3.25% - 9.00%*	7.50%	1.5% semi- annually	Post-retirement mortality rates were based on the RP-2000 White Collar Mortality Table for future mortality improvement projected to 2025 with the Society of Actuaries' projection scale BB (set forward one year for males) for service retirements and dependents beneficiaries. The RP-2000 Disabled Mortality Table with future mortality improvement projected to 2025 with Society of Actuaries projection scale BB (set forward two years for males and four years for females) was used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the plan. The numbers of expected future deaths are 8-11% less than the actual number of deaths that occurred during the study period for healthy retirees and 9-11% less than expected under the selected table for disabled retirees. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projected scale BB.	7/1/2009- 6/30/2014
Peace Officers'	6/30/2017	2.50%	N/A	6.50%	N/A	Mortality rates were based on the RP 2014 Healthy Mortality Table with blue collar adjustment projected with the Conduent modified MP-2016 projection scale for healthy lives and the RP-2014 Disabled Retiree Mortality Table projected with the Conduent modified MP-2016 projection scale for disabled lives.	6/30/2008- 6/30/2015
Firefighters'	6/30/2018	2.75%	N/A	6.00%	N/A	Mortality rates for pre-retirement were based on the RP-2000 Employee Mortality Table projected to 2025 with Projection Scale BB. Mortality rates for post-retirement and for dependent beneficiaries were based on the RP-2000 Blue Collar Mortality Table projected to 2025 with projection scale BB (set forward one year for males and set forward four years for females). For current disability retirees, mortality rates are based on the RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB (set forward five years for males and set forward three years for females), however there are no longer any disability benefits in the plan. 80% of active members are assumed to be married with the male three years older than his spouse.	7/1/2009- 6/30/2015

¹Investment rate of return is net of pension plan investment expense, including inflation. *Includes respective inflation assumptions.

NOTE 15 - RETIREMENT SYSTEMS (continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using either a log-normal distribution analysis, a building-block method or a Monte Carlo simulation in which best-estimate ranges of expected future real rates of return (expected nominal returns, net of pension plan investment expense and the assumed rate of inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized by plan in the table below:

	Target Allocation													
Asset Class	ERS		PSERS		GJI	RS	TR	s	Peace O	fficers'	Firefighters'			
	Target allocation	Long- term expected real rate of return*												
Investment Grade Corporate Credit		_				_		_			12.0%	2.2%		
Mortgage Backed Securities	_	_	_	_	_	_	_	_	_	_	12.0%	0.7%		
Fixed Income	30.0%	(0.5%)	30.0%	(0.5%)	30.0%	(0.5%)	30.0%	(0.5%)	—	—	—	—		
Fixed Income - Domestic	_	_	_	_	_	_	_	_	20.0%	2.7%	_	_		
Fixed Income - International	_	_	_	_	_	_	_	_	5.0%	4.0%	_	_		
Core Bonds	—	—	—	—	—	—	—	—	—	—	10.5%	1.1%		
Domestic large equities	37.2%	9.0 %	37.2%	9.0 %	37.2%	9.0 %	39.8%	9.0 %	35.0%	7.5%	15.5%	5.9%		
Domestic mid equities	3.4%	12.0 %	3.4%	12.0 %	3.4%	12.0 %	3.7%	12.0 %	8.0%	8.4%	_	_		
Domestic small equities	1.4%	13.5 %	1.4%	13.5 %	1.4%	13.5 %	1.5%	13.5 %	7.0%	8.6%	_	_		
Global equities	-	—	_	—	_	—	_	_	10.0%	8.2%	_	_		
Small/mid cap equities	_	_	_	_	_	_	_	_	—	_	15.5%	6.7%		
International developed market equities	17.8%	8.0 %	17.8%	8.0 %	17.8%	8.0 %	19.4%	8.0 %	_	_	_	_		
International emerging market equities	5.2%	12.0 %	5.2%	12.0 %	5.2%	12.0 %	5.6%	12.0 %	_		6.5%	9.5%		
International equity funds	_	_	_	_	_	_	_	_	10.0%	8.8%	13.0%	6.7%		
Private equity	_	_	_	_	_	_	_	_	_	_	5.0%	8.7%		
Real estate	_	_		_	_	_	_	_	_	_	5.0%	4.4%		
Real Assets (liquid)	_	_	_	_	_	_		_	_	_	5.0%	4.6%		
Commodities	_	_		_	_	_	_	_	5.0%	6.4%	_	_		
Alternatives	5.0%	10.5 %	5.0%	10.5 %	5.0%	10.5 %	_	_	_	_	_	_		
Total	100.0%		100.0%		100.0%		100.0%		100.0%		100.0%			

* Rates shown are net of the 2.75% assumed rate of inflation with the exception of Peace Officers', which assumed a 2.50% rate of inflation.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 15 - RETIREMENT SYSTEMS (continued)

Discount Rate

The discount rate used for ERS, PSERS, and GJRS to measure the total pension liability, as of June 30, 2018, was 7.30%. The discount rate used for TRS to measure the total pension liability was 7.50%. The projection of cash flows used by each plan to determine the discount rate was assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, each pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

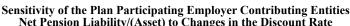
The discount rate used to measure the total pension liability for the Peace Officers' plan was 6.50%. The projection of cash flows used to determine the discount rate assumes revenues will remain level. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The discount rate used to measure the total pension liability for the Firefighters' plan was 6.00% The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that nonemployer contributing entity contributions will remain at the level contributed the previous fiscal year. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

NOTE 15 - RETIREMENT SYSTEMS (continued)

The following schedule is presented from the perspective of the State as the employer and nonemployer contributing entity and details the State's proportionate share of the NPL/(NPA), as of June 30, 2018. The NPL/ (NPA) is calculated using the discount rate detailed below, as well as what the State's proportionate share of the NPL/(NPA) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentagepoint higher than the current rate (amount in thousands):

							ng Employer Contributing Entities o Changes in the Discount Rate						
	Primary Government							Component Units					
	1	% Decrease	D	Current iscount Rate	19	% Increase	1	% Decrease	D	Current iscount Rate	19	% Increase	
		(6.30%)		(7.30%)		(8.30%)		(6.30%)		(7.30%)		(8.30%)	
ERS's Net Pension Liability	\$	5,201,105	\$	3,656,194	\$	2,340,809	\$	80,087	\$	56,305	\$	36,044	
SFS		99,201		69,744		44,646						—	
Total ERS Net Pension Liability	\$	5,300,306	\$	3,725,938	\$	2,385,455	\$	80,087	\$	56,305	\$	36,044	
		(6.30%)		(7.30%)		(8.50%)		(6.30%)		(7.30%)		(8.30%)	
PSERS's Net Pension Liability	\$	276,775	\$	158,027	\$	58,149	\$		\$		\$		
	_	(6.30%)	_	(7.30%)		(8.30%)		(6.30%)		(7.30%)		(8.30%)	
GJRS's Net Pension (Asset)	\$	1,414	\$	(21,988)	\$	(42,373)	\$	_	\$	_	\$		
SFS		1,032		(16,045)		(30,919)				—		—	
Total GJRS's Net Pension (Asset)	\$	2,446	\$	(38,033)	\$	(73,292)	\$		\$		\$		
		(6.50%)		(7.50%)		(8.50%)		(6.50%)		(7.50%)		(8.50%)	
TRS's Net Pension Liability	\$	5,271,059	\$	3,157,367	\$	1,416,134	\$	173,207	\$	103,761	\$	46,534	
SFS		68,397		40,974		18,376							
Total TRS's Net Pension Liability	\$	5,339,456	\$	3,198,341	\$	1,434,510	\$	173,207	\$	103,761	\$	46,534	
		(5.50%)		(6.50%)		(7.50%)		(5.50%)		(6.50%)		(7.50%)	
Peace Officers' Net Pension Liability/(Asset)	\$	68,861	\$	(13,992)	\$	(113,805)	\$		\$		\$		
		(5.00%)		(6.00%)		(7.00%)		(5.00%)		(6.00%)		(7.00%)	
Firefighters' Net Pension Liability	\$	313,594	\$	171,054	\$	53,386	\$	_	\$		\$	_	





NOTE 15 - RETIREMENT SYSTEMS (continued)

I. Defined Contribution Plans

GSEPS 401(k) Component of ERS Plan

In addition to the ERS defined benefit pension described above, GSEPS members may also participate in the Peach State Reserves 401(k) defined contribution plan and receive an employer matching contribution. The 401(k) plan is administered by the System and was established by the Georgia Employee Benefit Plan Council in accordance with State law and Section 401(k) of the IRC. The GSEPS segment of the 401(k) plan was established by State law effective January 1, 2009. Plan provisions and contribution requirements specific to GSEPS can be amended by State law. Other general 401(k) plan provisions can be amended by the ERS Board of Trustees as required by changes in federal tax law or for administrative purposes. The State was not required to make significant contributions to the 401(k) plan prior to GSEPS because most members under other segments of the plan either were not State employees or were not eligible to receive an employer match on their contributions.

The GSEPS plan includes automatic enrollment in the 401(k) plan at a contribution rate of 5% of salary unless the participating member elects otherwise. The member may change such level of participation at any time. In addition, the member may make such additional contributions as he or she desires, subject to limitations imposed by federal law. The State will match 100% of the employee's initial 1% contribution and 50% of contribution percents two through five. Therefore, the State will match 3% of salary when an employee contributes at least 5% to the 401(k) plan. Employee contributions greater than 5% of salary do not receive any matching funds.

GSEPS employer contributions are subject to a vesting schedule, which determines eligibility to receive all or a portion of the employer contribution balance at the time of any distribution from the account after separation from all State service. Vesting is determined based on the table below:

Less than 1 year	0%
1 year	20%
2 years	40%
3 years	60%
4 years	80%
5 or more years	100%

Employee contributions and earnings thereon are 100% vested at all times. The 401(k) plan also allows participants to roll over amounts from other qualified plans to their respective account in the 401(k) plan on approval of the 401(k) plan administrator. Such rollovers are 100% vested at the time of transfer. Participant contributions are invested according to the participant's investment election. If the participant does not make an election, investments are automatically defaulted to a Lifecycle fund based on the participant's date of birth.

The participants may receive the value of their vested accounts upon attaining age 59.5, qualifying financial hardship, or 30 days after retirement or other termination of service (employer contribution balances are only eligible for distribution upon separation from service). Upon the death of a participant, his or her beneficiary shall be entitled to the vested value of his or her accounts. Employees who die while actively employed and eligible for 401(k) employer matching contributions become fully vested in employer contributions upon death. Distributions are made in installments or in a lump sum.



NOTE 15 - RETIREMENT SYSTEMS (continued)

There were 69,662 plan members and 468 participating employers in the plan at June 30, 2019.

For the fiscal year ended June 30, 2019, the State's employer and employee GSEPS contributions were \$31.6 million and \$62.6 million, respectively. Additionally, the State made contributions of \$0.1 million on behalf of employers that are not in the reporting entity. Employer contributions may be partially funded from non-vested contributions that were forfeited by employees.

Regents Retirement Plan

The Regents Retirement Plan, a single-employer defined contribution plan, is an optional retirement plan established by the Georgia General Assembly in OCGA 47-21-1. It is administered and may be amended by the Board of Regents of the University System of Georgia (Board of Regents). A participant in the plan is an "eligible university system employee" defined as a faculty member or all exempt full and partial benefit eligible employees as designated by the regulations of the Board. Under the Plan, a plan participant may purchase annuity contracts from three approved vendors (VALIC, Fidelity, and TIAA-CREF) for the purpose of receiving retirement and death benefits. The approved vendors have separately issued financial reports that may be obtained through their respective corporate offices.

Benefits depend solely on amounts contributed to the plan plus investment earnings. Benefits are payable to participating employees or their beneficiaries in accordance with the terms of the annuity contracts.

The institutions of the University System of Georgia make monthly employer contributions for the Regents Retirement Plan at rates determined by the Board of Regents in accordance with State statute and as advised by their independent actuary. For the fiscal year ended June 30, 2019, the employer contribution was 9.24% of the participating employee's earned compensation, and employees contributed 6% of their earned compensation. Amounts attributable to all plan contributions are fully vested and non-forfeitable at all times. For the fiscal year ended June 30, 2019, employer and employee contributions were \$131.9 million and \$85.6 million, respectively.



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS

The State administers various cost sharing multiple-employer other postemployment benefit (OPEB) plans, which include:

Administered by Department of Community Health (DCH): Georgia State Employees Post-employment Health Benefit Fund (State OPEB Fund) Georgia School Personnel Post-employment Health Benefit Fund (School OPEB Fund)

Administered by the Employees' Retirement System (ERS): State Employees' Assurance Department (SEAD-OPEB Plan)

The State is the plan sponsor of these plans and the participating employer (Employer). The notes to the financial statements and required supplementary information that follow are presented from the perspective of the State as the plan sponsor and the State as Employer. The financial statements for the State OPEB Fund and School OPEB Fund are presented in the Fiduciary Funds section of this report. Separate financial reports that include the applicable financial statements and required supplementary information for the plan administered by ERS are publicly available and may be obtained from their website (www.ers.ga.gov).

A. Basis of Accounting

The financial statements of these plans are prepared using the economic resources measurement focus and accrual basis of accounting. Contributions from employers and members are recognized in the period in which they are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. The OPEB plan's fiduciary net positions have been determined on the same basis as they are reported by the various plans.

B. Investments

Investments are reported at market value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price.

For the fiscal year ended June 30, 2019, the annual money-weighted rate of return on OPEB plan investments, net of OPEB plan investment expense are represented below:

OPEB Plans	Net Annual Money- Weighted Rate
State OPEB Fund	3.85 %
School OPEB Fund	3.80 %
SEAD-OPEB Plan	(1.80%)

For all plans mentioned above the money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. These three plans have investment policies regarding the allocation of invested assets, established on a cost basis in compliance with Georgia Statute. Plan assets are managed on a total return basis with a short-term objective of stability of principal while allowing for liquidity and a long-term objective of achieving and maintaining a fully funded status for the benefits provided through each OPEB plan. During fiscal year 2018, the State and School OPEB funds updated their investment strategy to a more long-term approach.



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

	Target Allocation							
Asset Class	State OPEB	School OPEB	SEAD-OPEB					
Fixed Income	25% - 45%	25% - 45%	25% - 45%					
Equities	55% - 75%	55% - 75%	55% - 75%					
Alternative Investments	0% - 5%	0% - 5%	0% - 5%					
Total	100.0%	100.0%	100.0%					

The following table summarizes the adopted asset allocation policy by plan at June 30, 2019:

C. Plans Descriptions and Funding Policies

State OPEB Fund and School OPEB Fund

Plan Description: The State OPEB Fund and School OPEB Fund are cost-sharing multiple-employer defined benefit postemployment healthcare plans and are reported as employee benefit trust funds. The Funds are administered by a Board of Community Health (Board) that is comprised of nine members, including two former State of Georgia employees and seven industry professionals. The OCGA 45-18-25 and 20-2-875, for the State and School OPEB funds respectively, assigns the authority to establish and amend the benefit provisions of the group health plans, including benefits for retirees to the Board.

Benefits Provided: The State OPEB Fund provides postemployment health benefits (including benefits to qualified beneficiaries of eligible former employees) due under the group health plan for employees of State organizations (including technical colleges) and other entities authorized by law to contract with DCH for inclusion in the plan. Retiree medical eligibility is attained when an employee retires, and is immediately eligible to draw a retirement annuity from one of the State's retirement plans. If elected, dependent coverage starts on the same day as retiree coverage. It also pays administrative expenses of the fund. By law, no other use of the assets of the State OPEB Fund is permitted. The plan designs offered for the 2019 plan year include various plan options. For Medicare-eligible members there are Medicare Advantage plan options (UnitedHealthcare and Blue Cross and Blue Shield of Georgia) Standard and Premium Plans. Alternatively, for non-Medicare eligible members the plan options include Health Reimbursement Arrangement Plan Options (Blue Cross and Blue Shield of Georgia Gold, Silver, Bronze), Health Maintenance Organization Plan Options (Blue Cross and Blue Shield of Georgia, Kaiser Permanente, and UnitedHealthcare), and a High Deductible Health Plan Option (UnitedHealthcare).

The School OPEB Fund provides postemployment health benefits (including benefits for qualified beneficiaries of eligible former employees) due under the group health plan for public school teachers, including librarians, other certified employees of public schools, regional educational service agencies, and non-certified public school employees. Retiree medical eligibility is attained when an employee retires, and is immediately eligible to draw a retirement annuity from one of the State's retirement plans. If elected, dependent coverage starts on the same day as retiree coverage. It also pays administrative expenses of the fund. By law, no other use of the assets of the School OPEB Fund is permitted. The plan designs offered for the 2019 plan year include various plan options, which are the same options offered for the State options offered for the previous paragraph.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

Contributions: The State OPEB Fund and School OPEB Fund are currently funded on a pay-as-you-go basis. That is, annual costs of providing benefits will be financed in the same year as claims occur, with historically, no significant assets accumulating, as would occur in an advance funding strategy.

Additional contributions were voluntarily made in fiscal year 2019 for financing future costs associated with the OPEB liabilities. For fiscal year 2019, amounts contributed to the State OPEB Fund and the School OPEB Fund were \$363.0 million and \$194.5 million, respectively.

The contribution requirements of plan members and participating employers are established by the Board in accordance with the 2019 Appropriations Act and may be amended by the Board. Contributions of plan members or beneficiaries receiving benefits vary based on plan election, dependent coverage, and Medicare eligibility and election. As of January 1, 2012, for members with fewer than five years of service, contributions also vary based on years of service. As of January 1, 2012, on average, members with five years or more of service pay approximately 25% of the cost of health insurance coverage. In accordance with the Board resolution dated December 8, 2011, for members with fewer than five years of service as of January 1, 2012, the State provides a premium subsidy in retirement that ranges from 0% for fewer than 10 years of service to 75% (but no greater than the subsidy percentage offered to active employees) for 30 or more years of service. The subsidy for eligible dependents ranges from 0% to 55% (but no greater than the subsidy percentage offered to dependents of active employees minus 20%). No subsidy is available to Medicare eligible members not enrolled in a Medicare Advantage Option. The Board sets all member premiums by resolution and in accordance with the law and applicable revenue and expense projections. Any subsidy policy adopted by the Board may be changed at any time by Board resolution and does not constitute a contract or promise of any amount of subsidy.

The combined required employer contribution rates established by the Board for the active and retiree plans for the fiscal years ended June 30, 2019, were as summarized as follows:

Combined Active and State OPEB Fund Contribution Rates as a Percentage of Covered Payroll

State organizations, including technical colleges, and certain other eligible participating employers:July 2018 - June 201930.454%for August 2018 - July 2019 coverage

Combined Active and School OPEB Fund Contribution Rates per Member per Month

employers:		agencies, certain other eligible participating
July 2018 - June 2019	\$945.00	for August 2018 - July 2019 coverage
Library employees: July 2018 - June 2019	\$843.00	for August 2018 - July 2019 coverage
Non-certificated school personnel:		
July 2018 - June 2019	\$945.00	for August 2018 - July 2019 coverage

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

SEAD-OPEB Plan

Plan Description: The SEAD-OPEB Plan is a cost-sharing multiple-employer defined benefit other postemployment plan created by the 2007 Georgia General Assembly to provide term life insurance to eligible members of the ERS, Georgia Judicial Retirement System (JRS), and Legislative Retirement System (LRS). The SEAD-OPEB Plan provides benefits for retired and vested inactive members. Effective July 1, 2009, no newly hired members of any State public retirement system are eligible for term life insurance under the SEAD-OPEB Plan. The SEAD-OPEB Plan is administered by a Board of Directors that is comprised of six members, the State Auditor, State Treasurer, Department of Administrative Services Commissioner, Labor Commissioner, and two members appointed by the Governor. Pursuant to Title 47 of the OCGA, benefit provisions of the plan was established and can be amended by State statute.

Benefits Provided: The SEAD-OPEB Plan provides postemployment insurance coverage on a monthly, renewable term basis, with no return premiums or cash value available to be earned. The amount of insurance for a retiree with creditable service prior to April 1, 1964, is the full amount of insurance in effect on the date of retirement. The amount of insurance for a service retiree with no creditable service prior to April 1, 1964, is fearlier. Life insurance proceeds are paid in lump sum to the beneficiary upon death of the retiree. The net position represents the excess accumulation of investment income and premiums over benefit payments and expenses and is held as a reserve for payment of death benefits under existing policies. Administrative costs for the plan are determined based on the plan's share of overhead costs to accumulate and invest funds, actuarial services, and to process benefit payments to beneficiaries. Administrative fees are financed from the assets of the plan.

Contributions: Contributions by plan members are established by the Board of Directors, up to the maximum allowed by statute (not to exceed 0.5% of earnable compensation). The Board of Directors establishes employer contribution rates, such rates which, when added to members' contributions, shall not exceed 1% of earnable compensation. There were no employer contributions required for fiscal year ended June 30, 2019. Contributions were based on actuarial valuations, and for fiscal year 2019 were as follows:

	SEAD-OPEB Plan
	Percentage
Member Rates:	
ERS Old Plan	0.45 %
Less: Offset Paid by Employer	(0.22%)
Net ERS Old Plan	0.23 %
ERS New Plan, JRS, and LRS	0.23 %
Employer Rates/Amounts	0.00 %

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



D. Plan Membership and Participating Employers

The following table summarizes the participating membership and participating employers at June 30, 2019:

Participating Membership by Plan June 30, 2019

Plan Membership	State OPEB Fund	School OPEB Fund	SEAD- OPEB Plan
Inactive plan members or beneficiaries currently receiving benefits	38,150	83,709	43,596
Inactive plan members entitled to but not yet receiving benefits	_	_	1,018
Active plan members	51,623	177,183	23,368
Total	89,773	260,892	67,982
Open to New Members (Yes/No)	Yes	Yes	No
Number of Employers	203	251	456

These counts treat each legal entity in the State reporting entity as one employer.

E. Net OPEB Liability/(Asset)

For defined benefit OPEB plans that are administered through trusts that meet the specified criteria, GASB 74 requires the net OPEB liability to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. The total OPEB liability is actuarially determined. The following schedule is presented from the perspective of the State as the sponsor of the various Plans and summarizes the components of the Net OPEB Liability (NOL)/ Net OPEB Asset (NOA), as of June 30, 2019, by Plan (amount in thousands):

Components of the Net OPEB Liability/ (Asset)	State OPEB Fund	School OPEB Fund	SEAD- OPEB Plan
Total OPEB Liability	\$ 2,858,521	\$12,867,274	\$ 951,091
Plan Fiduciary Net Position	1,617,207	595,129	1,233,856
Net OPEB liability/(asset)	\$ 1,241,314	\$12,272,145	\$ (282,765)
Plan fiduciary net position as a percentage of the total OPEB liability	56.57%	4.63%	129.73%

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

F. Actuarial Methods and Assumptions

For the State OPEB fund and School OPEB fund, the impact of the Affordable Care Act (ACA) was addressed in the valuations. While the impact of certain provisions [such as the excise tax on high-value health insurance plans (if applicable), mandated benefits and participation changes due to the individual mandate] should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by amounts employers and retirees can afford (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, plan changes, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state based health insurance exchanges), continued monitoring of the ACA's impact on the Plan's liability will be required.

For the SEAD-OPEB Plan, the annual actuarial valuations providing the measures to assess funding progress will utilize the actuarial methods and assumptions last adopted by the Board based upon the advice and recommendations of the actuary. The Board will periodically have actuarial projections of the valuation results performed to assess the current and expected future progress towards the overall funding goals of the System.

Projections of benefits for financial reporting purposes for all plans are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculation.

Actuarial Valuation Date

The total OPEB liability at June 30, 2019, is based upon the June 30, 2018 actuarial valuation for State OPEB Fund, School OPEB Fund and the SEAD-OPEB Plan, using generally accepted actuarial procedures/techniques.

NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

Actuarial Assumptions

The total OPEB liability, as of June 30, 2019, for each plan was determined by an actuarial valuation date indicated in the table below using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date:

Actuarial Assumptions							
	State OPEB Fund	School OPEB Fund	SEAD-OPEB Plan				
Valuation date	6/30/2018	6/30/2018	6/30/2018				
Inflation	2.75%	2.50%	2.75%				
Salary increases	3.25% - 7.00%*	3.00% - 8.75%*	3.25% - 7.00%*				
Long-term expected rate of return ¹	7.30%	7.30%	7.30%				
Initial Healthcare Cost Trend							
Pre-Medicare Eligible	7.25%	7.25%	N/A				
Medicare Eligible	5.38%	5.38%	N/A				
Ultimate Trend Rate							
Pre-Medicare Eligible	4.75%	4.75%	N/A				
Medicare Eligible	4.75%	4.75%	N/A				
Year Ultimate Trend is Reached							
Pre-Medicare Eligible	2028	2028	N/A				
Medicare Eligible	2022	2022	N/A				
Mortality							

For Teachers Retirement System (TRS) members: The RP-2000 White Collar Mortality Table projected to 2025 with projection scale BB (set forward one year for males) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB (set forward two years for males and four years for females) is used for death after disability retirement. For Public School Employees Retirement System (PSERS) members: The RP-2000 Blue-Collar Mortality Table projected to 2025 with projection scale BB (set forward three years for males and two years for females) is used for the period after service retirement and for beneficiaries of deceased members. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward five years for both males and females) is used for the period after disability retirement.

The RP-2000 Combined Mortality Table projected to 2025 with the Society of Actuaries' projection scale BB (set forward two years for both males and females) is used for the period after service retirement and for dependent beneficiaries. There is a margin for future mortality improvement in the tables used by the plan.

Actuarial experience study

7/1/2009 - 6/30/2014

The RP-2000 Combined Mortality Table projected to 2025 with projection

scale BB (set forward two years for

both males and females) is used for the

period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table projected to

2025 with projection scale BB (set back

seven years for males and set forward

three years for females) is used for the

period after disability retirement.

7/1/2009 - 6/30/2014

7/1/2009 - 6/30/2014

¹ Long-term expected rate of return is net of investment expense, including inflation

*Includes respective inflation assumption.



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

The actuarial assumptions used in the valuations, for the State and School OPEB funds, are based on the results of the most recent actuarial experience studies, which covered the five year period ending June 30, 2014, with the exception of the School Plan's annual rate of inflation. It was decreased effective with the June 30, 2018 valuation. The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the June 30, 2018 valuation for the State and School OPEB funds were based on a review of recent plan experience done concurrently with the June 30, 2018 valuation.

The actuarial assumptions used in the valuation, for the SEAD-OPEB Plan were based on the results of an actuarial experience study, which covered the five year period ending June 30, 2014, with the exception of the long-term expected rate of return. The assumed investment rate of return was decreased as reported in the June 30, 2017 and June 30, 2018 actuarial valuations, based on a funding policy change.

Long-Term Expected Rate of Return

For all plans, the long-term expected rate of return on OPEB plan investments were determined using a log-normal distribution analysis, in which expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized by plan in the table below:

			Target A	llocation				
	State-OPE	B Fund	School-OPI	EB Fund	SEAD-OPEB Plan			
Asset Class	Target allocation	Long-term expected real rate of return*	Target allocation	Long-term expected real rate of return*	Target allocation	Long-term expected real rate of return*		
Fixed Income	30.0%	(0.1%)	30.0%	(0.1%)	30.0%	(0.1%)		
Domestic large equities	46.2%	8.9 %	46.2%	8.9 %	46.2%	8.9 %		
Domestic small equities	1.3%	13.2 %	1.3%	13.2 %	1.3%	13.2 %		
International developed market equities	12.4%	8.9 %	12.4%	8.9 %	12.4%	8.9 %		
International emerging market equities	5.1%	10.9 %	5.1%	10.9 %	5.1%	10.9 %		
Alternatives	5.0%	12.0 %	5.0%	12.0 %	5.0%	12.0 %		
Total	100.0%		100.0%	=	100.0%			

* Rates shown are net of the respective assumed rates of inflation.



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

Discount Rate

In order to measure the total OPEB liability, as of June 30, 2019, for the State OPEB fund, a discount rate of 7.30% was used, as compared with last year's single equivalent rate of 5.22%. Based on those assumptions, the fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on investments was applied to all periods of projected benefit payments to determine the total OPEB liability. Projected future benefit payments for all current plan members were projected through 2120.

In order to measure the total OPEB liability for the School OPEB, a single equivalent interest rate of 3.58% was used as the discount rate, as compared with last year's rate of 3.87%. This is comprised mainly of the yield or index rate for 20 year tax-exempt general obligation bonds with an average rating of AA or higher (3.50% per the Municipal Bond Index Rate). The projection of cash flows used to determine the discount rate assumed that contributions from members and from the employer will be made at the current level as averaged over the last five years, adjusted for annual projected changes in headcount. Projected future benefit payments for all current plan members were projected through 2119.

The discount rate used to measure the total OPEB liability for the SEAD-OPEB Plan was 7.30%, the same as last year's rate . The projection of cash flows used to determine the discount rate assumed that plan member insurance premiums will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the Net OPEB Liability/(Asset) to Changes in the Discount Rate

The following schedule summarizes the NOL/(NOA) of the employers, as of June 30, 2019. The NOL/(NOA) is calculated using the determined discount rate as well as what the NOL/(NOA) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate by the Plan (amount in thousands):

Sensitivity of the Plan Participating Employer Contributing Entities Net OPEB Liability/(Asset) to Changes in the Discount Rate

	1% Decrease			Current Rate	1% Increase		
		(6.30%)		(7.30%)		(8.30%)	
State's Net OPEB Liability	\$	1,536,763	\$	1,241,314	\$	990,162	
		(2.58%)		(3.58%)		(4.58%)	
School's Net OPEB Liability	\$	14,264,285	\$	12,272,145	\$	10,651,632	
		(6.30%)		(7.30%)		(8.30%)	
SEAD-OPEB Plan's Net OPEB (Asset)	\$	(156,471)	\$	(282,765)	\$	(386,551)	



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

Sensitivity of the Net OPEB Liability/(Asset) to Changes in the Healthcare Cost Trends

The following schedule summarizes the NOL/(NOA) of the employers, as of June 30, 2019. The NOL/(NOA) is calculated using the determined healthcare cost trends as well as what the NOL/(NOA) would be if it were calculated using healthcare cost trends that are 1-percentage-point lower or 1-percentage-point higher than the current rate by the Plan (amount in thousands):

Sensitivity of the Plan Participating Employer Contributing Entities Net OPEB Liability/(Asset) to Changes in Healthcare Cost Trends

	1% Decrease	Current Rate	1% Increase
State's Net OPEB Liability	\$ 953,888	\$ 1,241,315	\$ 1,582,447
School's Net OPEB Liability	\$ 10,337,984	\$ 12,272,147	\$ 14,728,681
SEAD-OPEB Plan's Net (Asset)	N/A	N/A	N/A



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

The following information is from the perspective of the State as the employer.

G. State's Proportionate Share of OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

The State reported a liability as the Employer for its proportionate share of the NOL associated with the plans listed below.

The following schedule is presented from the perspective of the State as the Employer details the proportional share of the OPEB amounts for each plan as of June 30, 2019 is as follows (amount in thousands):

Aggregate OPEB Amounts - All Plans

	Primary overnment	Component Units		
OPEB liabilities	\$ 2,409,618	\$	84,640	
OPEB assets	\$ 243,103	\$	3,000	
Deferred outflows of resources related to OPEBs	\$ 752,479	\$	15,175	
Deferred inflows of resources related to OPEBs	\$ 1,266,775	\$	23,415	
OPEB expense/expenditures	\$ (142,287)	\$	3,770	



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

The information below includes all multi-employer plans and funds administered by the State of Georgia.

The NOL/NOA for each plan was measured as of June 30, 2018. The total OPEB liability/asset used to calculate the NOL/NOA for each plan was based on an actuarial valuation as of June 30, 2017 for State, School, and SEAD.

State OPEB Fund

State's Proportionate Share of Net OPEB Liability and OPEB Expense

Primary Government: At June 30, 2019, the State reported a liability of \$2.4 billion for it's proportionate share of net OPEB liability. The net OPEB liability was measured as of June 30, 2018. The total OPEB liability used to calculate the net OPEB liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total OPEB liability to June 30, 2018. The State's proportion of the net OPEB liability was based on the State's proportion of the prior year contributions received by the OPEB plan relative to the contributions for all participants in the plan. At June 30, 2018, the State's proportion for the State plan as employer was 92.022957%, which was an increase of 0.546672% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized OPEB expense of \$(121.4) million.

Component Units: At June 30, 2019, the State reported a liability of \$5.1 million, for it's proportionate share of net OPEB liability. The net OPEB liability was measured as of June 30, 2018. The total OPEB liability used to calculate the net OPEB liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total OPEB liability to June 30, 2018. The State's proportion of the net OPEB liability was based on the State's proportion of the prior year contributions received by the OPEB plan relative to the contributions for all participants in the plan. At June 30, 2018, the State's proportion for the State plan as Employer was 0.209969%, which was a decrease of 0.003899% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized OPEB expense of \$(0.5) million.

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (amount in thousands):

(Table on next page)



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

	Primary Government				Component Units			
	State as Employer				State as Employer			
	0	Deferred Outflows of Resources		Deferred Inflows of Resources		Deferred Outflows of Resources		eferred flows of sources
Differences between expected and actual experience	\$	_	\$	188,837	\$		\$	401
Changes of assumptions				870,937				1,852
Net difference between projected and actual earnings on OPEB plan investments		55,537				117		
Changes in proportion and differences between State contributions and proportionate share of contributions		182,435		160,906		34		507
State contributions subsequent to the measurement date		493,986				971		
Total	\$	731,958	\$	1,220,680	\$	1,122	\$	2,760

Primary Government: State contributions as employer subsequent to the measurement date of \$494.0 million are reported as deferred outflows of resources and will be recognized as a reduction of the NOL in the year ended June 30, 2020.

Component Units: State contributions as employer subsequent to the measurement date of \$1.0 million are reported as deferred outflows of resources and will be recognized as a reduction of the NOL in the year ended June 30, 2020.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (amount in thousands):

	Primary Government	Component Units			
Year ended June 30:	 State as Employer		State as Employer		
2020	\$ (320,026)	\$	(929)		
2021	(320,026)		(929)		
2022	(265,561)		(704)		
2023	(77,095)		(47)		
2024	_		_		
Thereafter	—		—		

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

School OPEB Fund

State's Proportionate Share of Net OPEB Liability and OPEB Expense

Component Units: At June 30, 2019, the State reported a liability of \$79.5 million, for it's proportionate share of net OPEB liability. The net OPEB liability was measured as of June 30, 2018. The total OPEB liability used to calculate the net OPEB liability was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total OPEB liability to June 30, 2018. The State's proportion of the net OPEB liability was based on the State's proportion of the prior year contributions received by the OPEB plan relative to the contributions for all participants in the plan. At June 30, 2018, the State's proportion for the School plan as Employer was 0.625763% which was an increase of 0.027112% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized OPEB expense of \$4.4 million.

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (amount in thousands):

	Component Units State as Employer				
	Deferred Outf of Resource		Deferred Inflows o Resources		
Differences between expected and actual experience	\$		\$	1,809	
Changes of assumptions				13,474	
Net difference between projected and actual earnings on OPEB plan investments		108		_	
Changes in proportion and differences between State contributions and proportionate share of contributions	10	0,057		4,863	
State contributions subsequent to the measurement date		3,501			
Total	<u>\$ 13</u>	3,666	\$	20,146	

Component Units: State contributions as employer subsequent to the measurement date of \$3.5 million are reported as deferred outflows of resources and will be recognized as a reduction of the NOL in the year ended June 30, 2020.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (amount in thousands):

		Component Units				
Year ended June 30:	State as Employer					
2020	\$	(1,941)				
2021		(1,941)				
2022		(1,941)				
2023		(1,947)				
2024		(1,606)				
Thereafter		(605)				



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

State Employees' Assurance Department (SEAD-OPEB Plan)

State's Proportionate Share of Net OPEB Asset and OPEB Expense

Primary Government: At June 30, 2019, the State reported an asset of \$243.1 million, for it's proportionate share of net OPEB asset. The net OPEB liability was measured as of June 30, 2018. The total OPEB asset used to calculate the net OPEB asset was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total OPEB asset to June 30, 2018. The State's proportion of the net OPEB asset was based on the State's proportion of the prior year contributions received by the OPEB plan relative to the contributions for all participants in the plan. At June 30, 2018, the State's proportion for the SEAD plan as Employer was 84.826905%, which was an decrease of 4.732366% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized OPEB expense of \$(20.9) million.

Component Units: At June 30, 2019, the State reported an asset of \$3.0 million, for it's proportionate share of net OPEB asset. The net OPEB asset was measured as of June 30, 2018. The total OPEB asset used to calculate the net OPEB asset was based on an actuarial valuation as of June 30, 2017, with standard roll-forward techniques performed to update the total OPEB asset to June 30, 2018. The State's proportion of the net OPEB asset was based on the State's proportion of the prior year contributions received by the OPEB plan relative to the contributions for all participants in the plan. At June 30, 2018, the State's proportion for the SEAD plan as Employer was 1.119336%, which was a decrease of 0.12606% from its proportion measured as of June 30, 2017. For the year ended June 30, 2019, the State recognized OPEB expense of \$(0.1) million.

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (amount in thousands):

	Primary Government			(Component Units			
	State as Employer				State as Employer			yer
	Deferred Outflows of Resources		Deferred Inflows of Resources		Deferred Outflows of Resources		Inf	ferred lows of sources
Differences between expected and actual experience	\$	2,649	\$	_	\$	33	\$	
Changes of assumptions		12,464		—		155		—
Net difference between projected and actual earnings on OPEB plan investments		_		40,184				495
Changes in proportion and differences between State contributions and proportionate share of contributions		5,408		5,911		199		14
State contributions subsequent to the measurement date								
Total	\$	20,521	\$	46,095	\$	387	\$	509

There were no State contributions as employer subsequent to the measurement date.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (amount in thousands):

	Primary Government	Component Units
Year ended June 30:	 State as Employer	State as Employer
2020	\$ (3,706)	\$ 79
2021	(6,186)	(3)
2022	(12,277)	(153)
2023	(3,405)	(45)
2024	—	—
Thereafter	—	—

NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

H. Actuarial Methods and Assumptions (GASB 75)

The total OPEB liability for each plan was determined by an actuarial valuation date indicated in the table below using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date:

	Actuarial Assumptions			
	State OPEB Fund	School OPEB Fund	SEAD-OPEB Plan	
Valuation date	6/30/2017	6/30/2017	6/30/2017	
Inflation	2.75%	2.75%	2.75%	
Salary increases	3.25% - 7.00%*	3.25% - 9.00%*	3.25% - 7.00%*	
Long-term expected rate of return ¹	7.30%	7.30%	7.30%	
Initial Healthcare Cost Trend				
Pre-Medicare Eligible	7.50%	7.50%	N/A	
Medicare Eligible	5.50%	5.50%	N/A	
Ultimate Trend Rate				
Pre-Medicare Eligible	4.75%	4.75%	N/A	
Medicare Eligible	4.75%	4.75%	N/A	
Year Ultimate Trend is Reached				
Pre-Medicare Eligible	2028	2028	N/A	
Medicare Eligible	2022	2022	N/A	

Mortality

The RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table 20Ž5 projected to with projection scale BB and set back 7 years for males and set forward 3 years for females is used for the period after disability retirement.

For TRS members: The RP-2000 White Collar Mortality Table projected to 2025 with projection scale BB (set forward 1 year for males) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB (set forward 2 years for males and 4 years for females) is used for death after disability retirement. For PSERS members: The RP-2000 Blue-Collar Mortality Table projected to 2025 with projection scale BB (set forward 3 years for males and 2 years for females) is used for the period after service retirement and for beneficiaries of deceased members. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward 5 years for both males and females) is used for the period after disability retirement.

The RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females is used for the period after service retirement and for dependent beneficiaries. There is a margin for future mortality improvement in the tables used by the plan.

Actuarial Experience Study

7/1/2009 - 6/30/2014

7/1/2009 - 6/30/2014

7/1/2009 - 6/30/2014

¹ Long-term expected rate of return is net of investment expense, including inflation

^{*}Includes respective inflation assumption.

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

The actuarial assumptions used in the valuations are based on the results of the most recent actuarial experience studies, which covered the last five year period ending June 30, 2014. The remaining actuarial assumptions (e.g. initial per capita costs, health care cost trends, rates of plan participation, rates of plan election, etc.) used in the June 30, 2017 valuation for the State and School OPEB funds were based on a review of the recent plan experience done concurrently with the June 30, 2017 valuation. The June 30, 2017 actuarial valuation was revised for various factors, including the methodology used to determine how employees and retirees were assigned to each of the OPEB Funds and anticipated participation percentages. Also, there were changes to the discount rate and an increase in the long-term expected rate of return.

The actuarial assumptions used in the valuation for the SEAD-OPEB Plan were based on the results of an actuarial experience study, which covered the five year period ending June 30, 2014, with the exception of the long-term expected rate of return. The long-term expected rate of return was decreased as reported in the June 30, 2017 actuarial valuation, based on a funding policy change.

Long-Term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments were determined using a log-normal distribution analysis, in which expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The long-term expected return on plan assets is to be reviewed as asset allocations and/or capital market assumptions change. Several factors should be considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation), as developed by the investment consultant for each major asset class. These ranges should be combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions to be developed by the investment consultant may cover a shorter investment horizon and may not be useful in setting the long-term rate of return for funding OPEB plans which are likely to cover a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the table below:

	Target Allocation						
	State-OP	EB Fund	School-O	PEB Fund	SEAD-OPEB Plan		
Asset Class	Target allocation	Long-term expected real rate of return*	Target allocation	Long-term expected real rate of return*	Target allocation	Long-term expected real rate of return*	
Fixed Income	30.0%	(0.5%)	30.0%	(0.5%)	30.0%	(0.5%)	
Domestic large equities	37.2%	9.0 %	37.2%	9.0 %	37.2%	9.0 %	
Domestic mid equities	3.4%	12.0 %	3.4%	12.0 %	3.4%	12.0 %	
Domestic small equities	1.4%	13.5 %	1.4%	13.5 %	1.4%	13.5 %	
International developed market equities	17.8%	8.0 %	17.8%	8.0 %	17.8%	8.0 %	
International emerging market equities	5.2%	12.0 %	5.2%	12.0 %	5.2%	12.0 %	
Alternatives	5.0%	10.5 %	5.0%	10.5 %	5.0%	10.5 %	
Total	100.0%		100.0%		100.0%		

* Rates shown are net of the 2.75% assumed rate of inflation.

Discount Rate

In order to measure the total OPEB liability for the State OPEB, a single equivalent interest of 5.22% was used as the discount rate, as compared with the prior measurement period date rate of 3.60%. The 5.22% rate is comprised mainly of the yield or index rate for 20 year tax-exempt general obligation municipal bonds with an average rating of AA or higher (3.87% per the Bond Buyers Index). The projection of cash flows used to determine the discount rate assumed that contributions from members and from the employer will be made at the current level as averaged over the lat five years, adjusted for annual projected changes in head count. Projected future benefit payments for all current plan members were projected through 2118.

In order to measure the total OPEB liability for the School OPEB, a single equivalent interest of 3.87% was used as the discount rate, as compared with the prior measurement period date rate of 3.58%. The 3.87% rate is comprised mainly of the yield or index rate for 20 year tax-exempt general obligation municipal bonds with an average rating of AA or higher (3.87% per the Bond Buyers Index). The projection of cash flows used to determine the discount rate assumed that contributions from members and from the employer will be made at the current level as averaged over the last five years, adjusted for annual projected changes in head count. Projected future benefit payments for all current plan members were projected through 2118.

The discount rate used to measure the total OPEB liability for the SEAD-OPEB plan was 7.30%, as compared with the prior measurement period date rate of 7.50%. The projection of cash flow used to determine the discount rate assumed that plan member insurance premiums will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the fiduciary net position was projected to be available to make all projected



NOTE 16 - POSTEMPLOYMENT BENEFITS - MULTI-EMPLOYER PLANS (continued)

future benefit payments of current plan members. Therefore, the long-term expected rate of return on investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the State's proportionate share of the NOL/(NOA) to changes in the discount rate

The following schedule is presented from the perspective of the State as the employer details the State's proportionate share of the NOL/(NOA) calculated using the discount rate detailed below, as well as what the State's proportionate share of the NOL/(NOA) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate (amount in thousands):

	Se	nsitivity of the Pl Net OPEB Lia	an Participating bility/(Asset) to C			es
	P	rimary Governm	ent		Component Unit	s
	1% Decrease	Current Rate	1% Increase	1% Decrease	Current Rate	1% Increase
	(4.22%)	(5.22%)	(6.22%)	(4.22%)	(5.22%)	(6.22%)
State's Net OPEB Liability	\$ 2,928,413	\$ 2,409,618	\$ 2,081,991	\$ 6,525	\$ 5,107	\$ 4,639
	(2.87%)	(3.87%)	(4.87%)	(2.87%)	(3.87%)	(4.87%)
School's Net OPEB Liability	\$	\$	\$	\$ 92,869	\$ 79,533	\$ 68,778
	(6.30%)	(7.30%)	(8.30%)	(6.30%)	(7.30%)	(8.30%)
SEAD Plan's Net OPEB (Asset)	\$ (130,969)	\$ (243,103)	\$ (334,967)	\$ (1,632)	\$ (3,000)	\$ (4,175)

Sensitivity of the State's proportionate share of the NOL/(NOA) to changes in the Healthcare Cost Trends

The following schedule is presented from the perspective of the State as the employer details the State's proportionate share of the NOL/(NOA) calculated using the discount rate detailed below, as well as what the State's proportionate share of the NOL/(NOA) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate (amount in thousands):

					Contributing Entit althcare Cost Tree		
	Pi	imary Governm	ent		Component Units		
	1% Decrease	Current Rate	1% Increase	1% Decrease	Current Rate	1% Increase	
State's Net OPEB Liability	\$ 2,033,386	\$ 2,409,618	\$ 2,992,703	\$ 4,530	\$ 5,107	\$ 6,668	
School's Net OPEB Liability	\$	\$ _	\$ —	\$ 66,864	\$ 79,533	\$ 95,723	
SEAD Plan's Net OPEB (Asset)	N/A	N/A	N/A	N/A	N/A	N/A	



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS

The State administers the following single-employer other postemployment benefit (OPEB) plan:

Administered by the Board of Regents of the University System of Georgia (Board of Regents): Board of Regents Retiree Health Benefit Fund (Regents Plan)

The State is the plan sponsor of this plan and the participating employer (Employer). The notes to the financial statements and required supplementary information that follow are presented from the perspective of the State as the plan sponsor and the State as Employer. A separate financial report that includes the applicable financial statements and required supplementary information for the plan administered by the Board of Regents is also publicly available and may be obtained from their website (www.usg.edu).

A. Basis of Accounting

The financial statements of this plan are prepared using the economic resources measurement focus and accrual basis of accounting. Contributions from the employer are recognized in the period in which they are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. The OPEB plan's fiduciary net position has been determined on the same basis as reported by the plan.

B. Investments

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price.

For the fiscal year ended June 30, 2019, the annual money-weighted rate of return on OPEB plan investments, net of OPEB plan investment expense, for the Regents Plan was 7.99%.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. The Regents Plan has an investment policy regarding the allocation of invested assets. The assets are invested in the Board of Regents' Balanced Income pooled investment fund, which is not subject to state regulations concerning investments. Plan assets are managed on a total return basis with a short-term objective of achieving the highest quality per stable and a long-term objective of a more conservative investment strategy.

The following table summarizes the adopted asset allocation policy by plan at June 30, 2019:

Asset Class	Target Allocation		
Fixed Income	70.0%		
Equities	30.0%		
Total	100.0%		



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

C. Plan Description and Funding Policy

Regents Plan

Plan Description: The Regents Plan is a single-employer, defined benefit, postemployment healthcare plan administered by the University System Office, an organizational unit of the University System of Georgia (USG). The Regents Plan was authorized pursuant to OCGA Section 47-21-21 for the purpose of accumulating funds necessary to meet employer costs of retiree postemployment health insurance benefits. The Plan is administered by the Board of Regents that is comprised of 19 members, all appointed by the Governor (five from state-at-large and one from each of the State's 14 congressional districts). Benefit provisions of the plans were established and can be amended by the Board of Regents.

Benefits Provided: Pursuant to the general powers conferred by OCGA Section 20-3-31, the USG has established group health and life insurance programs for regular employees of the USG. It is the policy of the USG to permit employees of the USG eligible for retirement or who become permanently and totally disabled to continue as members of the group health and life insurance programs. The USG offers its employees and retirees under the age of 65 access to three self-insured healthcare plan options and one fully insured plan option. For the USG's Plan Year 2019, the following self-insured health care options were available: Blue Choice HMO plan, Consumer Choice HSA plan (Blue Cross and Blue Shield of Georgia), and the Comprehensive Care plan (Blue Cross and Blue Shield of Georgia). The USG also offers a self-insured dental plan administered by Delta Dental.

Retirees age 65 and older participate in a secondary healthcare coverage for Medicare-eligible retirees and dependents provided through a retiree health care exchange option. The USG makes contributions to the retirees' health reimbursement account, which can be used by the retiree to pay premiums and out-of-pocket healthcare related expenses.

Contributions: The contribution requirements of plan members and the employer are established and may be amended by the Board of Regents. The Regents Plan is substantially funded on a pay-as-you-go basis; however, amounts above the pay-as-you-go basis may be contributed annually, either by specific appropriation or by Board of Regents designation. Organizational units of the USG pay the employer portion for group insurance for eligible retirees. The employer portion of health insurance for its eligible retirees is based on rates that are established annually by the Board of Regents for the upcoming plan year. For the 2019 plan year, the employer rate was approximately 90% of the total health insurance cost for eligible retirees, and the retiree rate was approximately 10%. For employees hired on or after January 1, 2013 and retirees after January 1, 2018, the amount the USG contributes is tied to year of service, which ranges from 0% to 100%. The employer covers the total premium cost for \$25,000 of basic life insurance. If an individual elects to have supplemental, and/or dependent life insurance coverage, such costs are borne entirely by the retiree. For fiscal year ended June 30, 2019, the USG contributed approximately \$160.4 million to the plan for current premiums or claims.

NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

D. Plan Membership and Participating Employers

The following table summarizes the participating membership and participating employers, for the Regents Plan at June 30, 2019:

Plan Membership	June 30, 2019	June 30, 2018
Inactive plan members or beneficiaries currently receiving benefits	19,826	19,161
Inactive plan members entitled to but not yet receiving benefits	_	_
Active plan members	48,661	48,244
Total	68,487	67,405
Open to New Members (Yes/No)	Yes	Yes
Number of Employers	1	1

This count treats each legal entity in the State reporting entity as one employer.

E. Net OPEB Liability of Participating Employers

Net OPEB Liability

For defined benefit OPEB plans that are administered through trusts that meet the specified criteria, GASB 74 requires the net OPEB liability to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. The total OPEB liability is actuarially determined. The following schedule is presented from the perspective of the State as the sponsor of the Regents Plan and summarizes the components of the Net OPEB Liability (NOL) of the employer, as of June 30, 2019 (amount in thousands):

Components of the Net OPEB Liability	
Total OPEB Liability	\$ 4,616,023
Plan Fiduciary Net Position	144,455
Net OPEB liability	\$ 4,471,568
Plan fiduciary net position as a percentage of the total OPEB liability	 3.13%



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

F. Actuarial Methods and Assumptions

The impact of the Affordable Care Act (ACA) was addressed in the valuations for the Regents Plan. While the impact of certain provisions [such as the excise tax on high-value health insurance plans (if applicable), mandated benefits and participation changes due to the individual mandate] should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by amounts employers and retirees can afford (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, plan changes, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state based health insurance exchanges), continued monitoring of the ACA's impact on the Plan's liability will be required.

The projection of benefits for financial reporting purposes for this Plan is based on the substantive plan (the plan as understood by the employer and plan members) and includes the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculation.

Actuarial Valuation Date

The total OPEB liability at June 30, 2019, is based upon May 1, 2019 actuarial valuation for the Regents Plan, using generally accepted actuarial procedures/techniques. Update procedures were used to roll forward the total OPEB liability to June 30, 2019.

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019

NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

Actuarial Assumptions

The total OPEB liability for the Regents Plan was determined by an actuarial valuation date indicated in the table below using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date:

Valuation date	5/1/2019
Inflation	2.50%
Salary increases	4.00%
Long-term expected rate of return ¹	4.50%
Initial Healthcare Cost Trend	
Pre-Medicare Eligible	6.90%
Medicare Eligible	4.50%
Ultimate Trend Rate	
Pre-Medicare Eligible	4.50%
Medicare Eligible	4.50%
Year Ultimate Trend is Reached	
Pre-Medicare Eligible	2031
Medicare Eligible	2020
Mortality	Haulthy: Dub 2010 for Tanah

Healthy: Pub-2010 for Teachers (as appropriate) headcount weighted projected with scale MP-2018.

Disabled: Pub-2010 Disabled Mortality for Teachers (as appropriate) headcount weighted projected with scale MP-2018.

Actuarial experience study	
Economic and demographic assumptions	7/1/2017 - 6/30/2019
All other assumptions	7/1/2009 - 6/30/2014
¹ Long-term expected rate of return is net of investment exp	ense, including inflation

The economic and demographic assumptions are based on the results of the most recent actuarial experience study over the Plan, which covered a three-year period ending June 30, 2019. All other actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience studies, which covered the five-year period ending June 30, 2014.

Long-Term Expected Rate of Return

For the Regents Plan, the long-term expected rate of return on OPEB plan investments were determined using a buildingblock method in which expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the table below:

Asset Class	Target allocation	Long-term expected real rate of return*
Fixed Income	70.0%	1.09%
Equity Allocation	30.0%	4.46%
Total	100.0%	

* Rates shown are net of the 2.50% assumed rate inflation.

Discount Rate

In order to measure the total OPEB liability for the Regents Plan, as of June 30, 2019, a yield or index rate of 3.50% was used as the discount rate, as compared with last year's rate of 3.87%. This is comprised mainly of the yield or index rate for 20-year tax-exempt general obligation municipal bonds with an average rating of AA or higher (3.50% per the Bond Buyers Index). Assumed contributions are based on the contribution policy, and projected total contributions are the pay as you go costs of the plan. The current contribution policy is not designed to pre-fund the plan, and the unfunded liability is not expected to be paid off at any point in the future. Projected future benefit payments for all current plan members were projected through 2118.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following schedule summarizes the NOL, as of June 30, 2019, of the employer. The NOL is calculated using the determined discount rate as well as what the NOL would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate by the Regents Plan (amount in thousands):

Sensitivity of the Plan Participating Employer Contributing Entities Net OPEB Liability to Changes in the Discount Rate

	10	1% Decrease Current Rate		1% Increase		
		(2.50%)	(3.50%)		(4.50%)	
Regents OPEB Liability	\$	5,293,080	\$	4,471,568	\$	3,786,697



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trends

The following schedule summarizes the NOL of the employer, as of June 30, 2019. The NOL is calculated using the determined healthcare cost trends as well as what the NOL would be if it were calculated using healthcare cost trends that are 1-percentage-point lower or 1-percentage-point higher than the current rate by the Regents Plan (amount in thousands):

Sensitivity of the Plan Participating Employer Contributing Entities Net OPEB Liability to Changes in Healthcare Cost Trends

	1% Decrease		Cu	Current Rate		1% Increase	
Regents OPEB Liability	\$	3,749,646	\$	4,471,568	\$	5,376,308	



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

The following information is from the perspective of the State as the employer.

G. State's Proportionate Share of OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

The State reported a liability as the Employer for its proportionate share of the NOL associated with the plans listed below.

The following schedule is presented from the perspective of the State as the Employer details the proportional share of the OPEB amounts for each plan as of June 30, 2019 is as follows (amount in thousands):

Aggregate OPEB Amounts - All Plans

	Primary overnment	Component Units		
OPEB liabilities	\$ 4,410,751	\$	55,277	
Deferred outflows of resources related to OPEBs	\$ 468,895	\$	5,541	
Deferred inflows of resources related to OPEBs	\$ 495,151	\$	8,257	
OPEB expense/expenditures	\$ 349,664	\$	3,725	

The information below includes all significant plans and funds administered by the State of Georgia.

The NOL for the Regents Plan was measured as of June 30, 2018. The total OPEB liability used to calculate the NOL was based on an actuarial valuation as of May 1, 2018.

Regents Plan

State's Proportionate Share of Net OPEB Liability and OPEB Expense

Primary Government: At June 30, 2019, the State reported a net OPEB liability of \$4.4 billion, for the Regents Plan. The net OPEB liability was measured as of June 30, 2018. The total OPEB liability used to calculate the net OPEB liability was based on an actuarial valuation as of May 1, 2018, with standard roll-forward techniques performed to update the total OPEB liability to June 30, 2018. The net OPEB liability was based on contributions during the fiscal year ended June 30, 2018. For the year ended June 30, 2019, the State recognized OPEB expense of \$349.7 million.

NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

State's Proportionate Share of Deferred Outflows/Inflows of Resources

At June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to the Regents Plan from the following sources (amount in thousands):

	Primary Government State as Employer						
		red Outflows Resources	Deferred Inflows of Resources				
Differences between expected and actual experience	\$	307,571	\$				
Changes of assumptions		—		495,151			
Net difference between projected and actual earnings on OPEB plan investments		941		_			
State contributions subsequent to the measurement date		160,383					
Total	\$	468,895	\$	495,151			

Primary Government: State contributions as Employer subsequent to the measurement date of \$160.4 million are reported as deferred outflows of resources and will be recognized as a reduction of the NOL in the year ended June 30, 2020.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (amount in thousands):

	Primary Government
Year ended June 30:	State as Employer
2020	\$ (44,107)
2021	(44,107)
2022	(44,107)
2023	(42,256)
2024	(6,663)
Thereafter	(5,399)

NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

Changes in the Net OPEB Liability

For single-employer, defined benefit OPEB plans that are administered through trusts that meet the specified criteria, GASB 75 requires a schedule of the changes in the net OPEB liability, for the current reporting period. The following schedule is presented from the perspective of the State as the Employer of the Regents Plan and summarizes the changes the Net OPEB Liability (NOL) of the employer (amount in thousands):

Total OPEB liability:	
Service cost	\$ 236,917
Interest	158,223
Differences between expected and actual experience	264,729
Changes of assumptions	(310,107)
Benefit payments/refunds	(90,549)
Net change in total OPEB liability	259,213
Total OPEB liability-beginning	4,227,583
Total OPEB liability-ending (a)	4,486,796
Plan fiduciary net position:	
Contributions-employer	158,420
Net investment income	802
Benefit payments/refunds	(90,549)
Administrative expense	 (485)
Net change in plan fiduciary net position	68,188
Plan fiduciary net position-beginning	 7,857
Plan fiduciary net position-ending (b)	 76,045
Net OPEB liability-ending (a)-(b)	\$ 4,410,751

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

H. Actuarial Methods and Assumptions (GASB 75)

The impact of the Affordable Care Act (ACA) was addressed in the valuations for the Regents Plan. While the impact of certain provisions [such as the excise tax on high-value health insurance plans beginning in 2020 (if applicable), mandated benefits and participation changes due to the individual mandate] should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by amounts employers and retirees can afford (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, plan changes, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state based health insurance exchanges), continued monitoring of the ACA's impact on the Plan's liability will be required.

The projection of benefits for financial reporting purposes for this Plan is based on the substantive plan (the plan as understood by the employer and plan members) and includes the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculation.

Actuarial Valuation Date

The total OPEB liability at June 30, 2018, is based upon the actuarial valuation for May 1, 2018 for the Regents Plan, using generally accepted actuarial procedures/techniques. Update procedures were used to roll forward the total OPEB liability to June 30, 2018.

NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

Actuarial Assumptions

The total OPEB liability for the Regents Plan was determined by an actuarial valuation date indicated in the table below using the following actuarial assumptions:

Valuation date	5/1/2018
Inflation	2.50%
Salary increases	4.00%
Long-term expected rate of return ¹	4.50%
Initial Healthcare Cost Trend	
Pre-Medicare Eligible	7.10%
Medicare Eligible	4.50%
Ultimate Trend Rate	
Pre-Medicare Eligible	4.50%
Medicare Eligible	4.50%
Year Ultimate Trend is Reached	
Pre-Medicare Eligible	2030
Medicare Eligible	2019
Mortality	Healthy: RP-2014 White Collar I Generational Improvements by

Healthy: RP-2014 White Collar Mortality Table with Generational Improvements by Scale MP-2014. Disabled: RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB (set forward two years for males and four years for females).

Actuarial experience study

7/1/2009 - 6/30/2014

¹ Long-term expected rate of return is net of investment expense, including inflation

The actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience studies, which covered the five-year period ending June 30, 2014. The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the June 30, 2016 valuation for the Plan were based on a review of recent plan experience done concurrently with the June 30, 2016 valuation.

Long-Term Expected Rate of Return

For the Regents Plan, the long-term expected rate of return on OPEB plan investments was determined using a buildingblock method, in which expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued)

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the table below:

Asset Class	Target allocation	Long-term expected real expected rate of return*
Fixed Income	70%	1.1%
Equity Allocation	30%	3.98%
Total	100.0%	

* Rates shown are net of investment expense, and include the assumed rate of inflation.

Discount Rate

In order to measure the total OPEB liability for the Regents Plan, as of June 30, 2018, a yield or index rate of 3.87% was used as the discount rate, as compared with the prior measurement period date rate of 3.58%. This is comprised mainly of the yield or index rate for 20-year tax-exempt general obligation municipal bonds with an average rating of AA or higher (3.87% per the Bond Buyers Index). Assumed contributions are based on the contribution policy, and projected total contributions are the pay as you go costs of the plan. The current contribution policy is not designed to pre-fund the plan, and the unfunded liability is not expected to be paid off at any point in the future. Projected future benefit payments for all current plan members were projected through 2117.



NOTE 17 - POSTEMPLOYMENT BENEFITS - SINGLE-EMPLOYER PLANS (continued) Sensitivity of the State's proportionate share of the NOL to changes in the Discount Rate

The following schedule is presented from the perspective of the State as the Employer and details the State's proportionate share of the NOL, as of June 30, 2018. The NOL was calculated using the discount rate detailed below, as well as what the State's proportionate share of the NOL would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate (amount in thousands):

Sensitivity of the Employer feet of ED Enability to Changes in the Discount Rate									
	1% Decrease		C	urrent Rate	1% Increase				
		(2.87%)		(3.87%)		(4.87%)			
Regents Net OPEB Liability	\$	5,262,300	\$	4,410,751	\$	3,744,760			

Sensitivity of the Employer Net OPEB Liability to Changes in the Discount Rate

Sensitivity of the State's proportionate share of the NOL to changes in Healthcare Cost Trends

The following schedule is presented from the perspective of the State as the Employer and details the State's proportionate share of the NOL, as of June 30, 2018. The NOL was calculated using the healthcare cost trends detailed below, as well as what the State's proportionate share of the NOL would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current rate (amount in thousands):

Sensitivity of the Employer Net OPEB Liability to Changes in the Health Care Cost Trends

	 1% Decrease		Current Rate		1% Increase		
Regents Net OPEB Liability	\$ 3,719,385	\$	4,410,751	\$	5,320,399		

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 18 - RISK MANAGEMENT

A. Public Entity Risk Pool

The Department of Community Health (DCH) administers the State Health Benefit Plan (SHBP) for the State. Under OCGA Section 45-18-2, the DCH Board has the authority to establish a health insurance plan; provide rules and regulations; and general provisions of the plan. The plan is comprised of three health insurance plans: (1) a plan primarily for State employees OCGA Section 45-18-2, (2) a plan for teachers OCGA Section 20-2-881, and (3) a plan for non-certificated public school employees OCGA Section 20-2-911. The SHBP acts as the plan administrator for approximately 450 organizations (state, county and local educational agencies) and provides health coverage to more than 0.6 million employees, teachers, retirees and their dependents. All employees become members of the plan unless coverage is rejected or waived. An employee may withdraw from the plan if they become eligible for coverage under the aged program of the Social Security Administration OCGA Section 45-18-17. SHBP accepts all of the risk of insuring its employees.

SHBP is accounted for on the accrual basis. Claim liabilities are based on estimates for claims that have been incurred, but not reported. Liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. Estimates of liabilities for incurred, (both reported and unreported) but unpaid are actuarially determined based on estimates of the ultimate cost of settling claims, using past experience adjusted for current trends and any other factors that would modify past experience. Because actual claim liabilities depend on such factors as inflation, changes in legal doctrines and damage awards, the process used in computing claim liabilities may not result in an exact amount. Claim liabilities are evaluated periodically to take into consideration recently settled claims, the frequency of claims and other economic and social factors.

SHBP's general objectives as required under Georgia Compensation Rules & Regulations OCGA 111-4-1 are to collect enrollment information from covered employer groups, collect health premiums and employer contributions, and provide management and planning of health benefits.

DCH utilizes third party administrators to process Medicaid, PeachCare, and State employee health benefit claims. Agreements between individual administrators and DCH are for the processing of specific claim types. If an administrator was unable to continue processing claims for DCH under such an agreement, the DCH's ability to adjudicate such claims in the short-term could be threatened.

The following table provides information about the changes in the reported claims liabilities for the past two years (amount in thousands):

(Table on next page)

NOTE 18 - RISK MANAGEMENT (continued)

	Public Entity Risk Pool					
		Fiscal	Fiscal			
	Year Ended			Year Ended		
	(5/30/2019		6/30/2018		
Unpaid Claims and Claim						
Adjustments July 1	\$	200,292	\$	217,744		
Incurred claims and claim adjustment expenses:						
Provision for insured events of the current fiscal year		2,542,632		2,386,526		
Decrease in provision for insured events of the prior fiscal year		(47,115)		(117,375)		
Total incurred claims and claim adjustment expenses		2,495,517		2,269,151		
Payments:						
Claims and claim adjustment attributable						
to insured events of the current year		(2,348,115)		(2,187,695)		
Claims and claim adjustment attributable						
to insured events of the prior year		(152,339)		(98,908)		
Total Payments		(2,500,454)		(2,286,603)		
Total Unpaid Claims and Claim Adjustments June 30	\$	195,355	\$	200,292		

B. Board of Regents Employee Health Benefits Plan

The University System of Georgia (USG) maintains a program of health benefits for its employees and retirees. This plan is funded jointly through premiums paid by participants covered under the plan and employer contributions paid by the Board of Regents (BOR) and its organizational units. A self–insured program of professional liability for its employees was established by the BOR of the USG under powers authorized by the OCGA 45–9–1. All units of the USG share the risk of loss for claims of the plan.

The following table represents changes in the balances of claims liabilities for the past two years (amount in thousands):

	Board of Regents Employee Health Benefits Plan					
		Fiscal ear Ended /30/2019	Fiscal Year Ended 6/30/2018			
Unpaid Claims and Claim Adjustments July 1	\$	33,467	\$	51,688		
Current Year Claims and Changes in Estimates		434,268		406,315		
Claims Payments		(422,721)		(424,536)		
Unpaid Claims and Claim Adjustments June 30	\$	45,014	\$	33,467		



NOTE 18 - RISK MANAGEMENT (continued)

C. Other Risk Management

The Department of Administrative Services (DOAS) has the responsibility for the State of Georgia of making and carrying out decisions that will minimize the adverse effects of accidental losses that involve State government assets. The State believes it is more economical to manage its risks internally and set aside assets for claim settlement. Accordingly, DOAS processes claims for risk of loss to which the State is exposed, including general liability, property and casualty, workers' compensation, unemployment compensation, and law enforcement officers' and teachers' indemnification. Limited amounts of commercial insurance are purchased applicable to property, employee and automobile liability, fidelity and certain other risks.

The BOR is part of the State of Georgia reporting entity, and as such, is covered by the State of Georgia risk management program administered by DOAS. Premiums for the risk management program are charged to the various state organizations by DOAS to provide claims servicing and claims payment.

Charges by the workers' compensation risk management fund and the liability insurance risk management fund to other funds have failed to recover the full cost of claims over a reasonable period of time. Therefore, the unadjusted deficit at June 30, 2019, of \$882.1 million both for workers' compensation and liability was charged back to the contributing funds. Expenditures of \$559.1 million are reported in the General Fund, and expenses of \$240.0 million are reported in the Higher Education Fund (enterprise fund) relating to this charge-back.

The following table represents changes in the balances of claims liabilities for the past two years (amount in thousands):

	Risk Management Fund					
		Fiscal Year Ended 6/30/2019		Fiscal Year Ended 6/30/2018		
Unpaid Claims and Claim Adjustments July 1	\$	827,166	\$	737,123		
Current Year Claims and Changes in Estimates		250,585		234,795		
Claims Payments		(160,763)		(144,752)		
Unpaid Claims and Claim Adjustments June 30	\$	916,988	\$	827,166		



NOTE 19 - TAX ABATEMENT

As of June 30, 2019, the State had three tax abatement programs, the Mega Project Tax Credit, the Tourism Development Act, and Projects that were designated as a Competitive Project of Regional Significance. However, given the limited number of recipients under each of these programs, the State is legally prohibited from disclosing detailed information relating to the tax abatement programs and amounts abated.

A. Tax Abatement Programs

Mega Project Tax Credit

The Mega Project Tax Credit provides tax abatements to encourage job creation under Official Code of Georgia (OCGA) §48-7-40.24. This abatement is obtained through application by the business enterprise and certification by a panel composed of the commissioner of community affairs, the commissioner of economic development, and the director of the Office of Planning and Budget. In order to receive the tax abatements projects must create a certain level of new full-time employee jobs with average wages above a percentage of average wage projects within the County, and meet other requirements. The tax abatement equals \$5,250 per new eligible full-time employee job for five years beginning with the year in which such job is created through year five after such creation; provided, however, that where the amount of such credit exceeds a business enterprise's liability for such taxes in a taxable year, the excess may be taken as a credit against such business enterprise's quarterly or monthly tax payment. Additionally, there are various recapture provisions such as forfeiting the right to the claim or a percentage of the credit, with allowances for relief from recapture based on certain major events.

Tourism Development Act

The Tourism Development Act provides tax abatements to encourage the creation of tourism attractions or expansion of existing tourism attractions under OCGA §48-8-270. This abatement is obtained through the discretion of the commissioner of economic development and the commissioner of community affairs, in consideration of the execution of the agreement and subject to the approved company's compliance with the terms of the agreement. The term of the agreement granting the tax abatement (sales and use tax refund for new projects or an incremental sales and use tax refund for expansions of existing tourism attractions) is ten years, commencing on the date the tourism attraction opens for business and begins to collect sales and use taxes or for an expansion, the date construction is complete. Additionally, there are various recapture provisions if an approved company fails to abide by the terms of the agreement, such as voiding of the agreement and all sales and use tax proceeds that were refunded shall become immediately due and payable back to the State.

Competitive Project of Regional Significance

The Competitive Project of Regional Significance designation provides tax abatements to a business enterprise whose location or expansion of some or all of the operations in this state would have a significant regional impact under OCGA §48-8-3(93)(D). This abatement is obtained in accordance with the regulations promulgated by the commissioner of economic development. The tax abatement indicates that sales and use taxes levied by or imposed by the State shall not apply to sales of personal property used for and in the construction of these designated projects.

B. Legal Prohibition

The State is legally prohibited from providing more detailed information relating to the tax abatement programs and amounts abated. The restrictions relating to reporting of confidential income tax information and other tax types are generally covered under OCGA §48-7-60 and §48-2-15, respectively.

NOTE 20 - LITIGATION, CONTINGENCIES, AND COMMITMENTS

A. Grants and Contracts

The amounts received or receivable from grantor agencies are subject to audit and review by grantor agencies, principally the federal government. This could result in a request for reimbursement by the grantor agency for any expenditures which are disallowed under grant terms.

B. Litigation and Contingencies

The State is a defendant in various legal proceedings pertaining to matters incidental to the performance of routine governmental operations. The ultimate disposition of these proceedings is not presently determinable. However, it is not believed that the ultimate disposition of these proceedings would have a material adverse effect on the financial condition of the State. The following are significant active litigation, claims and assessments involving the State:

Primary Government

Judith Kellv. et al. v. Board of Community Health, - Plaintiffs, who seek class action status, are retired state employees, public school teachers, or public school employees, and are enrolled in the health insurance plans administered by the State Health Benefit Plan ("SHBP"). On December 8, 2011 the Board of Community Health (the "Board") approved a policy modifying the subsidies for certain retired employees based on employee years of service. Plaintiffs have brought suit against the Board of Community Health and the members of Board, in their individual and official capacities, for breach of contract asserting that retroactive modifications to the annuitant subsidy provided to certain retired employees had the effect of breaching the Plaintiffs' alleged contracts with SHBP. Plaintiffs assert this policy is a breach of an alleged contract to provide health insurance to retired employees. Plaintiffs seek monetary damages, a writ of mandamus to require the application of the full subsidy to the purported class members, plus attorneys' fees. After the Board filed a Motion to Dismiss the Complaint, Plaintiffs amended their Complaint to add three additional counts for Equal Protection, Section 1983 and Declaratory Judgment. The Board filed a Motion to Dismiss the Second Amended Complaint on May 11, 2018, claiming that the allegations in the Complaint are either barred by sovereign immunity or fail to state a claim. On August 20, 2018, the trial court granted the Motion to Dismiss and dismissed the case in its entirety. Plaintiffs filed an appeal with the Georgia Court of Appeals and briefing of the issues is complete. Oral argument was held on June 18, 2019. The Court of Appeals ruled in favor the Board, and Plaintiffs have filed a petition for a writ of certiorari with the Georgia Supreme Court which is currently pending. At this stage of litigation, it is impracticable to render an opinion about whether the likelihood of an unfavorable outcome is either "probable" or "remote"; however, the State believes it has meritorious defenses and is vigorously defending this action.

<u>*T-Mobile South, LLC v. David M Curry. Commissioner, Georgia Department of Revenue,*</u>- T-Mobile South seeks refunds of sales and use taxes allegedly paid on purchases of certain tangible personal property for tax periods May 30, 2012 through December 31, 2016, which T-Mobile South asserts to be subject to computer equipment related sales and use tax exemptions pursuant to OCGA § 48-8-3(68). The total of the sales and use tax refunds claimed by T-Mobile South for such periods is approximately \$11.5 million. The Department of Revenue ("DOR") ruled that the computer equipment purchases by T-Mobile South failed to exceed the required purchase amount of \$15.0 million per calendar year and therefore do not qualify for the sales tax exemption. T-Mobile South appealed these decisions with the Georgia Tax Tribunal. The parties have concluded discovery and each filed cross-motions for

State of Georgia

Notes to the Financial Statements For the Fiscal Year Ended June 30, 2019



NOTE 20 - LITIGATION, CONTINGENCIES, AND COMMITMENTS (continued)

summary judgment. Oral argument on the motions for summary judgment was heard on April 30, 2019. The Court denied both motions for summary judgment and returned the case to the Georgia Tax Tribunal to determine questions of fact where a trial on all issues was held in mid-December 2019. The Georgia Tax Tribunal has not issued a decision in this matter. At this stage of litigation, it is impracticable to render an opinion about whether the likelihood of an unfavorable outcome is either "probable" or "remote"; however, the State believes it has meritorious defenses and is vigorously defending this action.

Transportation v. David M. Curry, Commissioner, Georgia Department of Revenue, - CSX has filed multiple appeals of constructive denials of refunds for sales and use tax imposed on diesel fuel starting in 2013. DOR did not act on the refund claims due to the pendency of litigation on a comparable issue in the U.S. Supreme Court against the state of Alabama. The issue is whether the sales and use tax imposed on diesel fuel purchased by rail carriers violates Section 306 of the Railroad Revitalization and Regulatory Reform Act of 1976 (the "4-R Act"), prohibiting discriminatory treatment of rail carriers. CSX contends that the application of a four percent (4%) sales tax rate to its purchase of diesel fuel violates Section 306 of the 4-R Act because motor carriers are subject to state and local taxes but are exempt from the first three percent (3%) of the four percent (4%) sales tax rate under OCGA § 48-8-31, and because interstate water carriers are exempt from sales and use tax under OCGA § 48-8-31, and because interstate water carriers are exempt from sales and use tax under OCGA § 48-8-3(17). The total of the sales and use tax refunds claimed by CSX for tax periods October 2010 through June 2015 is approximately \$37.5 million.

The Georgia Tax Tribunal cases have been stayed pending the outcome of pending litigation in Alabama in <u>CSX Trans. Inc. v. Alabama Department of Revenue</u>. The Eleventh Circuit ruled that Alabama's sales and use tax did not discriminate against railroads when compared to motor carriers but did discriminate against railroads when compared to motor carriers but did discriminate against railroads when compared to water carriers. Alabama's petition for certiorari to the U.S. Supreme Court was filed on October 8, 2018. CSX also filed a conditional petition for certiorari. The U.S. Supreme Court denied the petitions for certiorari on June 24, 2019. Therefore, the Eleventh Circuit's decision was affirmed and the case was remanded to the District Court to conclude proceedings. We are awaiting a final ruling from the District Court in Alabama. At this stage of litigation, it is impracticable to render an opinion about whether the likelihood of an unfavorable outcome is either "probable" or "remote"; however, the State believes it has meritorious defenses and is defending this action.

Following an onsite review in 2014 of Georgia's nursing facility funding arrangements by the United States Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS), CMS issued a report in November 2015 to the Department of Community Health (DCH) concluding that certain funding arrangements for the payment of the State's share of upper payment limit payments to certain nursing homes owned by development authorities within the State were in violation of federal law and the State's Medicaid Plan. The report included a demand for the return of such upper payment limit payments for fiscal year 2010 and fiscal year 2011 in an aggregate amount of approximately \$76.0 million and the return of any upper payment limit payments made to such nursing homes in subsequent fiscal years, which DCH estimates to be in an aggregate amount of approximately \$94.0 million for both fiscal year 2012 and fiscal year 2013. DCH has taken no action to return the funds and appealed the demand. This matter is before the United States Department of Health and Human Services Departmental Board of Appeals for resolution. It is impracticable to predict the outcome of this matter, but DCH expects to vigorously assert its position contesting any unsubstantiated notice of disallowance issued by CMS.

Additionally, CMS informed DCH that as of October 17, 2016, negative Payment Management System (PMS) balances accruing between federal fiscal year 2005 through federal fiscal year 2013 totaling approximately \$50.0 million, should



NOTE 20 - LITIGATION, CONTINGENCIES, AND COMMITMENTS (continued)

be returned by DCH to CMS. According to an executive summary in an HHS-OIG report issued in March 2016, prior to federal fiscal year 2010, States had PMS grant award accounts that combined Medicaid funds from every year resulting in yearly balances that were not distinguishable. CMS used the PMS to record grant award amounts and process the States' withdrawals from the U.S. Department of Treasury. Beginning in federal fiscal year 2010, CMS began annualized grant award accounts with beginning and ending balances to improve Medicaid funding transparency. DCH shared two prepared reports with CMS comparing federal draws to reported expenditures for federal fiscal year 2005 through federal fiscal year 2013; DCH determined that while its analysis does indicate negative PMS balances exist, it has not been able to identify the root cause or options to address the balances due to the rolling grant funding process used prior to federal fiscal year 2010. In CMS's March 2016 report, it was acknowledged by CMS that it had "not issued guidance instructing States on the appropriate extent and timing of Medicaid withdrawals", and "did not publish formal guidance instructing States on how to handle the funds in annualized PMS accounts." This matter remains pending as unresolved between CMS and DCH.

The State is also involved in a number of disputes concerning the operation of U.S. Army Corps of Engineers (Corps) dams and reservoirs in the Apalachicola-Chattahoochee-Flint (ACF) River Basin and the Alabama-Coosa-Tallapoosa (ACT) River Basin for water supply and other purposes. Buford Dam impounds the Chattahoochee River to form Lake Lanier and is part of the ACF River Basin. Lake Lanier is the primary source of water supply to more than three million people in north Georgia, including a substantial portion of the metropolitan Atlanta region's population. The additional federal reservoirs are downstream of Lake Lanier in the ACF River Basin. The ACF River Basin is shared by Alabama, Florida, and Georgia. Lake Allatoona is in the ACT River Basin, which is shared by Alabama and Georgia. Lake Allatoona also is a major source of water supply to north Georgia. The Special Master appointed by the U.S. Supreme Court has recommended that the U.S Supreme Court dismiss Florida's case against Georgia. The U.S. Supreme Court must now decide whether to accept or reject the report of the Special Master, convene oral arguments in Washington or call the Special Master to revisit the case. It is not possible at this time to predict the duration or outcome of these disputes.

Sales tax refund claims that were filed with the Department of Revenue prior to July 1, 2019, are being reviewed by Legal Affairs & Tax Policy (LATP) and could be upheld by LATP (if Commissioner Curry concurred) in the approximate amount of \$16 million. About \$15.5 million of that amount consists of several taxpayer claims for refund of sales taxes that were paid on purchases of high-tech computer equipment which purchases the taxpayer now claims are exempt under OCGA Sec. 48-8-3(68).

C. Guarantees and Financial Risk

Component Units

Georgia Housing Finance Authority (GHFA) has uninsured single-family mortgage loans of approximately \$49.2 million as of June 30, 2019. The loans are for home mortgages in the State of Georgia. Economic conditions in Georgia have a direct impact on foreclosures and the rate of loss on foreclosed loans. If the economy declines, one impact of these conditions could be a decline in house values and an increase in unemployment and underemployment. GHFA could incur a higher rate of foreclosure and a higher rate of loss on foreclosed loans as a result of the decline in the value of its underlying collateral on uninsured loans. If the economy declines, GHFA could also experience a dramatic increase in foreclosures. It is possible that the combination of such an increase combined with lower housing prices could result in increase losses of loan assets that could have adverse impacts on GHFA's ability to repay its outstanding bonds.



NOTE 20 - LITIGATION, CONTINGENCIES, AND COMMITMENTS (continued)

D. Other Significant Commitments

Primary Government

Contractual Commitments

The Georgia Constitution permits State organizations to enter into contractual commitments provided they have funds available (statutory basis) at the time of the execution of the contract. At June 30, 2019, the fund balances of the primary government include encumbrances of \$4.9 billion.

The University System of Georgia (Higher Education Fund) had significant, unearned, outstanding construction or renovation contracts executed in the amount of \$29.4 million as of June 30, 2019. This amount is not reflected in the financial statements.

As of June 30, 2019, Employees' Retirement System of Georgia committed to fund certain private equity partnerships for a total capital commitment of \$577.8 million. Of this amount, \$271.0 million remained unfunded and is not recorded on the *Combining Statement of Fiduciary Net Position - Pension and Other Employee Benefit Trust Funds - Defined Benefit Pension Plans*.

Georgia Technology Authority (GTA) has a significant commitment to AT&T totaling \$440.6 million which was effective January 1, 2016 and is a five year contract with three optional years, and has a remaining balance of \$233.1 million as of June 30, 2019.

On August 24, 2015, GTA entered into an agreement with Capgemini to provide service integration processes and systems, including billing, service desk, service catalog and request management, risk and security management, among other services. This agreement is a seven year contract with three optional years for a total contract amount of \$300.5 million, and a remaining balance of \$172.2 million as of June 30, 2019.

On December 1, 2017, GTA entered into an \$90.0 million services contract with ATOS. This is a four year contract with five optional years, and has a remaining balance of \$69.6 million as of June 30, 2019.

On June 1, 2018, GTA entered into an \$84.1 million services contract with Xerox. This is a three year contract with three optional years, and has a remaining balance of \$80.0 million.

On January 1, 2019, GTA entered into a \$219.0 million services contract with Unisys. This is a three year contract with three optional years, and has a remaining balance of \$204.8 million.

State Road and Tollway Authority has contractual commitments on uncompleted contracts of \$465.2 million, the majority of which are for the I-285 at SR 400 Interchange Reconstruction Project and the I-85 Widening Project. In addition, \$18.1 million of grants and loans were awarded to local governments and community improvements districts.

Component Units

Contractual Commitments

As of June 30, 2019, Georgia Environmental Finance Authority (GEFA) had commitments to fund projects, excluding the undisbursed portion of loans in process, totaling \$65.8 million.



NOTE 20 - LITIGATION, CONTINGENCIES, AND COMMITMENTS (continued)

On April 13, 2017, the FCC released a public notice impacting Georgia Public Telecommunications Commission (GPTC) formally closing the auction and beginning the repacking component. This is a 39-month period during which time some TV stations will need to transition to new channel assignments. As a result of the auction, GPTC has to repack seven of its nine TV stations with cost of \$11.3 million.

As of June 30, 2019, Georgia Ports Authority (GPA) had commitments for construction projects of approximately \$193.4 million.

During the fiscal year ended June 30, 2013, the GPA entered into a compromise and settlement agreement with the U.S. Army Corps of Engineers, the State of South Carolina and several nongovernmental environmental organizations relative to the project by the U.S. Army Corps of Engineers to deepen the Savannah River federal navigation channel. The project is commonly referred to as the Savannah Harbor Expansion Project (SHEP).

The respective SHEP agreement, approved by the U.S. Federal District Court for the District of South Carolina, resulted in a commitment by GPA in the amount of \$35.5 million, of which GPA had paid \$6.0 million through the year ended June 30, 2019, which includes the following provision to be funded by the GPA subject to satisfaction of certain conditions that at this time are based on all known and expected factors, and therefore, considered to be "probable" as defined by respective and authoritative financial reporting standards (GASB No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*):

- The GPA will establish a letter of credit or escrow account within six months of the commencement of inner harbor dredging in the amount of \$2.0 million to serve as a contingency fund should the operation of the dissolved oxygen injection system not receive funding by the federal government. This letter of credit or escrow account will be maintained at a minimum of \$2.0 million for fifty years after completion of the SHEP.
- 2) The GPA will contribute \$3.0 million for water quality monitoring in the Lower Savannah River Basin, \$3.0 million for monitoring and research of Shortnose and Atlantic Sturgeon, \$15.0 million for conservation, wetlands preservation, acquisitions of easements and/or upland buffers, and creation, restoration or enhancement of wetlands to benefit the Lower Savannah River watershed.
- 3) The GPA will contribute \$12.5 million for environmental and conservation projects in the Savannah River Basin to the Savannah River Restoration Board whose membership is prescribed in the agreement.



NOTE 21 - SEGMENT INFORMATION

Segments are identifiable activities reported within or as part of an enterprise fund by which some form of revenuesupported debt is outstanding. Furthermore, to qualify as a segment, an activity must meet an external requirement to separately account for a specific revenue stream and the associated expenses, gains, and losses. The State maintains two enterprise funds that qualify as a segment. Financial information for each segment is included within the nonmajor enterprise funds. The following paragraphs describe the State's segments.

State Road and Tollway Authority - I-75 Northwest Corridor Express Lane Project, received loan funds from the Transportation Infrastructure Finance and Innovation Act (TIFIA). The TIFIA loan funds used to build various express lanes.

State Road and Tollway Authority - I-75 South Metro Express Lane Fund, issued revenue bonds to pay the costs of certain tolling infrastructure, finance a debt service reserve, and pay the costs of issuance of the bonds.

(Table on next page)



NOTE 21 - SEGMENT INFORMATION (continued)

Summary financial information for the State's segments for the year ended June 30, 2019 is presented below (amount in thousands):

	I-75 Northwest Corridor Express <u>Lanes Project</u>	
Condensed Statement of Net Position Assets		
Current Assets	\$ 25,318	\$ 13,926
Noncurrent Assets	13	⁵ 13,720
Due from Other Funds		876
Capital Assets	16,956	9,873
Total Assets	42,287	24,734
Deferred Outflows	58	165
Liabilities		
Current Liabilities	31,876	115
Noncurrent Liabilities	228,615	43,776
Due to Other Funds	381	1,318
Total Liabilities	260,872	45,209
Deferred Inflows	60	173
Net Position Net Investment in Capital Assets	16,956	(707)
Restricted	10,950	3,507
Unrestricted	(235,543)	(23,282)
Total Net Position	(218,587)	(20,482)
Condensed Statement of Revenues, Expenses and Changes in Net Position Operating Revenues Depreciation/Amortization Expense Other Operating Expenses	2,000	2,453 (2,920) (4,413)
Operating Income (Loss)	(675)	(4,880)
Nonoperating Revenues (Expenses)	1.520	256
Investment Income	1,529	256
Other Nonoperating Revenues Interest Expense	5,423 (7,733)	(2,215)
Other Nonoperating Expenses	(117,800)	(2,213)
Capital Contributions	10,594	
Net Transfers	(29)	(71)
Change in Net Position	(108,691)	(6,910)
Beginning Net Position (restated)	(109,896)	(13,572)
Ending Net Position	\$ (218,587)	\$ (20,482)
Condensed Statement of Cash Flows Net Cash Provided By (Used In):		
Operating Activities	\$ (17,153)	\$ (4,585)
Noncapital Financing Activities	400	(543)
Capital and Related Financing	(109,547)	(2,600)
Investing Activities	1,529	256
Net Increase (Decrease)	(124,771)	(7,472)
Beginning Cash and Cash Equivalents	<u> </u>	<u>\$ 13,004</u>
Ending Cash and Cash Equivalents	\$ 25,318	<u>\$ 13,904</u>



NOTE 22 - SUBSEQUENT EVENTS

A. Primary Government

Long-term Debt Issues

General Obligation Bonds Issued

In June 2019, the State sold General Obligation bonds 2019A and 2019B for \$636.1 million and \$278.6 million, respectively in the total amount of \$914.7 million, delivered on July 18, 2019. The bonds were sold to provide funds for various capital outlay projects of the State, for county and independent school systems through the Department of Education, to finance projects and facilities for both the Board of Regents of the University System of Georgia (BOR) and the Technical College System of Georgia, and to provide loans through Georgia Environmental Finance Authority (GEFA) to local governments and local government entities for water and sewerage facilities. The true interest cost on the 2019AB bonds was 2.486% and the average life is 10.444 years.

General Obligation Refunding Bonds

In June 2019, the State sold General Obligation refunding bonds in the total amount of \$35.9 million for delivery on July 18, 2019. To provide funds to refund all or a portion of the State Bonds 2009E (\$16.8 million refunding par) and 2009I (\$19.1 million refunding par). The true interest cost for the Series 2019C refunding bonds, which have an average life of 2.018 years, is 1.332%.

Other Subsequent Events

Board of Regents

In fiscal year 2019, Board of Regents (the Board), by and on behalf Georgia Tech Facilities, Inc, (GTFI) issued Series 2019A bonds (\$37.2 million par value) to refinance Series 2007A and Series 2009B-1 bonds related to the North Avenue Apartments. The Series 2019A bonds closed on September 18, 2019 with an All-In True Interest Cost of 1.59%. Total savings related to this refinancing is \$11.9 million.

GTFI issued Series 2019B bonds (\$28.5 million par value) to refinance Series 2009A bonds related to the Electrical Substation and System. The Series 2019B bonds closed on September 18, 2019 with an All-In True Interest Cost of 2.55%. Total savings related to this refinancing is \$11.3 million.

On July 9, 2019, the Board, by and on behalf University of Georgia Research Foundation, Inc., the Real Estate Board approved the \$10.5 million acquisition of a 6.6-mile, 77 acre, rail corridor that is adjacent to the University. A Real Estate Foundation LLC completed the purchase on August 19, 2019. The purchase was funded with unrestricted cash of \$5.0 million and borrowings of \$5.5 million on the revolving credit agreement.

B. Component Units

Other Subsequent Events

Georgia Housing and Finance Authority

The Georgia Housing and Finance Authority (GHFA) has issued 2019 Series B Single-Family Mortgage Bonds. The issue was for \$138.7 million and closed on October 10, 2019. On December 1, 2019, a bond redemption of \$21.3 million occurred.



NOTE 22 - SUBSEQUENT EVENTS (continued)

Additionally, GHFA has requested for the approval from the Georgia State Financing and Investment Commission (GSFIC) of the issuance and sale of up to \$250.0 million in aggregate principal of single family mortgage bonds during calendar year 2020 and GHFA recommended the underwriting team for calendar year 2020 through 2022.

Georgia World Congress Center Authority

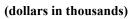
The Georgia World Congress Center Authority has requested for the approval from GSFIC of the issuance and the sale of up to \$500.0 million in aggregate principal of hotel revenue bonds and the authorization of a non recourse loan up to \$60.0 million secured solely by certain stadium payments in order to provide additional funds for the hotel project.

Georgia Ports Authority

The Georgia Ports Authority board has unanimously voted to approve a resolution authorizing the executive director and the chief administrative officer to enter into a purchase and sale agreement to acquire 145 acres of real property from PCS Nitrogen Inc. for \$18.7 million, subject to due diligence.

REQUIRED SUPPLEMENTARY INFORMATION

State of Georgia Required Supplementary Information **Budgetary Comparison Schedule Budget Fund** For the Fiscal Year Ended June 30, 2019



	Original propriation	 Amended Appropriation	Final Budget	Actual	Variance
Funds Available					
State Appropriation					
State General Funds	\$ 22,559,798	\$ 23,201,429	\$ 23,201,429	\$ 23,020,238	\$ 181,191
State Motor Fuel Funds	1,830,500	1,895,444	1,895,444	1,895,444	—
Lottery Proceeds	1,201,496	1,204,405	1,204,405	1,204,209	196
Tobacco Settlement Funds	150,160	161,723	161,723	161,723	—
Brain and Spinal Injury Trust Fund	1,446	1,446	1,446	1,446	_
Nursing Home Provider Fees	157,326	157,326	154,263	154,263	—
Hospital Provider Fee	326,188	311,653	333,955	333,955	—
State Funds - Prior Year Carry-Over					
State General Fund Prior Year	—	_	177,793	197,500	(19,707)
Brain and Spinal Injury Trust Fund - Prior Year	—	_	1,058	1,037	21
State Motor Fuel Funds - Prior Year	—	_	171,452	2,046,873	(1,875,421)
Federal Funds					
CCDF Mandatory & Matching Funds	97,618	97,618	89,923	89,790	133
Child Care and Development Block Grant	127,918	138,020	201,802	201,715	87
Community Mental Health Services Block Grant	14,164	14,164	24,704	24,287	417
Community Services Block Grant	16,845	16,329	20,667	20,176	491
Federal Highway Administration - Highway Planning and Construction	1,528,196	1,507,117	1,605,246	1,260,244	345,002
Foster Care Title IV-E	102,896	102,263	97,557	98,536	(979)
Low-Income Home Energy Assistance	56,083	56,008	94,340	91,553	2,787
Maternal and Child Health Services Block Grant	16,884	16,977	27,581	27,050	531
Medical Assistance Program	7,415,065	7,512,491	8,414,858	8,116,344	298,514
Prevention and Treatment of Substance Abuse Block Grant	48,001	47,852	66,287	61,239	5,048
Preventive Health and Health Services Block Grant	2,207	2,207	6,100	5,001	1,099
Social Services Block Grant	52,605	53,608	59,281	48,333	10,948
State Children's Insurance Program	461,089	461,089	621,694	459,278	162,416
Temporary Assistance for Needy Families Block Grant	326,177	327,876	334,344	317,820	16,524
TANF Transfer to SSBG	4,202	1,337	1,764	1,764	
Federal Funds Not Itemized	3,769,794	4,034,565	4,504,072	4,289,358	214,714
American Recovery and Reinvestment Act of 2009	- , , ,	,,	,,	,,	
Medical Assistance Program	_	_	_	21,416	(21,416)
Federal Funds Not Itemized	36,134	36,134	54,208	41,824	12,384
Other Funds	10,729,386	11,158,307	15,069,516	15,079,273	(9,757)
Total Funds Available	 51,032,178	 52,517,388	58,596,912	59,271,689	(674,777)
Expenditures	 , ,	 			
Georgia Senate	11,626	11,673	12,342	10,285	2,057
Georgia House of Representatives	19,590	19,590	21,085	17,721	3,364
Georgia General Assembly Joint Offices	12,123	12,887	13,172	11,704	1,468
Audits and Accounts, Department of	36,349	36,356	36,368	35,485	883
Appeals, Court of	21,435	21,503	21,694	21,395	299
Judicial Council	20,169	20,156	22,012	21,252	760
Juvenile Courts	8,751	8,722	8,823	8,384	439
Prosecuting Attorneys	83,782	83,824	117,341	111,427	5,914
Superior Courts	73,736	73,751	73,760	72,714	1,046
Supreme Court	16,379	16,216	16,335	16,138	1,010
Accounting Office, State	29,408	29,079	32,970	32,612	358
Administrative Services, Department of	200,722	240,151	260,979	247,447	13,532
Agriculture, Department of	57,662	155,954	159,660	142,017	13,532
5 · · ·			,		210
Banking and Finance, Department of Pahaviaral Health & Davalanmental Disabilities, Department of	13,293	13,295	13,360	13,150	
Behavioral Health & Developmental Disabilities, Department of	1,328,812	1,357,237	1,440,704	1,404,666	36,038
Community Affairs, Department of	277,780	314,752	313,538	312,628	910
Community Health, Department of	15,334,734	15,648,995	19,345,804	15,812,002	3,533,802
Community Supervision, Department of	182,546	182,830	185,743	180,913	4,830
					(continued)

State of Georgia

Required Supplementary Information Budgetary Comparison Schedule Budget Fund For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

	Original	Amended	Final		
	Appropriation	Appropriation	Budget	Actual	Variance
Expenditures					
Corrections, Department of	1,202,705	1,205,013	1,248,876	1,239,614	9,262
Defense, Department of	68,170	82,253	98,777	84,387	14,390
Driver Services, Department of	72,022	73,643	85,969	84,180	1,789
Early Care and Learning, Department of	820,533	835,701	879,224	878,665	559
Economic Development, Department of	35,365	35,369	38,430	37,827	603
Education, Department of	11,901,526	12,245,744	12,286,146	12,123,962	162,184
Employees' Retirement System of Georgia	60,670	59,698	59,698	57,749	1,949
Forestry Commission, State	50,249	60,460	71,446	70,681	765
Governor, Office of the	95,709	164,662	352,924	217,583	135,341
Human Services, Department of	1,941,205	1,935,329	2,026,363	1,925,895	100,468
Insurance, Department of	21,105	20,881	21,782	21,350	432
Investigation, Georgia Bureau of	248,506	286,014	331,286	301,489	29,797
Juvenile Justice, Department of	351,351	351,012	360,947	353,551	7,396
Labor, Department of	128,166	120,450	113,777	101,833	11,944
Law, Department of	72,964	72,872	97,772	95,146	2,626
Natural Resources, Department of	279,952	295,345	362,328	330,963	31,365
Pardons and Paroles, State Board of	17,617	18,050	18,229	17,857	372
Properties Commission, State	2,100	2,100	2,100	1,780	320
Public Defender Council, Georgia	92,418	92,670	96,500	90,214	6,286
Public Health, Department of	688,430	693,630	836,601	823,807	12,794
Public Safety, Department of	248,077	266,171	269,261	255,296	13,965
Public Service Commission	11,010	11,178	12,067	11,932	135
Regents, University System of Georgia	7,818,299	8,078,368	8,872,103	8,052,185	819,918
Revenue, Department of	194,679	229,110	251,668	244,170	7,498
Secretary of State	29,776	29,611	33,069	32,108	961
Student Finance Commission and Authority, Georgia	986,472	990,347	984,839	905,160	79,679
Teachers' Retirement System	39,718	41,043	41,043	37,116	3,927
Technical College System of Georgia	877,985	942,508	1,092,417	951,427	140,990
Transportation, Department of	3,598,793	3,683,459	4,095,475	3,563,462	532,013
Veterans Service, Department of	40,883	40,892	50,521	50,008	513
Workers' Compensation, State Board of	19,329	19,337	19,338	18,148	1,190
State of Georgia General Obligation Debt Sinking Fund	1,287,497	1,287,497	1,390,246	1,234,709	155,537
Total Expenditures	51,032,178	52,517,388	58,596,912	52,686,194	5,910,718
Excess of Funds Available over Expenditures	<u> </u>	<u>\$ </u>	\$	\$ 6,585,495	\$ (6,585,495)

State of Georgia Required Supplementary Information **Budget to GAAP Reconciliation** For the Fiscal Year Ended June 30, 2019

(dollars in thousands)

		General Fund
Sources/Inflows of Resources		
Summary Actual amounts (budgetary basis) "Total Funds Available" from the budgetary comparison schedule	\$	59,271,689
Differences - budget to GAAP Perspective Differences:		
Revenues of budgeted funds included in the Budget Fund, but removed from the General Fund for financial reporting purposes.		(10,671,311)
Revenues of nonbudgeted funds included within the State's reporting entity, and shown in the General Fund for financial reporting purposes.		27,082,123
State appropriations revenues are budgetary resources, but are netted with the State's treasury disbursements for GAAP purposes.		(26,771,280)
Basis Differences:		
Accrual of taxpayer assessed receivables and revenues.		(46,565)
Fund balance adjustments are not inflows of budgetary resources, but affect current year revenues for GAAP reporting purposes.		(115,635)
Prior Year Reserves Available for Expenditure are included in Funds Available, but are not revenues for GAAP reporting purposes.		(5,666,188)
Revenues from intrafund transactions are budgetary resources, but are not revenues for GAAP reporting purposes.		(578,297)
Receivables and revenues accrued based on encumbrances reported for goods and services ordered but not received are reported in the year the order is placed for budgetary purposes, but in the year the goods and services are received for GAAP reporting.		18,186
Transfers from other funds are inflows of budgetary resources, but are not revenues for financial reporting purposes.		(62,269)
Revenue reported for nonbudgetary food stamp program and donated commodities.		2,361,097
Revenue reported for on-behalf payments related to pensions.		60,686
Other net accrued receivables and revenues.		(57,544)
Total Revenues (General Fund) as reported on the Statement of Revenues, Expenditures, and	¢	44.004.000
Changes in Fund Balance - Governmental Funds	\$	44,824,692 (continued)
		` '

Required Supplementary Information Budget to GAAP Reconciliation For the Fiscal Year Ended June 30, 2019

(dollars in thousands)

	General Fund
Uses/Outflows of Resources	
Summary Actual amounts (budgetary basis) "Total Expenditures" from the budgetary comparison schedule	\$ 52,686,194
Differences - budget to GAAP Perspective Differences:	
Expenditures of Budgeted Funds for organizations not reported in the General Fund.	(12,923,162)
Expenditures of nonbudgeted Funds included within the State's reporting entity, and shown in the General Fund for financial reporting purposes.	139,331
Basis Differences:	
Accrual of teacher salaries not included in current budget year.	(4,526)
Capital lease acquisitions are not outflows of budgetary resources, but are recorded as current expenditures and other financing sources for GAAP reporting.	16,304
Change in expenditure accrual for nonbudgetary Medicaid claims	3,500
Encumbrances for goods and services ordered but not received are reported as budgetary expenditures in the year the order is placed, but are reported as GAAP expenditures in the year the goods and services are received.	11,653
Expenditures from intrafund transactions are budgetary outflows, but are not expenditures for GAAP reporting purposes.	(579,161)
Expenditures reported for nonbudgetary food stamp program and donated commodities.	2,361,097
Expenditures reported for on-behalf payments related to pensions.	60,686
Fund balance adjustments are not outflows of budgetary resources, but affect current year expenditures for GAAP reporting purposes.	(353,997)
Transfers to other funds are outflows of budgetary resources, but are not expenditures for GAAP reporting purposes.	(1,599,361)
Other net accrued liabilities and expenditures.	 (43,038)
Total Expenditures (General Fund) as reported on the Statement of Revenues, Expenditures, and Changes in Fund Balance - Governmental Funds	\$ 39,775,520





Required Supplementary Information Notes to Required Supplementary Information Budgetary Comparison For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

Budgetary Reporting

Budgetary Process

OCGA Title 45, Chapter 12, Article 4 sets forth the process for the development and monitoring of an appropriated budget for the State. Not later than September 1 of each year, the head of each executive branch budget unit (e.g. agencies, departments, and commissions) must submit estimates of the financial requirements for the subsequent fiscal year to Office of Planning and Budget (OPB), which operates under the direction of the Governor. Budget estimates relative to the legislative and judicial branches of State government are provided to OPB for the purpose of estimating the total financial needs of the State, but are not subject to revision or review by OPB.

The Governor, through the OPB, examines the estimates and may investigate and revise executive branch submissions as necessary. Upon the completion and revisions of the estimates, the Governor must prepare and submit a budget report to the General Assembly within five days of the date on which the General Assembly convenes. The Governor also possesses the responsibility and authority to establish the revenue estimate for the corresponding fiscal year.

The General Assembly, after adopting such modifications to the Governor's budget report as it deems necessary, enacts the General Appropriations Act for the subsequent fiscal year. Each General Appropriations Act enacted, along with amendments as are adopted, continues in force and effect for the next fiscal year after adoption. In accordance with the Georgia Constitution, Article III, Section IX, Paragraph IV, "The General Assembly shall not appropriate [State] funds for any given fiscal year which, in aggregate, exceed a sum equal to the amount of unappropriated surplus expected to have accrued in the state treasury at the beginning of the fiscal year together with an amount not greater than the total treasury receipts from existing revenue sources anticipated to be collected in the fiscal year, less refunds, as estimated in the budget report and amendments thereto." The Constitution also authorizes the passage of additional Supplementary Appropriation Acts, provided sufficient surplus is available or additional revenue measures have been enacted. Finally, the Governor may withhold allotments of funds to budget units in order to maintain this balance of revenues and expenditures. Compliance with this requirement is demonstrated in the Governor's budget report and the Appropriation Acts for each fiscal year.

To the extent that federal funds received by the State are changed by federal authority or exceed the amounts appropriated by the original or supplementary appropriations acts, such excess, changed or unanticipated funds are "continually appropriated;" that is, they are amended in to departmental budgets when such events are known. Similarly, revenues generated by departments that may be retained for departmental operations ("other funds") are amended in as such funds are collected or anticipated.

Internal transfers within a budget unit are subject to the condition that no funds shall be transferred for the purpose of initiating a new program area which otherwise had received no appropriation of any funding source.

The Governor, through OPB, requires each budget unit, other than those of the legislative and judicial branches, to submit an annual operating budget based on the programs set forth in the Appropriations Act. Budget units submit periodic allotment requests, which must be approved in conjunction with quarterly work programs prior to release of appropriated funds. Further monitoring of budget unit activities is accomplished by review of expenditure reports, which are submitted quarterly to OPB.



Required Supplementary Information Notes to Required Supplementary Information Budgetary Comparison For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

The appropriated budget covers a majority of the organizations comprising the State's General Fund, and includes appropriations for debt service. The budget also includes certain proprietary funds, the Higher Education Fund, and the administrative costs of operating certain public employee retirement systems.

Budget units of the State are responsible for budgetary control of their respective portion of the total State appropriated budget. The legal level of budgetary control is at the program level by funding source. Due to the complex nature of the State appropriated budget, a separate *Budgetary Compliance Report* is published each year to report on compliance at the legal level of budgetary control.

Budgetary Basis of Accounting

The annual budget of the State is prepared on the modified accrual basis utilizing encumbrance accounting with the following exceptions: federal and certain other revenues are accrued based on the unexecuted portion of long-term contracts; and intrafund transactions are disclosed as revenues and expenditures. Under encumbrance accounting, encumbrances are used to indicate the intent to purchase goods or services. Liabilities and expenditures are recorded upon issuance of completed purchase orders. Goods or services need not have been received for liabilities and expenditures to be recorded.

The budget represents departmental appropriations recommended by the Governor and adopted by the General Assembly prior to the beginning of the fiscal year. Annual appropriated budgets are adopted at the departmental (budget unit) level by program and funding source. All unencumbered annual appropriations lapse at fiscal year-end unless otherwise specified by constitutional or statutory provisions. Supplementary and amended appropriations may be enacted during the next legislative session by the same process used for original appropriations.

Budgetary Compliance Exceptions

Expenditures of State funds may not exceed the amount appropriated at the legal level of control as provided by the Constitution. For the year ended June 30, 2019, total State funds expenditures did not exceed appropriated amounts.

For more information on budgetary exceptions, please refer to the *Budgetary Compliance Report* issued under separate cover. This report can be found on website of the State Accounting Office at <u>http://sao.georgia.gov/</u>.

Budgetary Presentation

The accompanying Budgetary Comparison Schedule for the Budget Fund presents comparisons of the legally adopted budget with actual data prepared on the budgetary basis of accounting utilized by the State. The Budget Fund, a compilation of the budget units of the State, differs from the funds presented in the basic financial statements. The Budget-to-GAAP reconciliation immediately following the budgetary comparison schedule identifies the types and amounts of adjustments necessary to reconcile the Budget Fund with the General Fund as reported in accordance with generally accepted accounting principles.

Required Supplementary Information Public Entity Risk Pool For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

Claims Development Information

The table below illustrates how the State Health Benefit Plan's (SHBP) earned revenues and investment income compare to related costs of loss and other expenses assumed by the SHBP as of the end of the current fiscal year. The rows of the table are defined as follows: (1) This line shows the total of each fiscal year's earned contribution revenues and investment revenues. (2) This line shows each fiscal year's other operating costs of the fund including overhead and claims expense not allocable to individual claims. (3) This line shows the fund's incurred claims and allocated claim adjustment expenses (both paid and accrued) as originally reported at the end of the first year in which the event that triggered coverage under the contract occurred (policy year). (4) This section shows the cumulative net amounts paid as of the end of the policy year. (5) This section shows how current year's net incurred claims increased or decreased as of the end of the year. This annual reestimation results from new information received on known claims, reevaluation of existing information on known claims, as well as emergence of new claims not previously known. (6) This line compares the latest reestimated net incurred claims amount to the amount originally established (line 3) and shows whether this latest estimate of claims cost is greater or less than originally thought. As data for individual policy years mature, the correlation between original estimates and reestimated amounts is commonly used to evaluate the accuracy of net incurred claims currently recognized in less mature policy years.

(Table on next page)



Required Supplementary Information Public Entity Risk Pool For the Fiscal Year Ended June 30, 2019

(dollars in thousands)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
1) Required contribution and investment revenue earned							
(fiscal year)	\$2,366,054	\$2,434,392	\$2,267,667	\$2,145,197	\$2,271,697	\$2,966,874	\$2,457,668
2) Unallocated expenses	100,532	150,939	155,501	144,515	140,450	132,097	118,674
 Estimated claims and expenses, end of policy year, net incurred 	2,074,390	1,880,541	1,882,588	2,013,443	2,158,188	2,269,151	2,495,517
4) Net paid (cumulative) as of:							
End of policy year	1,919,597	1,758,032	1,708,902	1,847,202	2,052,213	2,187,695	2,348,115
One year later	2,223,219	1,931,895	1,871,509	1,915,972	2,151,121	2,340,034	
Two years later	2,223,219	1,931,895	1,871,509	1,915,972	2,151,121		
Three years later	2,223,219	1,931,895	1,871,509	1,915,972			
Four years later	2,223,219	1,931,895	1,871,509				
Five years later	2,223,219	1,931,895					
Six years later ⁽¹⁾	2,223,219						
5) Reestimated net incurred claims and expenses:							
End of policy year	2,074,390	1,880,541	1,882,588	2,013,443	2,158,188	2,269,151	2,495,517
One year later	2,068,566	1,879,800	1,871,599	1,915,823	2,150,162	2,340,850	
Two years later	2,014,054	1,934,321	1,871,599	1,915,823	2,148,700		
Three years later	2,019,869	1,934,321	1,871,599	1,915,846			
Four years later	2,019,869	1,934,321	1,871,599				
Five years later	2,019,869	1,934,321					
Six years later ⁽¹⁾	2,019,869						
5) Increase (decrease) in estimated net incurred claims and expenses from the end of policy year	\$ (54,521)	\$ 53,780	\$ (10,989)	\$ (97,597)	\$ (9,488)	\$ 71,699	\$

Fiscal and Policy Year Ended

⁽¹⁾Data not available prior to fiscal year 2013



REQUIRED SUPPLEMENTARY INFORMATION - PENSIONS

Required Supplementary Information Schedules of Employers' and Nonemployers' Contributions Defined Benefit Pension Plans For the Last Ten Fiscal Years

(dollars in thousands)

	Year Ended	Actuarially determined contribution (a)	Contributions in relation to the actuarially determined contribution (b)	Contribution deficiency (excess) (a-b)	Covered payroll (c)	Contributions as a percentage of covered payroll (b/c)
Employees' Retirement System	6/30/2010	263,064	263,064		2,571,042	10.23%
i v v	6/30/2011	261,132	261,132	_	2,486,780	10.50%
	6/30/2012	273,623	274,034	(411)	2,414,884	11.35%
	6/30/2013	358,376	358,992	(616)	2,335,773	15.37%
	6/30/2014	428,982	429,752	(770)	2,335,773	18.40%
	6/30/2015	517,220	519,163	(943)	2,353,225	22.06%
	6/30/2016	595,124	595,566	(442)	2,390,457	24.91%
	6/30/2017	624,623	625,281	(658)	2,565,918	24.37%
	6/30/2018	650,073	652,167	(2,094)	2,635,896	24.74%
	6/30/2019	649,209	649,209	—	2,615,491	24.82%
Public School Employees Retirement System ¹	6/30/2010	5,530	5,530	_	N/A	N/A
x v v	6/30/2011	7,509	7,509	_	N/A	N/A
	6/30/2012	15,884	15,884	_	N/A	N/A
	6/30/2013	24,829	24,829	_	N/A	N/A
	6/30/2014	27,160	27,160	_	N/A	N/A
	6/30/2015	28,461	28,461	_	N/A	N/A
	6/30/2016	28,580	28,580	_	N/A	N/A
	6/30/2017	26,277	26,277	_	N/A	N/A
	6/30/2018	29,276	29,276	_	N/A	N/A
	6/30/2019	30,263	30,263	—	N/A	N/A
Georgia Judicial Retirement System	6/30/2010	2,600	2,600	—	51,293	5.07%
	6/30/2011	1,932	1,932	—	52,331	3.69%
	6/30/2012	2,083	2,083	_	51,898	4.01%
	6/30/2013	2,279	2,279	_	52,807	4.32%
	6/30/2014	2,375	2,375	_	54,787	4.33%
	6/30/2015	4,261	4,261	_	54,272	7.85%
	6/30/2016	7,623	7,623	—	57,401	13.28%
	6/30/2017	6,684	6,684	—	59,695	11.20%
	6/30/2018	6,566	6,566	_	60,572	10.84%
	6/30/2019	5,254	5,254	—	60,532	8.68%
Teachers Retirement System of Georgia	6/30/2010	1,057,416	1,057,416	—	10,856,427	9.74%
	6/30/2011	1,089,912	1,089,912	-	10,602,257	10.28%
	6/30/2012	1,082,224	1,082,224	_	10,527,471	10.28%
	6/30/2013	1,180,469	1,180,469	—	10,345,916	11.41%
	6/30/2014	1,270,963	1,270,963	_	10,349,862	12.28%
	6/30/2015	1,406,706	1,406,706	—	10,697,384	13.15%
	6/30/2016	1,580,532	1,580,532	—	11,075,907	14.27%
	6/30/2017 6/30/2018	1,654,844 2,018,724	1,654,844 2,018,724		11,596,664 12,009,066	14.27% 16.81%
	6/30/2018	2,566,403	2,566,403		12,009,000	20.90%
Desse Officerel Ampity and Desselft Fund of Coordia					N/A	
Peace Officers' Annuity and Benefit Fund of Georgia	6/30/2010 6/30/2011	14,034 19,760	17,281 16,185	(3,247) 3,575	N/A N/A	N/A N/A
	6/30/2011	19,760	16,185	3,504	N/A N/A	N/A N/A
	6/30/2012	22,343	15,472	6,871	N/A N/A	N/A N/A
	6/30/2014	22,343	15,342	6,998	N/A N/A	N/A N/A
	6/30/2014	17,815	15,341	2,474	N/A N/A	N/A N/A
	6/30/2015	18,082	14,713	3,369	N/A N/A	N/A N/A
	6/30/2017	12,651	14,005	(1,354)	N/A	N/A
	6/30/2018	11,351	13,826	(2,475)	N/A	N/A
	6/30/2019	10,430	14,444	(4,014)	N/A	N/A
Georgia Firefighters' Pension Fund	6/30/2010	36,031	25,328	10,703	N/A	N/A
	6/30/2011	36,031	25,966	10,065	N/A	N/A
	6/30/2012	29,995	27,073	2,922	N/A	N/A
	6/30/2013	29,995	28,442	1,553	N/A	N/A
	6/30/2014	28,956	30,034	(1,078)	N/A	N/A
	6/30/2015	26,215	31,489	(5,274)	N/A	N/A
	6/30/2016	28,030	32,684	(4,654)	N/A	N/A
	6/30/2017	28,987	34,152	(5,165)	N/A	N/A
	6/30/2018	28,191	35,715	(7,524)	N/A	N/A
	6/30/2019	29,732	37,902	(8,170)	N/A	N/A

This data, except for annual covered payroll, was provided by each plan's actuary.

No statistics regarding covered payroll are available. Contributions are not based upon members' salaries, but are simply \$4.00 per member, per month, for nine months, each fiscal year if hired prior to July 1, 2012 and \$10 per month, per member, per month, for nine months, if hired after July 1, 2012.

Required Supplementary Information Schedules of Employers' and Nonemployers' Net Pension Liability Defined Benefit Pension Plans For the Last Six Fiscal Years

(dollars in thousands)

	2019	2018		2017		2016		2015	2014
Employees' Retirement System:	 								
Total pension liability	\$ 17,744,003	\$ 17,628,219	\$	17,159,634	\$	17,103,987	\$	17,019,362	\$ 17,042,149
Plan fiduciary net position	13,617,472	13,517,186	13,098,299		12,373,567		12,967,964		13,291,531
Employers' and nonemployers' net pension liability	\$ 4,126,531	\$ 4,111,033	\$	4,061,335	\$	4,730,420	\$	4,051,398	\$ 3,750,618
Plan fiduciary net position as a percentage of the total pension liability	 76.74 %	 76.68 %		76.33 %		72.34 %		76.20 %	 77.99 %
Covered payroll	\$ 2,615,491	\$ 2,635,896	\$	2,565,918	\$	2,390,457	\$	2,353,225	\$ 2,335,773
Employers' and nonemployers' net pension liability as a percentage of covered payroll	157.77 %	155.96 %		158.28 %		197.89 %		172.16 %	160.57 %
Public School Employees Retirement System:									
Total pension liability	\$ 1,107,496	\$ 1,072,165	\$	1,013,163	\$	992,292	\$	946,200	\$ 930,745
Plan fiduciary net position	941,588	914,138		868,134		803,775		823,150	821,733
Employers' and nonemployers' net pension liability	\$ 165,908	\$ 158,027	\$	145,029	\$	188,517	\$	123,050	\$ 109,012
Plan fiduciary net position as a percentage of the total pension liability	 85.02 %	 85.26 %		85.69 %		81.00 %		87.00 %	88.29 %
Covered payroll	N/A	N/A		N/A		N/A		N/A	N/A
Employers' and nonemployers' net pension liability as a percentage of covered payroll	N/A	N/A		N/A		N/A		N/A	N/A
Georgia Judicial Retirement System:									
Total pension liability	\$ 440,041	\$ 428,624	\$	394,736	\$	368,669	\$	357,081	\$ 350,443
Plan fiduciary net position	479,372	466,657		441,182		403,011		404,852	400,790
Employers' and nonemployers' net pension (asset)	\$ (39,331)	\$ (38,033)	\$	(46,446)	\$	(34,342)	\$	(47,771)	\$ (50,347)
Plan fiduciary net position as a percentage of the total pension liability	108.94 %	108.87 %		111.77 %		109.32 %		113.38 %	114.37 %
Covered payroll	\$ 60,532	\$ 60,572	\$	59,695	\$	57,401	\$	54,272	\$ 54,787
Employers' and nonemployers' net pension (asset) as a percentage of covered payroll	(64.98%)	(62.79%)		(77.81%)		(59.83%)		(88.02%)	(91.90%) (continued)

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia.

Required Supplementary Information Schedules of Employers' and Nonemployers' Net Pension Liability Defined Benefit Pension Plans For the Last Six Fiscal Years

(dollars in thousands)

	2019	2018			2017		2016		2015		2014
Teachers Retirement System:											
Total pension liability	\$ 100,291,641	\$9	94,095,067	\$ 8	89,926,280	\$8	6,183,526	\$8	2,023,120	\$7	9,099,772
Plan fiduciary net position	78,788,937	7	75,532,925	71,340,972		65,552,411		66,799,111		6	6,466,091
Employers' and nonemployers' net pension liability	\$ 21,502,704	\$ 1	\$ 18,562,142		\$ 18,585,308		\$20,631,115		5,224,009	\$1	2,633,681
Plan fiduciary net position as a percentage of the total pension liability	78.56 %		80.27 %		79.33 %		76.06 %		81.44 %		84.03 %
Covered payroll	\$ 12,279,440	\$ 1	12,009,066	\$	11,596,664	\$1	1,075,907	\$1	0,697,384	\$1	0,349,862
Employers' and nonemployers' net pension liability as a percentage of covered payroll	175.11 %		154.57 %		160.26 %		186.27 %		142.32 %		122.07 %
Peace Officers' Annuity and Benefit Fund of Georgia:											
Total pension liability	\$ 802,169	\$	781,281	\$	742,609	\$	747,459	\$	720,213	\$	674,725
Plan fiduciary net position	 825,675		795,273		754,615		689,022		703,536		698,889
Employers' and nonemployers' net pension liability/ (asset)	\$ (23,506)	\$	(13,992)	\$	12.006	\$	58,437	\$	16,677	\$	(24,164)
Plan fiduciary net position as a percentage of the total pension liability	102.93 %		101.79 %		101.62 %		92.18 %		97.68 %		103.58 %
Covered payroll	N/A		N/A		N/A		N/A		N/A		N/A
Employers' and nonemployers' net pension liability/(asset) as a percentage of covered payroll	N/A		N/A		N/A		N/A		N/A		N/A
Georgia Firefighters' Pension Fund:											
Total pension liability	\$ 1,103,481	\$	1,065,923	\$	1,007,205	\$	970,157	\$	923,835	\$	848,314
Plan fiduciary net position	 934,352		894,871		843,414		766,678		767,333		761,115
Employers' and nonemployers' net pension liability	\$ 169,129	\$	171,052	\$	163,791	\$	203,479	\$	156,502	\$	87,199
Plan fiduciary net position as a percentage of the total pension liability	 84.67 %		83.95 %		83.74 %		79.03 %		83.06 %		89.72 %
Covered payroll	N/A		N/A		N/A		N/A		N/A		N/A
Employers' and nonemployers' net pension liability as a percentage of covered payroll	N/A		N/A		N/A		N/A		N/A		N/A

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia.



Required Supplementary Information Schedules of Changes in Employers' and Nonemployers' Net Pension Liability Defined Benefit Pension Plans For the Last Six Fiscal Years

(dollars in thousands)

Employees' Retirement System:	2019		2018		2017		2016		2015		2014
Total pension liability:											
Service cost	\$ 135,679	\$	129,294	\$	125,910	\$	143,043	\$	145,045	\$	150,075
Interest	1,233,882		1,233,689		1,230,175		1,225,650		1,227,846		1,224,380
Benefit changes	42,097		31,097		30,563						—
Differences between expected and actual experience	155,573		180,655		72,315		(238)		(53,950)		—
Changes of assumptions	—		314,733				70,890				—
Benefit payments	(1,443,756)		(1,413,298)		(1,394,283)		(1,347,633)		(1,334,278)		(1,305,998)
Refunds of contributions	(7,691)		(7,585)		(9,033)		(7,087)		(7,450)		(8,757)
Net change in total pension liability	115,784		468,585		55,647		84,625		(22,787)		59,700
Total pension liability-beginning	17,628,219		17,159,634		17,103,987		17,019,362		17,042,149		16,982,449
Total pension liability-ending (a)	17,744,003		17,628,219		17,159,634		17,103,987		17,019,362		17,042,149
Plan fiduciary net position:											
Contributions-employer	638,989		639,302		613,191		583,082		505,668		418,807
Contributions-nonemployer	10,220		12,865		12,080		12,484		12,495		10,945
Contributions-member	36,252		37,130		35,863		31,961		33,713		32,423
Administrative expense allotment	10		10		10		10		10		—
Net investment income	873,404		1,166,013		1,475,626		141,292		474,147		2,021,748
Benefit payments	(1,443,756)		(1,413,298)		(1,394,283)		(1,347,633)		(1,334,278)		(1,305,998)
Administrative expense	(7,142)		(8,056)		(8,732)		(8,506)		(7,872)		(7,440)
Refunds of contributions	(7,691)		(7,585)		(9,033)		(7,087)		(7,450)		(8,757)
Other*			(7,494)		10						
Net change in plan fiduciary net position	100,286		418,887		724,732		(594,397)		(323,567)		1,161,728
Plan fiduciary net position-beginning	13,517,186		13,098,299		12,373,567		12,967,964		13,291,531		12,129,803
Plan fiduciary net position-ending (b)	13,617,472		13,517,186		13,098,299		12,373,567		12,967,964		13,291,531
Net pension liability-ending (a)-(b)	\$ 4,126,531	\$	4,111,033	\$	4,061,335	\$	4,730,420	\$	4,051,398	\$	3,750,618
Public School Employees Retirement System:											
Total pension liability:											
Service cost	\$ 13,762	\$	13,180	\$	12,788	\$	11,952	\$	12,089	\$	11,049
Interest	75,923		73,643		72,157		68,776		67,652		66,143
Benefit changes	18,050		17,289		—		—		—		—
Differences between expected and actual experience	(8,159)		(3,943)		(3,665)		(9,483)		(6,858)		—
Changes of assumptions	—		21,354		—		33,215		—		—
Benefit payments	(63,637)		(61,820)		(59,378)		(57,903)		(56,972)		(56,189)
Refunds of contributions	(609)		(700)		(1,031)		(465)		(456)		(514)
Net change in total pension liability	35,330		59,003		20,871		46,092		15,455		20,489
Total pension liability-beginning	1,072,166		1,013,163		992,292		946,200		930,745		910,256
Total pension liability-ending (a)	1,107,496		1,072,166		1,013,163		992,292		946,200		930,745
Plan fiduciary net position:											
Contributions-nonemployer	30,263		29,276		26,277		28,580		28,461		27,160
Contributions-member	2,256		2,162		2,084		1,925		1,800		1,659
Net investment income	60,554		78,417		97,715		9,809		30,129		123,799
Benefit payments	(63,636)		(61,820)		(59,378)		(57,903)		(56,972)		(56,189)
Administrative expense	(1,378)		(1,331)		(1,308)		(1,321)		(1,545)		(1,450)
Refunds of contributions	(609)		(700)		(1,031)		(465)		(456)		(514)
Net change in plan fiduciary net position	27,450		46,004		64,359		(19,375)		1,417		94,465
Plan fiduciary net position-beginning	914,138	_	868,134	_	803,775	_	823,150	_	821,733	_	727,268
Plan fiduciary net position-ending (b)	941,588	_	914,138	_	868,134	_	803,775	_	823,150	_	821,733
Net pension liability-ending (a)-(b)	\$ 165,908	\$	158,028	\$	145,029	\$	188,517	\$	123,050	\$	109,012
											(continued)

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule includes all significant plans and funds administered by the State of Georgia.

*Pursuant to the requirements of GASB Statement 75, the fiscal year 2018 beginning Fiduciary Net Position was restated by \$7,494 to reflect the impact of recording the initial Deferred Outflows of Resources and the Net OPEB liabilities and OPEB asset.



Required Supplementary Information Schedules of Changes in Employers' and Nonemployers' Net Pension Liability Defined Benefit Pension Plans For the Last Six Fiscal Years

(dollars in thousands)

Georgia Judicial Retirement System:	2019	2018	2017	2016	2015	2014
Total pension liability:						
Service cost	\$ 13,350	\$ 13,019	\$ 12,514	\$ 12,713	\$ 7,751	\$ 7,584
Interest	30,267	28,666	26,826	26,058	25,566	24,530
Benefit changes	1,065	3,442	3,419	—	—	—
Differences between expected and actual experience	(5,250)	6,379	5,258	(3,603)	(7,542)	—
Changes of assumptions	_	7,466	—	(4,308)	—	—
Benefit payments	(27,462)	(24,934)	(21,784)	(19,011)	(18,365)	(17,441)
Refunds of contributions	(553)	(150)	(166)	(261)	(772)	(22)
Net change in total pension liability	11,417	33,888	26,067	11,588	6,638	14,651
Total pension liability-beginning	428,624	394,736	368,669	357,081	350,443	335,792
Total pension liability-ending (a)	440,041	428,624	394,736	368,669	357,081	350,443
Plan fiduciary net position:						
Contributions-employer	3,117	4,725	4,081	4,754	2,696	1,373
Contributions-nonemployer	2,137	1,841	2,603	2,869	1,564	1,002
Contributions-member	5,469	4,910	4,906	5,507	5,061	4,731
Net investment income	30,827	39,877	49,259	5,055	14,697	60,012
Benefit payments	(27,462)	(24,934)	(21,784)	(19,011)	(18,365)	(17,441)
Administrative expense	(820)	(794)	(728)	(754)	(819)	(754)
Refunds of contributions	(553)	(150)	(166)	(261)	(772)	(22)
Net change in plan fiduciary net position	12,715	25,475	38,171	(1,841)	4,062	48,901
Plan fiduciary net position-beginning	466,657	441,182	403,011	404,852	400,790	351,889
Plan fiduciary net position-ending (b)	479,372	466,657	441,182	403,011	404,852	400,790
Net pension (asset)-ending (a)-(b)	\$ (39,331)	\$ (38,033)	\$ (46,446)	\$ (34,342)	\$ (47,771)	\$ (50,347)
Teachers Retirement System:						
Total pension liability:						
Service cost	\$ 1,536,336	\$ 1,484,705	\$ 1,413,080	\$ 1,435,808	\$ 1,386,498	\$ 1,374,556
Interest	6,868,617	6,565,372	6,293,611	5,990,178	5,779,597	5,557,046
Differences between expected and actual experience	430,272	894,691	573,483	380,526	(165,785)	
Changes of assumptions	2,388,357			662,047		_
Benefit payments	(4,950,465)	(4,699,920)	(4,461,124)	(4,228,819)	(3,996,879)	(3,764,452)
Refunds of contributions	(76,543)	(76,061)	(76,296)	(79,334)	(80,083)	(87,095)
Net change in total pension liability	6,196,574	4,168,787	3,742,754	4,160,406	2,923,348	3,080,055
Total pension liability-beginning	94,095,067	89,926,280	86,183,526	82,023,120	79,099,772	76,019,717
Total pension liability-ending (a)	100,291,641	94,095,067	89,926,280	86,183,526	82,023,120	79,099,772
Plan fiduciary net position:	100,291,011	71,075,007	07,720,200	00,105,520	02,023,120	
Contributions - employer	2,560,810	2,014,088	1,648,411	1,572,624	1,399,668	1,264,546
Contributions - employer	5,414	4,416	6,175	7,908	7,038	6,417
Contributions-member	759,474	745,574	716,233	685,626	661,835	640,120
Net investment income	4,972,419	6,247,155	7,971,677	810,574	2,384,145	9,826,743
Benefit payments	(4,950,465)	(4,699,920)	(4,461,124)	(4,228,819)	(3,996,879)	(3,764,452)
Administrative expense	(4,930,403) (15,276)	(4,699,920) (15,865)	(4,401,124) (16,773)	(4,228,819) (15,281)	(3,990,879) (14,996)	(5,764,432) (15,025)
•						
Refunds of contributions	(76,543)	(76,061)	(76,296)	(79,334)	(80,085)	(87,095)
Other**	179	(27,434)	258		(27,706)	
Net change in plan fiduciary net position	3,256,012	4,191,953	5,788,561	(1,246,702)	333,020	7,871,254
Plan fiduciary net position-beginning	75,532,925	71,340,972	65,552,411	66,799,113	66,466,091	58,594,837
Plan fiduciary net position-ending (b)	78,788,937	75,532,925	71,340,972	65,552,411	66,799,113	66,466,091 \$ 12,633,681
Net pension liability-ending (a)-(b)	\$ 21,502,704	\$ 18,562,142	\$ 18,585,308	\$ 20,631,115	\$ 15,224,007	\$ 12,633,681

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule includes all significant plans and funds administered by the State of Georgia.

**Pursuant to the requirement of GASB 75, the fiscal year 2018 beginning Fiduciary Net Position was restated by \$27,654 to reflect the impact of recording the initial Deferred Outflows of Resources and the Net OPEB liabilities and OPEB asset.



Required Supplementary Information Schedules of Changes in Employers' and Nonemployers' Net Pension Liability Defined Benefit Pension Plans For the Last Six Fiscal Years

(dollars in thousands)

Peace Officers' Annuity and Benefits Fund of Georgia		2019		2018		2017		2016		2015		2014
Total pension liability:												
Service cost	\$	14,015	\$	13,771	\$	15,049	\$,	\$,	\$	17,890
Interest		49,361		48,066		52,255		50,242		47,138		43,877
Benefit changes***		12,271		11,546						-		
Differences between expected and actual experience		(17,616)		(350)		(6,615)		(4,688)				—
Changes of assumptions		_				(32,942)				14,577		
Benefit payments		(36,684)		(33,890)		(32,216)		(30,696)		(28,879)		(27,263)
Refunds of contributions		(460)		(470)		(406)		(413)		(433)		(437)
Net change in total pension liability		20,887		38,673		(4.875)		27,271		45,488		34,067
Total pension liability-beginning		781,282		742,609		747,484		720,213		674,725		640,658
Total pension liability-ending (a)		802,169		781,282		742,609		747,484		720,213		674,725
Plan fiduciary net position:												
Contributions-nonemployer		14,444		13,826		14,005		14,713		15,341		15,342
Contributions-member		3,542		3,460		3,482		3,527		3,537		3,532
Net investment income		50,633		58,716		81,611		(837)		15,771		103,600
Benefit payments		(36,683)		(33,890)		(32,216)		(30,696)		(28,879)		(27,263)
Miscellaneous		119		92		64		66		65		90
Administrative expense		(1,193)		(1,076)		(947)		(874)		(755)		(730)
Refunds of contributions		(460)		(470)	_	(406)		(413)		(433)		(437)
Net change in plan fiduciary net position		30,402		40,658		65,593		(14,514)		4,647		94,134
Plan fiduciary net position-beginning		795,273		754,616		689,021		703,535		698,889		604,755
Plan fiduciary net position-ending (b)		825,675		795,273		754,615		689,021		703,536		698,889
Net pension liability/(asset)-ending (a)-(b)	\$	(23,506)	\$	(13,992)	\$	(12,006)	\$	58,463	\$	16,677	\$	(24,164)
Georgia Firefighters' Pension Fund:												
Total pension liability:												
Service cost	\$	20,381	\$	19,713	\$	19,557	\$	19,398	\$	18,377	\$	17,889
Interest		62,400		58,986		56,847		54,164		53,833		51,850
Benefit changes		10,795		20,553		9,980		14,201		_		_
Differences between expected and actual experience		(4,165)		7,676		(3,913)		771		(11,448)		_
Changes of assumptions		_		_		_		_		54,973		_
Benefit payments		(50,704)		(47,256)		(44,301)		(41,562)		(39,379)		(37,530)
Refunds of contributions		(1,149)		(954)		(1,121)		(650)		(835)		(694)
Net change in total pension liability		37,558		58,718	_	37,049		46,322		75,521		31,515
Total pension liability-beginning		1,065,923		1,007,205		970,156		923,835		848,314		816,799
Total pension liability-ending (a)		1,103,481		1,065,923		1,007,205		970,157		923,835		848,314
Plan fiduciary net position:												
Contributions-nonemployer		37,902		35,715		34,152		32,684		31,489		30,034
Contributions-member		4,022		3,960		3,952		3,970		3,896		3,836
Net investment income		50,109		60,756		85,059		5,973		12,080		111,715
Benefit payments		(50,704)		(47,256)		(44,301)		(41,562)		(39,379)		(37,530)
Administrative expense		(1,509)		(1,484)		(1,341)		(1,362)		(1,329)		(1,209)
Refunds of contributions		(1,149)		(954)		(1,121)		(651)		(835)		(693)
Other		810		718		337		293		296		332
Net change in plan fiduciary net position		39,481		51,455		76,737		(655)		6,218		106,485
Plan fiduciary net position-beginning		894,871		843,414		766,677		767,333		761,115		654,630
Plan fiduciary net position englimiting Plan fiduciary net position-ending (b)		934,352		894,871		843,414		766,678		767,333		761,115
Net pension liability-ending (a)-(b)	\$	169,129	\$	171,054	\$	163,791	\$	203,479	\$	156,502	\$	87,199
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This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia.

Required Supplementary Information Schedules of Investment Returns Defined Benefit Pension Plans For the Last Six Fiscal Years

		Annual money-weighted rate of return, net of investment expense								
	2019	2018	2017	2016	2015	2014				
Pooled Investment Fund (ERS): Employees' Retirement System Public School Employees Retirement System Georgia Judicial Retirement System	(1.80%)	0.60%	2.90%	(7.23%)	(5.32%)	(5.95%)				
Teachers Retirement System	4.08%	5.05%	7.62%	(2.92%)	(0.45%)	12.17%				
Peace Officers' Annuity and Benefit Fund of Georgia	6.14%	7.89%	11.91%	0.08%	2.53%	18.49%				
Georgia Firefighters' Pension Fund	5.11%	7.76%	11.10%	0.96%	1.23%	17.60%				

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule includes all significant plans and funds administered by the State of Georgia.

Annual money-weighted rate of return, net of investment



Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Actuarial Methods and Assumptions - Plan Perspective:

This note provides information about changes of benefit terms, changes of assumptions, and methods and assumptions used in calculations of actuarially determined contributions.

Employees' Retirement System

Changes of benefit terms: A new benefit tier was added for members joining the System on and after July 1, 2009. A one-time 3% payment was granted to certain retirees and beneficiaries effective July 2016, and a one-time 3% payment was granted to certain retirees and beneficiaries effective July 2017. Two one-time 2% payments were granted to certain retirees and beneficiaries effective July 2019.

Changes of assumptions: Subsequent to the June 30, 2017 measurement date, the ERS Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for the June 30, 2017 actuarial valuation. In addition, based on the ERS board's new funding policy the assumed investment rate of return was reduced by 0.10% from 7.40% to 7.30% as of the June 30, 2018 measurement date. Therefore, an assumption change from 7.50% to 7.30% is reflected in the calculation of the total pension liability.

Public School Employees Retirement System

Changes of benefit terms: The member contribution rate was increased from \$4.00 to \$10.00 per month for members joining the System on or after July 1, 2012. The monthly benefit accrual rate was increased from \$14.75 to \$15.00 per year of credible service effective July 1, 2017. The monthly benefit accrual was increased from \$15.00 to \$15.25 per year of credible service effective July 1, 2018.

Changes of assumptions: Subsequent to the June 30, 2017 measurement date, the PSERS Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for the June 30, 2017 actuarial valuation. In addition, based on the PSERS board's new funding policy the assumed investment rate of return was reduced by 0.10% from 7.40% to 7.30% as of the June 30, 2018 measurement date. Therefore, an assumption change from 7.50% to 7.30% is reflected in the calculation of the total pension liability.

Georgia Judicial Retirement System

Changes of benefit terms: Spouses benefits were changed for members joining the System on or after July 1, 2012. A 2% cost-of-living adjustment (COLA) was granted to certain retired members and beneficiaries effective July 1, 2016, another 2% COLA was granted effective July 1, 2018, and a 2% COLA was also granted effective July 1, 2019.

Changes of assumptions: Subsequent to the June 30, 2017 measurement date, the GJRS Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for the June 30, 2017 actuarial valuation. In addition, based on the ERS board's new funding policy the assumed investment rate of return was reduced by 0.10% from 7.40% to 7.30% as of the June 30, 2018 measurement date. Therefore, an assumption change from 7.50% to 7.30% is reflected in the calculation of the total pension liability.

Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Actuarial Methods and Assumptions - Plan Perspective:

Teachers Retirement System

Changes of benefit terms: There were no changes in benefits terms that affect the measurement of the total pension liability since the prior measurement date.

Changes of assumptions: On December 17, 2015, the Board adopted recommend changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, disability, withdrawal, and salary increases.

Peace Officers' Annuity and Benefit Fund of Georgia

Changes of benefit terms: For fiscal year 2019, the Board of Commissioners approved a 1.5% COLA effective January 1, 2018. For fiscal year 2020, the Board of Commissioners approved a 1.5% COLA effective January 1, 2020.

Change in assumptions: For fiscal year 2015, the mortality table was changed to the RP 2014 Healthy Mortality Table with blue collar adjustment and generational mortality projection using Scale MP-2014 for healthy lives and to the RP-2014 Disabled Retiree Mortality Table with generational mortality projection using Scale MP-2014 for disabled lives. For fiscal year 2017, the mortality table for healthy lives was updated to the RP-2014 Healthy Mortality Table with blue collar adjustments and generational mortality projection using with Conduent modified MP-2016 scale and the mortality table for disabled lives was updated to the RP-2014 Disabled Retiree Mortality Table with generational mortality projection using with Conduent modified MP-2016 scale and the mortality table for disabled lives was updated to the RP-2014 Disabled Retiree Mortality Table with generational mortality projection using the Conduent modified MP-2016 scale. Also, the active retirement and termination rates were updated based on the results of an experience study covering the period June 30, 2008 through June 30, 2015. In addition, the discount rate was decreased from 7.0% to 6.50%.



Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Georgia Firefighters' Pension Fund

Changes of benefit terms: In 2016, a one-time 1.5% COLA was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of July 1, 2016. In 2017, a one-time 1% Cost-of Living Adjustment (COLA) was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of July 1, 2017. In 2018, a one-time 1% COLA was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of July 1, 2017. In 2018, a one-time 1% COLA was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of July 1, 2018 and an additional 1% COLA was granted July 1, 2018.

Change in assumptions: In 2013, a funding policy was adopted which changes the amortization period of the unfunded actuarial accrued liability from 15 to 30 years. Also, in 2015 the following changes were made:

- The assumed investment rate of return was lowered from 6.5% to 6.0%.
- The assumed rate of inflation was lowered from 3.0% to 2.75%
- Rates of withdrawal and retirement were adjusted to more closely reflect actual experience.
- Rates of mortality were adjusted during the experience study. Pre-retirement mortality rates were changed to the RP 2000 employee mortality table projected to 2025 with projection scale BB set forward one year for males and four years for females. Post-retirement mortality rates were changed to the RP 2000 blue collar mortality table projected to 2025 with projection scale BB. Post-disability mortality rates were changed to the RP 2000 disabled mortality table projected to 2025 with projection scale BB set forward five years for males and three years for females, however there are no longer any disability benefits included in the plan. Post-disability mortality rates were changed to the RP 2000 disabled mortality rates were changed to the RP 2000 disabled mortality rates were changed to the RP 2000 disability mortality rates were changed to the RP 2000 disabled mortality rates were changed to the RP 2000 disability mortality rates were changed to the RP 2000 disability mortality rates were changed to the RP 2000 disability benefits included in the plan. Post-disability mortality rates were changed to the RP 2000 disabled mortality table projected to 2025 with projection scale BB.

Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Actuarial Methods and Assumptions - Plan Perspective:

Methods and assumptions used in calculations of actuarially determined contributions: The actuarially determined contribution rates in the schedules of employers' and non-employers' contributions are calculated as of June 30, one to three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rates in those schedules:

	ERS	GJRS
Valuation date	June 30, 2016	June 30, 2016
Actuarial cost method	Entry age	Entry age
Amortization method	Level dollar, closed	Level percent of pay, closed
Remaining amortization period	18.2 years	17.8 years
Asset valuation method	5-year smoothed fair	5-year smoothed fair
Inflation	2.75%	2.75%
Salary increases:	3.25 - 7.0%	4.50%
Investment rate of return	7.50%, net of pension plan investment	7.50%, net of pension plan investment
	expense, including inflation	expense, including inflation
	PSERS	TRS
Valuation date	June 30, 2016	June 30, 2016
Actuarial cost method	Entry age	Entry age
Amortization method	Level dollar, closed	Level percent of payroll, closed
Remaining amortization period	21.9 years	28.0 years
Asset valuation method	5-year smoothed fair	5-year smoothed market
Inflation	2.75%	2.75%
Salary increases	N/A	3.25 - 9.0%, including inflation
Investment rate of return	7.50%, net of pension plan investment	7.50%, net of pension plan investment
	expense, including inflation	expense, including inflation
Cost-of-living adjustment	1.50%, semi-annually	
Post-retirement benefit increases:		1.50%, semi-annually
	Peace Officers'	Firefighters'
Valuation date	June 30, 2018	June 30, 2018
Actuarial cost method	Entry age normal	Entry age normal
Amortization method	Level dollar, open	Level dollar, open
Remaining amortization period	30 years	26.3 years
Asset valuation method	Actuarial value	5-year smoothed market with 15.0% corridor
Inflation	1.90%	2.75%
Salary increases	N/A	N/A
Investment rate of return	6.50%, net of pension plan investment	6.0%, net of pension plan investment
	expense, including inflation	expense, including inflation
	expense, menualing initiation	expense, menualing initiation

Required Supplementary Information Schedules of State's Contributions - As Employer Defined Benefit Pension Plans For the Last Five Fiscal Years

(dollars in thousands)

	 2019	 2018	 2017	 2016	 2015
Primary Government					
Employees' Retirement System:					
Statutorily required contribution	\$ 578,876	\$ 582,189	\$ 554,976	\$ 505,411	\$ 440,602
Contributions in relation to the statutorily required contribution	(578,876)	(582,189)	(554,976)	(505,411)	(440,602)
Contribution Deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$ _
State's covered payroll	\$ 2,378,687	\$ 2,403,879	\$ 2,257,282	\$ 2,103,422	\$ 1,875,953
Contributions as a percentage of the covered payroll	24.34%	24.22%	24.59%	24.03%	23.49%
Georgia Judicial Retirement System:					
Statutorily required contribution	\$ 2,741	\$ 2,507	\$ 3,701	\$ 4,134	\$ 2,209
Contributions in relation to the statutorily required contribution	(2,741)	(2,507)	(3,701)	(4,134)	(2,209)
Contribution Deficiency (excess)	\$ 	\$ _	\$ _	\$ 	\$ _
State's covered payroll	\$ 34,988	\$ 34,956	\$ 35,440	\$ 33,710	\$ 31,184
Contributions as a percentage of the covered payroll	7.83%	7.17%	10.44%	12.26%	7.08%
Teachers Retirement System:					
Statutorily required contribution	\$ 434,861	\$ 339,634	\$ 276,210	\$ 261,758	\$ 230,939
Contributions in relation to the statutorily required contribution	(434,861)	(339,634)	(276,210)	(261,758)	(230,939)
Contribution Deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$ _
State's covered payroll	\$ 2,075,231	\$ 2,016,415	\$ 1,934,055	\$ 1,832,311	\$ 1,756,586
Contributions as a percentage of the covered payroll	20.95%	16.84%	14.28%	14.29%	13.15%
Component Units					
Employees' Retirement System:					
Statutorily required contribution	\$ 9,369	\$ 9,184	\$ 9,576	\$ 9,425	\$ 8,304
Contributions in relation to the statutorily required contribution	(9,369)	(9,184)	(9,576)	(9,425)	(8,304)
Contribution Deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$
State's covered payroll	\$ 40,121	\$ 37,649	\$ 36,171	\$ 39,238	\$ 35,265
Contributions as a percentage of the covered payroll	23.35%	24.39%	26.47%	24.02%	23.55%
Teachers Retirement System:					
Statutorily required contribution	\$ 14,338	\$ 11,195	\$ 9,248	\$ 8,616	\$ 8,231
Contributions in relation to the statutorily	(14,338)	(11,195)	(9,248)	(8,616)	(8,231)
required contribution Contribution Deficiency (excess)	\$ 	\$ 	\$ (7,270)	\$ 	\$
State's covered payroll	\$ 68,606	\$ 66,582	\$ 64,715	\$ 63,339	\$ 62,558
Contributions as a percentage of the covered payroll	20.90%	16.81%	14.29%	13.60%	13.16%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information Schedules of State's Contributions - As Nonemployer Contributing Entity Defined Benefit Pension Plans For the Last Five Fiscal Years

(dollars in thousands)

	2019	2018	2017	2016	2015
Employees' Retirement System:	 				
Statutorily required contribution	\$ 10,404	\$ 10,781	\$ 11,967	\$ 12,138	\$ 11,174
Contributions in relation to the statutorily required contribution	(10,404)	(10,781)	(11,967)	(12,138)	(11,174)
Contribution Deficiency (excess)	\$ 	\$ 	\$ _	\$ _	\$
Public School Employees Retirement System:					
Statutorily required contribution	\$ 30,263	\$ 29,276	\$ 26,277	\$ 28,580	\$ 28,461
Contributions in relation to the statutorily required contribution	(30,263)	(29,276)	(26,277)	(28,580)	(28,461)
Contribution Deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$
Georgia Judicial Retirement System:					
Statutorily required contribution	\$ 2,065	\$ 1,838	\$ 2,575	\$ 2,902	\$ 1,558
Contributions in relation to the statutorily required contribution	(2,065)	(1,838)	(2,575)	(2,902)	(1,558)
Contribution Deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$
Teachers Retirement System:					
Statutorily required contribution	\$ 5,414	\$ 4,420	\$ 6,152	\$ 7,944	\$ 7,038
Contributions in relation to the statutorily required contribution	(5,414)	(4,420)	(6,152)	(7,944)	(7,038)
Contribution Deficiency (excess)	\$ 	\$ _	\$ 	\$ _	\$
Peace Officers' Annuity and Benefit Fund of Georgia					
Statutorily required contribution	\$ 14,444	\$ 13,826	\$ 14,005	\$ 14,713	\$ 15,341
Contributions in relation to the statutorily required contribution	(14,444)	(13,826)	(14,005)	(14,713)	(15,341)
Contribution Deficiency (excess)	\$ 	\$ _	\$ 	\$ 	\$
Georgia Firefighters' Pension Fund:					
Statutorily required contribution	\$ 37,902	\$ 35,715	\$ 34,152	\$ 32,684	\$ 31,489
Contributions in relation to the statutorily required contribution	(37,902)	(35,715)	(34,152)	(32,684)	(31,489)
Contribution Deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



Required Supplementary Information Schedules of State's Proportionate Share of the Net Pension Liability - As Employer **Defined Benefit Pension Plans** For the Last Five Fiscal Years

(dollars in thousands)

	 2019	 2018	 2017	 2016	 2015
Primary Government					
Employees' Retirement System:					
State's proportion of the net pension liability	88.948204 %	88.415594 %	87.798535 %	87.682412 %	87.266834 %
State's proportionate share of the net pension liability	\$ 3,656,194	\$ 3,590,854	\$ 4,153,237	\$ 3,552,363	\$ 3,273,046
State's Covered payroll	\$ 2,403,879	\$ 2,257,282	\$ 2,103,422	\$ 1,875,953	\$ 1,615,070
State's proportionate share of the net pension liability as a percentage of its covered payroll	152.10 %	159.08 %	197.45 %	189.36 %	202.66 %
Plan fiduciary net position as a percentage of the total pension liability	76.68 %	76.33 %	72.34 %	76.20 %	77.99 %
Georgia Judicial Retirement System:					
State's proportion of the net pension liability	57.814059 %	58.970340 %	58.753912 %	58.635878 %	57.356971 %
State's proportionate share of the net pension liability	\$ (21,988)	\$ (27,390)	\$ (20,177)	\$ (28,011)	\$ (28,878)
State's Covered payroll	\$ 34,956	\$ 35,440	\$ 33,710	\$ 31,184	\$ 29,887
State's proportionate share of the net pension liability as a percentage of its covered payroll	(62.90%)	(77.29%)	(59.85%)	(89.82%)	(96.62%)
Plan fiduciary net position as a percentage of the total pension liability	108.87 %	111.77 %	109.32 %	113.38 %	114.37 %
Teachers Retirement System:					
State's proportion of the net pension liability	17.011357 %	16.885665 %	16.741530 %	16.687812 %	16.517474 %
State's proportionate share of the net pension liability	\$ 3,157,367	\$ 3,137,798	\$ 3,453,291	\$ 2,540,211	\$ 2,086,629
State's Covered payroll	\$ 2,016,415	\$ 1,934,055	\$ 1,832,311	\$ 1,756,586	\$ 1,683,292
State's proportionate share of the net pension liability as a percentage of its covered payroll	156.58 %	162.24 %	188.47 %	144.61 %	123.96 %
Plan fiduciary net position as a percentage of the total pension liability	80.27 %	79.33 %	76.06 %	81.44 %	84.03 %
Component Units					
Employees' Retirement System:					
State's proportion of the net pension liability	1.369623 %	1.501635 %	1.639295 %	1.557127 %	1.543905 %
State's proportionate share of the net pension liability	\$ 56,305	\$ 60,985	\$ 77,545	\$ 63,085	\$ 57,906
State's Covered payroll	\$ 37,649	\$ 36,171	\$ 39,238	\$ 35,265	\$ 28,075
State's proportionate share of the net pension liability as a percentage of its covered payroll	149.55 %	168.60 %	197.63 %	178.89 %	206.25 %
Plan fiduciary net position as a percentage of the total pension liability	76.68 %	76.33 %	72.34 %	76.20 %	77.99 %



Required Supplementary Information Schedules of State's Proportionate Share of the Net Pension Liability - As Employer Defined Benefit Pension Plans For the Last Five Fiscal Years (dollars in thousands)

	 2019		2018		2017		2016		2015
Component Units									
Teachers Retirement System:									
State's proportion of the net pension liability	0.558992 %	, D	0.564739 %	D	0.577541 %	6	0.564109 %	, D	0.590520 %
State's proportionate share of the net pension liability	\$ 103,761	\$	104,910	\$	118,967	\$	85,798	\$	74,604
State's Covered payroll	\$ 66,582	\$	64,715	\$	63,339	\$	62,558	\$	60,180
State's proportionate share of the net pension liability as a percentage of its covered payroll	155.84 %	, D	162.11 %)	187.83 %	6	137.15 %	, D	123.97 %
Plan fiduciary net position as a percentage of the total pension liability	80.27 %	, D	79.33 %		76.06 %	6	81.44 %	, D	84.03 %

The amounts presented for each fiscal year were determined as of the prior fiscal year-end.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



Required Supplementary Information Schedules of State's Proportionate Share of the Net Pension Liability -As Nonemployer Contributing Entity Defined Benefit Pension Plans For the Last Five Fiscal Years

(dollars in thousands)

	 2019	 2018	2017	2016	2015
Employees' Retirement System:					
State's proportion of the net pension liability (asset)	1.696518%	1.891959%	2.111751%	2.225584%	2.410713%
State's proportionate share of the net pension liability (asset)	\$ 69,744	\$ 76,839	\$ 99,895	\$ 90,167	\$ 90,417
Plan fiduciary net position as a percentage of the total pension liability	76.68%	76.33%	72.34%	76.20%	77.99%
Public School Employees Retirement System:					
State's proportion of the net pension liability (asset)	100.000000%	100.000000%	100.000000%	100.000000%	100.000000%
State's proportionate share of the net pension liability (asset)	\$ 158,027	\$ 145,029	\$ 188,517	\$ 123,050	\$ 109,012
Plan fiduciary net position as a percentage of the total pension liability	85.26%	85.69%	81.00%	87.00%	88.29%
Georgia Judicial Retirement System:					
State's proportion of the net pension liability (asset)	42.185941%	41.029660%	41.246088%	41.364122%	42.643029%
State's proportionate share of the net pension liability (asset)	\$ (16,045)	\$ (19,057)	\$ (14,165)	\$ (19,760)	\$ (21,469)
Plan fiduciary net position as a percentage of the total pension liability	108.87%	111.77%	109.32%	113.38%	114.37%
Teachers Retirement System:					
State's proportion of the net pension liability (asset)	0.220738%	0.375432%	0.507487%	0.507036%	0.504588%
State's proportionate share of the net pension liability (asset)	\$ 40,974	\$ 69,775	\$ 104,700	\$ 77,191	\$ 63,748
Plan fiduciary net position as a percentage of the total pension liability	80.27%	79.33%	76.06%	81.44%	84.03%
Peace Officers' Annuity and Benefit Fund of Georgia:					
State's proportion of the net pension liability (asset)	100.000000%	100.000000%	100.000000%	100.000000%	100.000000%
State's proportionate share of the net pension liability (asset)	\$ (13,992)	\$ (12,006)	\$ 58,463	\$ 16,677	\$ (24,164)
Plan fiduciary net position as a percentage of the total pension liability	101.79%	101.62%	92.18%	97.68%	103.58%
Georgia Firefighters' Pension Fund:					
State's proportion of the net pension liability (asset)	100.000000%	100.000000%	100.000000%	100.000000%	100.000000%
State's proportionate share of the net pension liability (asset)	\$ 171,054	\$ 163,791	\$ 203,479	\$ 156,502	\$ 87,199
Plan fiduciary net position as a percentage of the total pension liability	83.95%	83.74%	79.03%	83.06%	89.72%

The amounts presented for each fiscal year were determined as of the prior fiscal year-end.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Actuarial Methods and Assumptions - State as Employer Perspective

This note provides information about changes of benefit terms, changes of assumptions, and methods and assumptions used in calculations of actuarially determined contributions.

Employees' Retirement System

Changes of benefit terms: A new benefit tier was added for members joining the System on and after July 1, 2009. A one-time 3% payment was granted to certain retirees and beneficiaries effective July 2016. A one-time 3% payment was granted to certain retirees and beneficiaries effective July 2017.

Changes of assumptions: On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, and withdrawal.

On March 15, 2018, the Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for June 30, 2017 actuarial valuation. In addition, based on the Board's new funding policy, the assumed investment rate of return was further reduced by 0.10% from 7.40% to 7.30% as of June 30, 2018 Measurement Date.

Public School Employees Retirement System

Changes of benefit terms: The member contribution rate was increased from \$4 to \$10 per month for members joining the System on or after July 1, 2012. The monthly benefit accrual rate was increased from \$14.75 to \$15.00 per year of creditable service effective July 1, 2017.

Changes of assumptions: In 2010 and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2010. In 2010, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience.

On December 17, 2015, the Board adopted recommend changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement and withdrawal. The expectation of retired life mortality was changed to the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward 3 years for males and 2 years females.)

On March 15, 2018, the Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for June 30, 2017 actuarial valuation. In addition, based on the Board's new funding policy, the assumed investment rate of return was further reduced by 0.10% from 7.40% to 7.30% as of June 30, 2018 Measurement Date.

Georgia Judicial Retirement System

Changes of benefit terms: Spouses' benefits were changed for members joining the System on or after July 1, 2012. A 2% cost -of-living adjustment was granted to certain retired members and beneficiaries effective July 1, 2016. Two one-time payments were granted to certain retired members and beneficiaries payable in August 2018 and February 2019.



Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Changes of assumptions: In 2010 and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2010. In 2010, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect tactual experience. In 2010, assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

On December 17, 2015, the Board adopted recommend changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, withdrawal, and salary increases. The expectation of retired life mortality was changed to the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward 2 years for both males and females.)

On March 15, 2018 the Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for June 30, 2017 actuarial valuation. In addition, based on the Board's new funding policy, the assumed investment rate of return was further reduced by 0.10% from 7.40% to 7.30% as of June 30, 2018 Measurement Date.

Teachers Retirement System

Changes of benefit terms: There were no changes in benefits terms that affect the measurement of the total pension liability since the prior measurement date.

Changes of assumptions: In 2010 and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2010. In 2010, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect tactual experience. Also, in 2010, assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

On November 18, 2015, the Board adopted recommend changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, withdrawal, and salary increases. The expectation of retired life mortality was changed to the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward one year for males.)

Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Actuarial Methods and Assumptions - State as Employer Perspective

Peace Officers' Annuity and Benefit Fund of Georgia

Changes of benefit terms: There have been no changes in benefit terms.

Change in assumptions: For fiscal year 2015, the RP 2014 Healthy Mortality Table with blue collar adjustment and generational mortality projection using Scale MP 2014 for health lives and RP 2014 Disabled Retiree Mortality Table with generational mortality projection using Scale MP 2014 for disabled lives, were used. For fiscal year 2017, the mortality table for healthy lives was updated to the RP 2014 Healthy Mortality Table with blue collar adjustment projected with Conduent modified MP 2016 projection scale and the mortality table for disabled lives was updated to the RP 2014 Disabled Retiree Mortality Table projected with the Conduent modified MP 2016 projection scale. Also, the active retirement and termination rates were updated based on the results of an experience study covering the period June 30, 2008 through June 30, 2015. In addition, the discount rate was decreased from 7.00% to 6.50%.

Georgia Firefighters' Pension Fund

Changes of benefit terms:

- In 2013, membership dues were increased from \$15 per month to \$25 per month.
- In 2016, a one-time 1.5% Cost-of Living Adjustment (COLA) was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of July 1, 2016.
- In 2017, a one-time 1% COLA was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of July 1, 2017.
- In 2018, a one-time 1% COLA was granted to retired members and beneficiaries and to the benefit rate for future retirees effective as of January 1, 2018 and an additional COLA was granted on July 1, 2018

Change in assumptions:

- In 2015 the following changes were made:
 - The assumed investment rate of return was lowered from 6.5% to 6.0%.
 - The assumed rate of inflation was lowered from 3.0% to 2.75%
 - Rates of withdrawal and retirement were adjusted to more closely reflect actual experience.
 - Rates of mortality were adjusted during the most recent experience study. Pre-retirement mortality rates were changed to the RP 2000 employee mortality table projected to 2025 with projection scale BB. Post-retirement mortality rates were changed to the RP 2000 blue collar mortality table projected to 2025 with projection scale BB. Post-disability mortality rates were changed to the RP 2000 disabled mortality table projected to 2025 with projected to 2025 with projection scale BB.
- In 2013, a funding policy was adopted which changes the amortization period of the unfunded actuarial accrued liability from 15 to 30 years.

Required Supplementary Information Notes to Required Supplementary Information Defined Benefit Pension Plans Methods and Assumptions For the Fiscal Year Ended June 30, 2019

Actuarial Methods and Assumptions - State as Employer Perspective

Methods and assumptions used in calculations of actuarially determined contributions: The actuarially determined contribution rates in the schedules of employers' and non-employers' contributions are calculated as of June 30, one to three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rates in those schedules:

	ERS	GJRS
Valuation date	June 30, 2015	June 30, 2015
Actuarial cost method	Entry age	Entry age
Amortization method	Level dollar, closed	Level percent of pay, closed
Remaining amortization period	19.4 years	19 years
Asset valuation method	5-year smoothed market	5-year smoothed market
Inflation	2.75%	2.75%
Salary increases:	3.25 - 7.00%, including inflation	4.50%, including inflation
Investment rate of return	7.50%, net of pension plan investment	7.50%, net of pension plan investment
	expense, including inflation	expense, including inflation
	PSERS	TRS
Valuation date	June 30, 2015	June 30, 2015
Actuarial cost method	Entry age	Entry age
Amortization method	Level dollar, closed	Level percent of payroll, closed
Remaining amortization period	22.9 years	28.4 years
Asset valuation method	5-year smoothed market	5-year smoothed market
Inflation	2.75%	2.75%
Salary increases	N/A	3.25 - 9.00%, including inflation
Investment rate of return	7.50%, net of pension plan investment	7.50%, net of pension plan investment
	expense, including inflation	expense, including inflation
Post-Retirement Benefit Increases	1.50% semi-annually	1.50% semi-annually
	Peace Officers'	Firefighters'
Valuation date	June 30, 2017	June 30, 2017
Actuarial cost method	Entry age normal	Entry age normal
Amortization method	Level dollar, open	Level dollar, open
Remaining amortization period	30 years	27 years
Asset valuation method	Actuarial value	5-year smoothed market with 15% corridor
Inflation	2.50%	2.75%
Salary increases	N/A	N/A
Investment rate of return	6.5%, net of pension plan investment	6.00%, net of pension plan investment
	expense, including inflation	expense, including inflation



REQUIRED SUPPLEMENTARY INFORMATION -OTHER POSTEMPLOYMENT BENEFITS (OPEB)

Required Supplementary Information Schedule of Employers' Contributions Multi-Employer and Single-Employer OPEB Plans For the Last Ten Fiscal Years

(dollars in thousands)

	Year Ended	Actuarially Determined Contribution (a)	Contributions in Relation to the Actuarially Determined Contribution (b)	Contribution Deficiency/ (Excess) (a - b)	Covered Payroll	Contributions as a Percentage of Covered Payroll (b/c)
State OPEB ¹	6/30/2010	\$ 347,772	\$ 22,209	\$ 325,563	\$ 2,626,081	0.85%
	6/30/2011	327,053	168,384	158,669	2,542,891	6.62%
	6/30/2012	317,100	181,899	135,201	2,408,000	7.55%
	6/30/2013	338,819	181,504	157,315	2,328,334	7.80%
	6/30/2014	321,456	177,045	144,411	2,293,104	7.72%
	6/30/2015	275,681	267,235	8,446	2,333,060	11.45%
	6/30/2016	259,250	574,015	(314,765)	2,404,901	23.87%
	6/30/2017	202,092	498,202	(296,110)	2,483,060	20.06%
	6/30/2018	232,161	501,574	(269,413)	2,535,722	19.78%
	6/30/2019	218,962	534,673	(315,711)	2,802,815	19.08%
School OPEB ¹	6/30/2010	1,080,042	308,539	771,503	N/A	N/A
	6/30/2011	1,050,851	339,221	711,630	N/A	N/A
	6/30/2012	1,054,708	380,859	673,849	N/A	N/A
	6/30/2013	982,120	362,527	619,593	N/A	N/A
	6/30/2014	943,310	408,422	534,888	N/A	N/A
	6/30/2015	873,278	408,538	464,740	N/A	N/A
	6/30/2016	873,736	432,438	441,298	N/A	N/A
	6/30/2017	669,894	521,408	148,486	N/A	N/A
	6/30/2018	824,872	518,290	306,582	N/A	N/A
	6/30/2019	833,291	538,569	294,722	N/A	N/A
						(continued)

¹ Refer to the "Notes to the Required Supplementary Information" (Plan Perspective) for additional information regarding OPEB funding.

Required Supplementary Information Schedule of Employers' Contributions Multi-Employer and Single-Employer OPEB Plans For the Last Ten Fiscal Years

(dollars in thousands)

	Year Ended	Actuarially Determined Contribution (a)	Contributions in Relation to the Actuarially Determined Contribution (b)	Contribution Deficiency/ (Excess) (a - b)	Covered Payroll	Contributions as a Percentage of Covered Employee Payroll (b/c)
Regents Plan ^{2,4,5}	6/30/2010	\$ 381,700	\$ 69,900	\$ 311,800	\$ 2,399,532	2.91%
	6/30/2011	411,516	80,262	331,254	2,432,367	3.30%
	6/30/2012	345,298	88,836	256,462	2,526,212	3.52%
	6/30/2013	362,426	83,414	279,012	2,466,314	3.58%
	6/30/2014	403,314	120,926	282,388	2,594,800	4.66%
	6/30/2015	442,359	129,823	312,536	2,608,757	4.98%
	6/30/2016	295,192	111,814	183,378	3,087,013	3.62%
	6/30/2017	349,859	99,584	250,275	3,122,694	³ 3.19%
	6/30/2018	467,338	158,420	308,918	3,218,771	4.92%
	6/30/2019	484,599	160,383	324,216	3,375,246	4.75%
SEAD-OPEB ⁵	6/30/2010		_		N/A	N/A
	6/30/2011	—	—	_	N/A	N/A
	6/30/2012	12,724	12,724		2,085,902	0.61%
	6/30/2013	5,009	5,009		1,855,185	0.27%
	6/30/2014		—		N/A	N/A
	6/30/2015		—		N/A	N/A
	6/30/2016		—		N/A	N/A
	6/30/2017		—		N/A	N/A
	6/30/2018		—		N/A	N/A
	6/30/2019	—	—	—	N/A	N/A

² For purposes of GASB 75, the Regents plans present Covered-Employee Payroll.

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June 30, 2017 covered employee payroll for the Board of Regents Retiree Health Benefit Plan was restated.

⁴ Refer to the "Notes to the Required Supplementary Information" (Plan Perspective) for additional information regarding OPEB funding.

⁵ This data, except for annual covered payroll, was provided by each plan's actuary.

Required Supplementary Information Schedule of Employers' Net OPEB Liability Multi-Employer and Single-Employer OPEB Plans For the Last Three Fiscal Years

(dollars in thousands)

	2019		2018		2017
State OPEB Fund:					
Total OPEB liability	\$ 2,858,521	\$	3,817,453	\$	4,929,142
Plan fiduciary net position	1,617,207		1,201,865		854,937
Employers' net OPEB liability	\$ 1,241,314	\$	2,615,588	\$	4,074,205
Plan fiduciary net position as a percentage of the total OPEB liability	 56.57 %		31.48 %		17.34 %
Covered payroll	\$ 2,802,815	\$	2,535,722	\$	2,483,060
Employers' net OPEB liability as a percentage of covered payroll	44.29 %		103.15 %		164.08 %
School OPEB Fund:					
Total OPEB liability	\$ 12,867,274	\$	13,092,956	\$	14,279,644
Plan fiduciary net position	595,129		383,263		229,685
Employers' net OPEB liability	\$ 12,272,145	\$	12,709,693	\$	14,049,959
Plan fiduciary net position as a percentage of the total OPEB liability	 4.63 %		2.93 %		1.61 %
Covered payroll	N/A	N/A N/A			N/A
Employers' net OPEB liability as a percentage of covered payroll	N/A		N/A		N/A
SEAD-OPEB Plan:					
Total OPEB liability	\$ 951,091	\$	918,816	\$	861,346
Plan fiduciary net position	1,233,856		1,189,462		1,121,251
Employers' net OPEB (asset)	\$ (282,765)	\$	(270,646)	\$	(259,905)
Plan fiduciary net position as a percentage of the total OPEB liability	129.73 %		129.46 %		130.17 %
Covered payroll	\$ 1,211,274	\$	1,328,485	\$	1,383,860
Employers' net OPEB (asset) as a percentage of covered payroll	(23.34%)		(20.37%)		(18.78%)
Regents Plan:					
Total OPEB liability	\$ 4,616,023	\$	4,486,796	\$	4,227,583
Plan fiduciary net position	 144,455		76,045		7,857
Employers' net OPEB liability	\$ 4,471,568	\$	4,410,751	\$	4,219,726
Plan fiduciary net position as a percentage of the total OPEB liability	3.13 %		1.69 %		0.19 %
Covered payroll*	\$ 3,375,246	\$	3,218,771	\$	3,122,694
Employers' net OPEB liability as a percentage of covered payroll	132.48 %		137.03 %		135.13 %

* June 30, 2017 covered employee payroll for the Board of Regents Retiree Health Benefit Plan was restated.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia.

Required Supplementary Information Schedule of Changes in Employers' Net OPEB Liability Multi-Employer and Single-Employer OPEB Plans For the Last Three Fiscal Years

(dollars in thousands)

	2019		2018		2017
\$	63,724	\$	112,297	\$	119,686
	194,860		174,427		158,096
	(371,757)		(267,124)		—
	(676,765)		(963,394)		(383,932)
	(168,993)		(167,896)		(162,145)
	(958,931)		(1,111,690)		(268,295)
	3,817,452		4,929,142		5,197,437
	2,858,521		3,817,452		4,929,142
	534,673		501,574		498,202
	51,687		15,300		4,696
	(168,993)		(167,896)		(162,145)
	(2,025)		(2,052)		(2,077)
	415,342		346,926		338,676
	1,201,865		854,939		516,261
	1,617,207		1,201,865		854,937
\$	1,241,314	\$	2,615,587	\$	4,074,205
\$	1,241,314	\$	2,615,587	\$	4,074,205
\$	1,241,314	\$	2,615,587	\$	4,074,205
<u>\$</u> \$	1,241,314	\$	2,615,587	\$	4,074,205
	408,667		521,135		557,770
	408,667 500,123		521,135 504,681		557,770
	408,667 500,123 (1,298,677)		521,135 504,681 (341,373)		557,770 452,024 —
	408,667 500,123 (1,298,677) 503,959		521,135 504,681 (341,373) (1,506,313)		557,770 452,024 (1,262,291)
	408,667 500,123 (1,298,677) 503,959 (339,754)		521,135 504,681 (341,373) (1,506,313) (364,818)		557,770 452,024 (1,262,291) (383,556) (636,053)
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682)		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688)		557,770 452,024 — (1,262,291) (383,556)
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644		557,770 452,024 (1,262,291) (383,556) (636,053) 14,915,697
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644		557,770 452,024 (1,262,291) (383,556) (636,053) 14,915,697 14,279,644
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956 12,867,274 538,569		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644 13,092,956 518,290		557,770 452,024 (1,262,291) (383,556) (636,053) 14,915,697 14,279,644 521,408
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956 12,867,274		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644 13,092,956		557,770 452,024 — (1,262,291) (383,556) (636,053) 14,915,697 14,279,644 521,408 1,148
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956 12,867,274 538,569 17,468 (339,754)		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644 13,092,956 518,290 4,563 (364,818)		557,770 452,024 (1,262,291) (383,556) (636,053) 14,915,697 14,279,644 521,408 1,148 (383,556)
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956 12,867,274 538,569 17,468 (339,754) (4,417)		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644 13,092,956 518,290 4,563 (364,818) (4,457)		557,770 452,024 — (1,262,291) (383,556) (636,053) 14,915,697 14,279,644 521,408 1,148 (383,556) (4,727)
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956 12,867,274 538,569 17,468 (339,754) (4,417) 211,866		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644 13,092,956 518,290 4,563 (364,818) (4,457) 153,578		557,770 452,024 — (1,262,291) (383,556) (636,053) 14,915,697 14,279,644 521,408 1,148 (383,556) (4,727) 134,273
	408,667 500,123 (1,298,677) 503,959 (339,754) (225,682) 13,092,956 12,867,274 538,569 17,468 (339,754) (4,417)		521,135 504,681 (341,373) (1,506,313) (364,818) (1,186,688) 14,279,644 13,092,956 518,290 4,563 (364,818) (4,457)		557,770 452,024 — (1,262,291) (383,556) (636,053) 14,915,697 14,279,644 521,408 1,148 (383,556) (4,727)
	\$	\$ 63,724 194,860 (371,757) (676,765) (168,993) (958,931) 3,817,452 2,858,521 534,673 51,687 (168,993) (2,025) 415,342 1,201,865	\$ 63,724 \$ 194,860 (371,757) (676,765) (168,993) (958,931) 3,817,452 2,858,521 534,673 51,687 (168,993) (2,025) 415,342 1,201,865	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia



Required Supplementary Information Schedule of Changes in Employers' Net OPEB Liability Multi-Employer and Single-Employer OPEB Plans For the Last Three Fiscal Years

(dollars in thousands)

Total OPEB liability: S 3,617 \$ 3,695 \$ 3,959 Interest 65,708 63,242 61,076 0	SEAD-OPEB Plan:	2019	2018	2017
Interest 65,708 63,242 61,076 Differences between expected and actual experience 366 4,697 Changes of assumptions 22,085 Benefit payments (37,416) (36,242) (36,058) Net change in total OPEB liability 32,275 57,470 28,977 Total OPEB liability-beginning 918,816 861,346 832,369 Plan fiduciary net position:	Total OPEB liability:	 	 	
Differences between expected and actual experience 366 4,697 Changes of assumptions 22,085 Benefit payments (37,416) (36,0249) (36,0249) Net change in total OPEB liability 32,275 57,470 28,977 Total OPEB liability-beginning 918,816 861,346 832,369 Total OPEB liability-ending (a) 951,091 918,816 861,346 Plan fiduciary net position: 101,542 125,550 Benefit payments (37,416) (36,249) (36,058) Administrative expense (716) (681) (576) Other 5 1 Net enge in plan fiduciary net position 44,394 68,211 92,710 Plan fiduciary net position-beginning 1,189,462 1,121,251 1,028,541 Plan fiduciary net position-ending (b) 1,233,856 1,189,462 1,121,251 Net OPEB (asel)-ending (a)-(b) 5 (27,056) 5 (270,064) 5 211,513 Interest 180,173	Service cost	\$ 3,617	\$ 3,695	\$ 3,959
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Interest	65,708	63,242	61,076
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Differences between expected and actual experience	366	4,697	—
Net change in total OPEB liability 32,275 57,470 28,977 Total OPEB liability-beginning 918,816 861,346 832,269 Plan fiduciary net position: 951,001 918,816 861,346 832,269 Insurance premiums-member 3,328 3,599 3,793 Net investment income 79,193 101,542 125,550 Benefit payments (37,416) (36,249) (36,058) Administrative expense (716) (681) (576) Other 5 — 1 192,710 11,89,462 1,121,251 1,028,541 Plan fiduciary net position-beginning 1,189,462 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,028,541 1,121,251 1,233,856 1,1189,462 1,121,251 1,212,513 1,212,513 1,212,513 1,212,513 1,212,513 1,212,513 1,212,513 1,212,513	Changes of assumptions	_	22,085	_
Total OPEB liability-beginning 918,816 861,346 832,369 Total OPEB liability-ending (a) 951,091 918,816 861,346 Plan fiduciary net position:	Benefit payments	(37,416)	(36,249)	(36,058)
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Net change in total OPEB liability	32,275	 57,470	28,977
Plan fiduciary net position: 3,328 3,599 3,793 Net investment income 79,193 101,542 125,550 Benefit payments (37,416) (36,249) (36,058) Administrative expense (716) (681) (576) Other 5 1 Net change in plan fiduciary net position-beginning 1,189,462 1,121,251 1,028,541 Plan fiduciary net position-beginning 1,189,462 1,121,251 1,028,541 Plan fiduciary net position-ending (b) 1,233,856 1,189,462 1,121,251 Net OPEB (asset)-ending (a)-(b) \$ (2282,765) \$ (270,646) \$ 211,513 Interest 180,173 158,223 124,612 1,121,251 1,23,986 Benefit changes (11,211) - - - - - Differences between expected and actual experience (29,667) 264,729 123,090 (28,653) (90,549) (88,653) Net change in total OPEB liability 129,227 259,213 22,231 <td< td=""><td>Total OPEB liability-beginning</td><td>918,816</td><td>861,346</td><td>832,369</td></td<>	Total OPEB liability-beginning	918,816	861,346	832,369
Insurance premiums-member $3,328$ $3,599$ $3,793$ Net investment income $79,193$ $101,542$ $125,550$ Benefit payments $(37,416)$ $(36,249)$ $(36,058)$ Administrative expense (716) (681) (576) Other 5 — 1 Net change in plan fiduciary net position $44,394$ $68,211$ $92,710$ Plan fiduciary net position-beginning $1,189,462$ $1,121,251$ $1,028,541$ Plan fiduciary net position-ending (b) 5 $282,765$ 5 $(270,646)$ 5 $(259,905)$ Regents Plan: Total OPEB liability: 5 $(282,765)$ 5 $(270,646)$ 5 $(215,93)$ $(214,612)$ Benefit changes $(11,211)$ — — — — — — — — — — — — — — — — — — — — $(121,251,3)$ $(310,107)$ $(313,31)$ $(31,452,33)$ $124,6$	Total OPEB liability-ending (a)	 951,091	 918,816	 861,346
Net investment income 79,193 101,542 125,550 Benefit payments $(37,416)$ $(36,249)$ $(36,058)$ Administrative expense (716) (681) (576) Other 5 1 Net change in plan fiduciary net position $44,394$ $68,211$ $92,710$ Plan fiduciary net position-beginning $1,189,462$ $1,121,251$ $1,028,541$ Plan fiduciary net position-ending (b) $1,233,856$ $1,189,462$ $1,121,251$ Net OPEB (asset)-ending (a)-(b) $$ (282,765) $ (270,646) $ (259,905) Regents Plan: Total OPEB liability: Service cost $ 217,648 $ 236,917 $ 211,513 Interest 180,173 158,223 124,612 Benefit changes (11,211) - - Differences between expected and actual experience (29,667) 264,729 123,090 (486,796) 4227,583 42205,352 722,231 722,231 $	Plan fiduciary net position:			
Benefit payments $(37,416)$ $(36,249)$ $(36,058)$ Administrative expense (716) (681) (576) Other5—1Net change in plan fiduciary net position $44,394$ $68,211$ $92,710$ Plan fiduciary net position-ending (b) $1,189,462$ $1,121,251$ $1,028,541$ Plan fiduciary net position-ending (b) $1,233,856$ $1,189,462$ $1,121,251$ Net OPEB (asset)-ending (a)-(b) $$ (282,765)$ $$ (270,646)$ $$ (259,905)$ Regents Plan:Total OPEB liability:Service cost $$ 217,648$ $$ 236,917$ $$ 211,513$ Interest $180,173$ $188,223$ $124,612$ Benefit changes $(11,211)$ ——Differences between expected and actual experience $(29,667)$ $264,729$ $123,090$ Changes of assumptions $(129,153)$ $(310,107)$ $(347,331)$ Benefit change in total OPEB liability $129,227$ $259,213$ $22,231$ Total OPEB liability-beginning $4,486,796$ $4,227,583$ $4,205,352$ Total OPEB liability-ending (a) $4,616,023$ $4,486,796$ $4,227,583$ Plan fiduciary net position: $7,126$ 802 72 Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Administrative expense (536) (485) $(5,045)$ Administrative expense (536) (485) $(5,045)$ Administrative expense (536) $(90,549)$ $(89,653)$ </td <td>Insurance premiums-member</td> <td>3,328</td> <td>3,599</td> <td>3,793</td>	Insurance premiums-member	3,328	3,599	3,793
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Net investment income	79,193	101,542	125,550
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Benefit payments	(37,416)	(36,249)	(36,058)
Net change in plan fiduciary net position $44,394$ $68,211$ $92,710$ Plan fiduciary net position-beginning $1,189,462$ $1,121,251$ $1,028,541$ Plan fiduciary net position-ending (b) $1,233,856$ $1,189,462$ $1,121,251$ Net OPEB (asset)-ending (a)-(b) $\$$ $282,765$ $\underline{\$$ $(270,646)$ $\underline{\$$ $(259,905)$ Regents Plan: Total OPEB liability: $\underline{\$$ $217,648$ $\underline{\$$ $236,917$ $\underline{\$$ $211,513$ Interest 180,173 158,223 124,612 Benefit changes $(11,211)$ $ -$ Differences between expected and actual experience $(29,667)$ $264,729$ 123,090 (24,729) 123,090 Changes of assumptions $(129,153)$ $(310,107)$ $(347,331)$ Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Net change in total OPEB liability $129,227$ $259,213$ $22,231$ $22,231$ Total OPEB liability-beginning $4,486,796$ $4,227,583$ $4,205,352$ 72 Benefit payments	Administrative expense	(716)	(681)	(576)
Plan fiduciary net position-beginning $1,189,462$ $1,121,251$ $1,028,541$ Plan fiduciary net position-ending (b) $1,233,856$ $1,189,462$ $1,121,251$ Net OPEB (asset)-ending (a)-(b) $\underline{\$}$ $(282,765)$ $\underline{\$}$ $(270,646)$ $\underline{\$}$ Regents Plan:Total OPEB liability:Service cost $\underline{\$}$ $217,648$ $\underline{\$}$ $236,917$ $\underline{\$}$ $211,513$ Interest $180,173$ $158,223$ $124,612$ Benefit changes $(11,211)$ $ -$ Differences between expected and actual experience $(29,667)$ $264,729$ $123,090$ Changes of assumptions $(129,153)$ $(310,107)$ $(347,331)$ Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Net change in total OPEB liability $129,227$ $229,213$ $22,231$ Total OPEB liability-beginning $4,486,796$ $4,227,583$ $4,205,352$ Total OPEB liability-ending (a) $4,616,023$ $4,486,796$ $4,227,583$ Plan fiduciary net position:Contributions-employer $160,383$ $158,420$ $99,584$ Net investment income $7,126$ 802 72 Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Administrative expense (536) (485) $(5,045)$ Net investment income $7,126$ 802 72 Benefit p	Other	5	_	1
Plan fiduciary net position-ending (b) $1,233,856$ $1,189,462$ $1,121,251$ Net OPEB (asset)-ending (a)-(b)\$ $(282,765)$ \$ $(270,646)$ \$ $(259,905)$ Regents Plan:Total OPEB liability:Service cost\$ $217,648$ \$ $236,917$ \$ $211,513$ Interest180,173158,223124,612Benefit changes $(11,211)$ Differences between expected and actual experience $(29,667)$ $264,729$ 123,090Changes of assumptions $(129,153)$ $(310,107)$ $(347,331)$ Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Net change in total OPEB liability $129,227$ $259,213$ $22,231$ Total OPEB liability-beginning $4,486,796$ $4,227,583$ $4,205,352$ Total OPEB liability-leginning $4,486,796$ $4,227,583$ $4,205,352$ Total OPEB liability-ending (a) $4,616,023$ $4,486,796$ $4,227,583$ Plan fiduciary net position: $(98,563)$ $(90,549)$ $(89,653)$ Contributions-employer $160,383$ $158,420$ $99,584$ Net investment income $7,126$ 802 72 Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Administrative expense (536) (485) $(5,045)$ Net change in plan fiduciary net position $68,410$ $68,188$ $4,958$ Plan fiduciary net position-beginning $76,045$ $7,857$ $2,899$ Plan f	Net change in plan fiduciary net position	 44,394	 68,211	92,710
Net OPEB (asset)-ending (a)-(b) \$ (282,765) \$ (270,646) \$ (259,905) Regents Plan: Total OPEB liability: \$ \$ 217,648 \$ 236,917 \$ 211,513 Interest 180,173 158,223 124,612 Benefit changes (11,211) - - Differences between expected and actual experience (29,667) 264,729 123,090 Changes of assumptions (129,153) (310,107) (347,331) Benefit payments (98,563) (90,549) (89,653) Net change in total OPEB liability 129,227 259,213 22,231 Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: I 09,549 (89,653) 09,549 (89,653) Contributions-employer 160,383 158,420 99,584 158,420 99,584 Net investment income 7,126 802 72 160,383 158,420 99,584 Net i	Plan fiduciary net position-beginning	1,189,462	1,121,251	1,028,541
Regents Plan: Service cost \$ 217,648 \$ 236,917 \$ 211,513 Interest 180,173 158,223 124,612 Benefit changes (11,211) - - Differences between expected and actual experience (29,667) 264,729 123,090 Changes of assumptions (129,153) (310,107) (347,331) Benefit payments (98,563) (90,549) (89,653) Net change in total OPEB liability 129,227 259,213 22,231 Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: Contributions-employer 160,383 158,420 99,584 Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net investment income 7,126 802 72 Benefit payments (98,563) (90,54	Plan fiduciary net position-ending (b)	 1,233,856	 1,189,462	1,121,251
Total OPEB liability: Service cost \$ 217,648 \$ 236,917 \$ 211,513 Interest 180,173 158,223 124,612 Benefit changes (11,211) — — Differences between expected and actual experience (29,667) 264,729 123,090 Changes of assumptions (129,153) (310,107) (347,331) Benefit payments (98,563) (90,549) (89,653) Net change in total OPEB liability 129,227 259,213 22,231 Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: 7126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Met investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188	Net OPEB (asset)-ending (a)-(b)	\$ (282,765)	\$ (270,646)	\$ (259,905)
Total OPEB liability: Service cost \$ 217,648 \$ 236,917 \$ 211,513 Interest 180,173 158,223 124,612 Benefit changes (11,211) — — Differences between expected and actual experience (29,667) 264,729 123,090 Changes of assumptions (129,153) (310,107) (347,331) Benefit payments (98,563) (90,549) (89,653) Net change in total OPEB liability 129,227 259,213 22,231 Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: 72 Benefit payments (98,563) (90,549) (89,653) Contributions-employer 160,383 158,420 99,584 Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188 4,958	Regents Plan.			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				
Benefit changes $(11,211)$ Differences between expected and actual experience $(29,667)$ $264,729$ $123,090$ Changes of assumptions $(129,153)$ $(310,107)$ $(347,331)$ Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Net change in total OPEB liability $129,227$ $259,213$ $22,231$ Total OPEB liability-beginning $4,486,796$ $4,227,583$ $4,205,352$ Total OPEB liability-ending (a) $4,616,023$ $4,486,796$ $4,227,583$ Plan fiduciary net position: $7,126$ 802 72 Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Administrative expense (536) (485) $(5,045)$ Net change in plan fiduciary net position $68,410$ $68,188$ $4,958$ Plan fiduciary net position-beginning $76,045$ $7,857$ $2,899$ Plan fiduciary net position-ending (b) $144,455$ $76,045$ $7,857$	Service cost	\$ 217,648	\$ 236,917	\$ 211,513
Differences between expected and actual experience $(29,667)$ $264,729$ $123,090$ Changes of assumptions $(129,153)$ $(310,107)$ $(347,331)$ Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Net change in total OPEB liability $129,227$ $259,213$ $22,231$ Total OPEB liability-beginning $4,486,796$ $4,227,583$ $4,205,352$ Total OPEB liability-ending (a) $4,616,023$ $4,486,796$ $4,227,583$ Plan fiduciary net position: $160,383$ $158,420$ $99,584$ Net investment income $7,126$ 802 72 Benefit payments $(98,563)$ $(90,549)$ $(89,653)$ Administrative expense (536) (485) $(5,045)$ Net change in plan fiduciary net position-beginning $76,045$ $7,857$ $2,899$ Plan fiduciary net position-beginning $76,045$ $7,857$ $2,899$ Plan fiduciary net position-ending (b) $144,455$ $76,045$ $7,857$	Interest	180,173	158,223	124,612
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Benefit changes	(11,211)	_	_
Benefit payments (98,563) (90,549) (89,653) Net change in total OPEB liability 129,227 259,213 22,231 Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: Contributions-employer 160,383 158,420 99,584 Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188 4,958 Plan fiduciary net position-beginning 76,045 7,857 2,899 Plan fiduciary net position-ending (b) 144,455 76,045 7,857	Differences between expected and actual experience	(29,667)	264,729	123,090
Net change in total OPEB liability 129,227 259,213 22,231 Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: 160,383 158,420 99,584 Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position-beginning 76,045 7,857 2,899 Plan fiduciary net position-beginning (b) 144,455 76,045 7,857	Changes of assumptions	(129,153)	(310,107)	(347,331)
Total OPEB liability-beginning 4,486,796 4,227,583 4,205,352 Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position: 160,383 158,420 99,584 Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188 4,958 Plan fiduciary net position-beginning 76,045 7,857 2,899 Plan fiduciary net position-ending (b) 144,455 76,045 7,857	Benefit payments	(98,563)	(90,549)	(89,653)
Total OPEB liability-ending (a) 4,616,023 4,486,796 4,227,583 Plan fiduciary net position:	Net change in total OPEB liability	 129,227	 259,213	22,231
Plan fiduciary net position:160,383158,42099,584Contributions-employer160,383158,42099,584Net investment income7,12680272Benefit payments(98,563)(90,549)(89,653)Administrative expense(536)(485)(5,045)Net change in plan fiduciary net position68,41068,1884,958Plan fiduciary net position-beginning76,0457,8572,899Plan fiduciary net position-ending (b)144,45576,0457,857	Total OPEB liability-beginning	4,486,796	4,227,583	4,205,352
Contributions-employer 160,383 158,420 99,584 Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188 4,958 Plan fiduciary net position-beginning 76,045 7,857 2,899 Plan fiduciary net position-ending (b) 144,455 76,045 7,857	Total OPEB liability-ending (a)	 4,616,023	 4,486,796	4,227,583
Net investment income 7,126 802 72 Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188 4,958 Plan fiduciary net position-beginning 76,045 7,857 2,899 Plan fiduciary net position-ending (b) 144,455 76,045 7,857	Plan fiduciary net position:			
Benefit payments (98,563) (90,549) (89,653) Administrative expense (536) (485) (5,045) Net change in plan fiduciary net position 68,410 68,188 4,958 Plan fiduciary net position-beginning 76,045 7,857 2,899 Plan fiduciary net position-ending (b) 144,455 76,045 7,857	Contributions-employer	160,383	158,420	99,584
Administrative expense(536)(485)(5,045)Net change in plan fiduciary net position68,41068,1884,958Plan fiduciary net position-beginning76,0457,8572,899Plan fiduciary net position-ending (b)144,45576,0457,857	Net investment income	7,126	802	72
Net change in plan fiduciary net position68,41068,1884,958Plan fiduciary net position-beginning76,0457,8572,899Plan fiduciary net position-ending (b)144,45576,0457,857	Benefit payments	(98,563)	(90,549)	(89,653)
Plan fiduciary net position-beginning76,0457,8572,899Plan fiduciary net position-ending (b)144,45576,0457,857	Administrative expense	(536)	(485)	(5,045)
Plan fiduciary net position-ending (b) 144,455 76,045 7,857	Net change in plan fiduciary net position	 68,410	 68,188	4,958
	Plan fiduciary net position-beginning	76,045	7,857	2,899
Net OPEB liability-ending (a)-(b) \$ 4,471,568 \$ 4,410,751 \$ 4,219,726	Plan fiduciary net position-ending (b)	 144,455	 76,045	7,857
	Net OPEB liability-ending (a)-(b)	\$ 4,471,568	\$ 4,410,751	\$ 4,219,726

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia.

Required Supplementary Information Schedule of Investment Returns Multi-Employer and Single-Employer OPEB Plans For the Last Three Fiscal Years



Annual money-weighted rate of return, net of investment expense

	2019	2018	2017
Pooled Investment Fund:			
State OPEB Fund	3.85%	1.54%	0.74%
School OPEB Fund	3.80%	1.57%	0.78%
SEAD-OPEB Plan	(1.80%)	0.60%	2.90%
Regents Plan	7.99%	2.85%	0.99%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



Required Supplementary Information Notes to Required Supplementary Information Methods and Assumptions Multi-Employer and Single-Employer OPEB Plans June 30, 2019

Actuarial Methods and Assumptions - Plan Perspective:

This note provides information about changes of benefit terms, changes of assumptions, and methods and assumptions used in calculations of the OPEB liability/asset and required contributions.

State OPEB Fund

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- June 30, 2017 valuation: The participation assumption, tobacco use assumption and morbidity factors were revised. The June 30, 2017 actuarial valuation was revised, for various factors, including the methodology used to determine how employees and retirees were assigned to each of the OPEB Funds and anticipated participation percentages. Current and former employees of State organizations (including technical colleges, community service boards and public health departments) are now assigned to the State OPEB Fund based on their last employer payroll location; irrespective of retirement system affiliation. Additionally, there were changes the discount rate and an increase in the investment rate of return due to a longer term investment strategy.
- June 30, 2015 valuation: Decremental and underlying inflation assumptions were changed to reflect the Retirement Systems' experience studies.
- June 30, 2012 valuation: A data audit was performed and data collection procedures and assumptions were changed.

School OPEB Fund

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- June 30, 2017 valuation: The participation assumption, tobacco use assumption and morbidity factors were revised. The June 30, 2017 actuarial valuation was revised, for various factors, including the methodology used to determine how employees and retirees were assigned to each of the OPEB Funds and anticipated participation percentages. Current and former employees of State organizations (including technical colleges, community service boards and public health departments) are now assigned to the State OPEB Fund based on their last employer payroll location; irrespective of retirement system affiliation. Additionally, there were changes the discount rate and an increase in the investment rate of return due to a longer term investment strategy.
- June 30, 2015 valuation: Decremental and underlying inflation assumptions were changed to reflect the Retirement Systems' experience studies.
- June 30, 2012 valuation: A data audit was performed and data collection procedures and assumptions were changed.



Required Supplementary Information Notes to Required Supplementary Information Methods and Assumptions Multi-Employer and Single-Employer OPEB Plans June 30, 2019

Actuarial Methods and Assumptions - Plan Perspective:

SEAD-OPEB Plan

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- Subsequent to the June 30, 2017 measurement date, the SEAD Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for June 30, 2017 actuarial valuation. In addition, based on the SEAD Board's new funding policy, the assumed investment rate of return was further reduced by 0.10% from 7.40% to 7.30% as of the June 30, 2018 measurement date.
- On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the Fund. Primary among the changes were the updates to rates of mortality, retirement, withdrawal, and salary increases.

Regents Plan

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- Expected claims were updated to reflect actual claims experience.
- Trend rate schedule was updated to reflect current estimates of the impact of the Excise Tax, due to the updated claims assumption.
- Mortality rates were changed from RP-2014 White Collar Mortality Table with Generational Improvements by Scale MP-2014 to Pub-2010 for Teachers (as appropriate) headcount weighted projected with scale MP-2018.
- Retirement rates were updated from rates developed for Teacher's Retirement System to rates based on actual experience.
- The discount rate was updated from 3.87% as June 30, 2018 to 3.50% as of June 30, 2019.



Required Supplementary Information Notes to Required Supplementary Information Methods and Assumptions Multi-Employer and Single-Employer OPEB Plans June 30, 2019

Actuarial Methods and Assumptions - Plan Perspective:

Methods and assumptions used in calculations of actuarially determined contributions: The actuarially determined contribution rates in the schedule of employers' contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported for State, School, and SEAD-OPEB Plan, and as of June 30, 2018 for the Regents Plan. The following actuarial methods and assumptions were used to determine the most recent contribution rates in the schedule:

	State OPEB	School OPEB
Valuation date	June 30, 2016	June 30, 2016
Actuarial cost method	Projected unit credit	Projected unit credit
Amortization method	Level percent of pay, open	Level percent of pay, open
Remaining amortization period	30 years	30 years
Asset Valuation method	Market Value	Market Value
Inflation	2.75%	2.75%
Healthcare cost trend rate		
Pre-Medicare Eligible	7.75%	7.75%
Medicare Eligible	5.75%	5.75%
Ultimate Trend Rate		
Pre-Medicare Eligible	5.00%	5.00%
Medicare Eligible	5.00%	5.00%
Year of ultimate trend rate	2022	2022
Investment Rate of return*	4.50%	4.50%
	SEAD-OPEB Plan	Regents Plan
Valuation date	June 30, 2016	May 1, 2019
Actuarial cost method	Entry Age	Entry Age Normal
Amortization method	Level percent, open	Closed amortization period for initial unfunded and subsequent actuarial gains/
Remaining amortization period	Infinite	losses
Asset Valuation method	Fair Value	Fair Value
Inflation	2.75%	2.50%
Salary Increases	3.25 - 7.00%	4.00%
Healthcare cost trend rate		
Pre-Medicare Eligible	N/A	6.90%
Medicare Eligible	N/A	4.50%
Ultimate Trend Rate		
Pre-Medicare Eligible	N/A	4.50%
Medicare Eligible	N/A	4.50%
Year of ultimate trend rate	N/A	2031 Pre-Medicare Eligible
		2020 Medicare Eligible
Investment Rate of return*	7.50%	4.50%

* Includes respective rates of inflation, net of investment expense.

The State OPEB Fund, School OPEB Fund, and the Regents Plan are funded on a pay-as-you basis, and not funded based on the actuarially determined contributions.

Required Supplementary Information Schedules of State's Contributions - As Employer Multi-Employer OPEB Plans For the last Two Fiscal Years

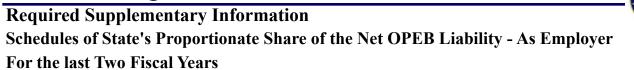
(dollars in thousands)

-

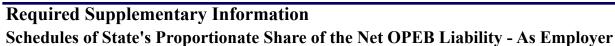
2019		2019	2018		
Primary Government					
State OPEB Fund:					
Statutorily required contribution	\$	493,986	\$	461,566	
Contributions in relation to the statutorily required contribution	¢	(493,986)	¢	(461,566)	
Contribution Deficiency (excess)	<u>\$</u>		\$		
State's covered payroll [*]	\$	2,636,539	\$	2,454,971	
Contributions as a percentage of the covered payroll		18.74%		18.80%	
SEAD-OPEB Plan:					
Actuarially determined contribution	\$	_	\$	_	
Contributions in relation to the statutorily required contribution					
Contribution Deficiency (excess)	\$		\$		
State's covered payroll [*]	\$	1,145,756	\$	1,247,936	
Contributions as a percentage of the covered payroll		N/A		N/A	
Component Units					
State OPEB Fund:					
Statutorily required contribution	\$	971	\$	979	
Contributions in relation to the statutorily required contribution		(971)		(979)	
Contribution Deficiency (excess)	\$		\$		
State's covered payroll [*]	\$	12,585	\$	13,038	
Contributions as a percentage of the covered payroll		7.72%		7.51%	
School OPEB Fund:					
Statutorily required contribution	\$	3,501	\$	3,243	
Contributions in relation to the statutorily required contribution		(3,501)		(3,243)	
Contribution Deficiency (excess)	\$		\$		
State's covered-employee payroll*	\$	68,679	\$	65,272	
Contributions as a percentage of the covered-employee payroll		5.10%		4.97%	
SEAD-OPEB Plan:					
Actuarially determined contribution	\$	_	\$	_	
Contributions in relation to the statutorily required contribution					
Contribution Deficiency (excess)	\$		\$		
State's covered payroll*	\$	14,739	\$	15,496	
Contributions as a percentage of the covered payroll		N/A		N/A	

* current year amounts are estimates

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Schedule includes all significant plans and funds administered by the State of Georgia.



	 2019	 2018
Primary Government		
Multi-Employer Plans		
State OPEB Fund:		
State's proportion of the net OPEB liability	92.022957 %	91.476285 %
State's proportionate share of the net OPEB liability	\$ 2,409,618	\$ 3,726,929
State's covered payroll	\$ 2,454,971	\$ 2,305,259
State's proportionate share of the net OPEB liability as a percentage of its covered payroll	98.15 %	161.67 %
Plan fiduciary net position as a percentage of the total OPEB liability	31.48 %	17.34 %
SEAD-OPEB Plan:		
State's proportion of the net OPEB liability	84.826905 %	89.559271 %
State's proportionate share of the net OPEB liability	\$ (243,103)	\$ (232,195)
State's covered payroll	\$ 1,247,936	\$ 1,247,936
State's proportionate share of the net OPEB liability as a percentage of its covered payroll	(19.48%)	(18.61%)
Plan fiduciary net position as a percentage of the total OPEB liability	129.46 %	130.17 %
Single-Employer Plan		
Regents Plan:		
State's proportion of the net OPEB liability	100.000000 %	100.000000 %
State's proportionate share of the net OPEB liability	\$ 4,410,751	\$ 4,219,726
State's covered-employee payroll	\$ 3,218,771	\$ 3,122,694
State's proportionate share of the net OPEB liability as a percentage of its covered-employee payroll	137.03 %	135.13 %
Plan fiduciary net position as a percentage of the total OPEB liability	1.69 %	0.19 %



For the last Two Fiscal Years

(dollars in thousands)

Component Units		2019		2018
Multi-Employer Plans				
State OPEB Fund:				
State's proportion of the net OPEB liability		0.209969 %		0.213868 %
State's proportionate share of the net OPEB liability	\$	5,107	\$	8,097
State's covered payroll	\$	13,038	\$	12,526
State's proportionate share of the net OPEB liability as a percentage of its covered payroll		39.17 %		64.64 %
Plan fiduciary net position as a percentage of the total OPEB liability		31.48 %		17.34 %
School OPEB Fund:				
State's proportion of the net OPEB liability		0.625763 %		0.598651 %
State's proportionate share of the net OPEB liability	\$	79,533	\$	84,110
State's covered-employee payroll	\$	65,272	\$	63,442
State's proportionate share of the net OPEB liability as a percentage of its covered-employee payroll		121.85 %		132.58 %
Plan fiduciary net position as a percentage of the total OPEB liability		2.93 %		1.61 %
SEAD-OPEB Plan:				
State's proportion of the net OPEB liability		1.119336 %		1.245396 %
State's proportionate share of the net OPEB liability	\$	(3,000)	\$	(3,195)
State's covered payroll	\$	15,496	\$	15,496
State's proportionate share of the net OPEB liability as a percentage of its covered payroll		(19.36%)		(20.62%
Plan fiduciary net position as a percentage of the total OPEB liability		129.46 %		130.17 %
The amounts presented for each fiscal year were determined	or of	the prior fical	1100	r and

The amounts presented for each fiscal year were determined as of the prior fiscal year-end.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information Schedule of Employers' Net OPEB Liability - as Employer Single-Employer OPEB Plans For the last Two Fiscal Years

(dollars in thousands)

	2019	2018
Regents Plan:		
Total OPEB liability	\$ 4,486,796	\$ 4,227,583
Plan fiduciary net position	76,045	7,857
Employers' net OPEB liability	\$ 4,410,751	\$ 4,219,726
Plan fiduciary net position as a percentage of the total	1.69%	 0.19%
Covered-employee payroll	\$ 3,218,771	\$ 3,122,694
Employers' net OPEB liability as a percentage of covered- employee payroll	137.03%	135.13%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information Schedule of Changes in Employers' Net OPEB Liability - as Employer Single-Employer OPEB Plans For the Last Two Fiscal Years (dollars in thousands)

	2019	2018
Regents Plan:		
Total OPEB liability:		
Service cost	\$ 236,917	\$ 211,513
Interest	158,223	124,612
Differences between expected and actual experience	264,729	123,090
Changes of assumptions	(310,107)	(347,331)
Benefit payments/Refunds	(90,549)	(89,653)
Net change in total OPEB liability	 259,213	 22,231
Total OPEB liability-beginning	 4,227,583	 4,205,352
Total OPEB liability-ending (a)	4,486,796	 4,227,583
Plan fiduciary net position:		
Contributions-employer	158,420	99,584
Net investment income	802	72
Benefit payments/Refunds	(90,549)	(89,653)
Administrative expense	 (485)	 (5,045)
Net change in plan fiduciary net position	68,188	4,958
Plan fiduciary net position-beginning	 7,857	 2,899
Plan fiduciary net position-ending (b)	 76,045	 7,857
Net OPEB liability-ending (a)-(b)	\$ 4,410,751	\$ 4,219,726

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



Required Supplementary Information Notes to Required Supplementary Information Methods and Assumptions Multi-Employer and Single-Employer OPEB Plans June 30, 2019

Actuarial Methods and Assumptions - State as Employer Perspective

This note provides information about changes of benefit terms, changes of assumptions, and methods and assumptions used in calculations of the OPEB liability/asset and required contributions.

State OPEB Fund

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- June 30, 2017 valuation: The June 30, 2017 actuarial valuation was revised, for various factors, including the methodology used to determine how employees and retirees were assigned to each of the OPEB Funds and anticipated participation percentages. Current and former employees of State organizations (including technical colleges, community service boards and public health departments) are now assigned to the State OPEB Fund based on their last employer payroll location; irrespective of retirement system affiliation.
- The discount rate was updated from 3.09% as June 30, 2016 to 3.60% as of June 30, 2017, and to 5.22% as of June 30, 2018.
- June 30, 2015 valuation: Decremental and underlying inflation assumptions were changed to reflect the Retirement Systems' experience studies.
- June 30, 2012 valuation: A data audit was performed and data collection procedures and assumptions were changed.

School OPEB Fund

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- June 30, 2017 valuation: The June 30, 2017 actuarial valuation was revised, for various factors, including the methodology used to determine how employees and retirees were assigned to each of the OPEB Funds and anticipated participation percentages. Current and former employees of State organizations (including technical colleges, community service boards and public health departments) are now assigned to the State OPEB Fund based on their last employer payroll location; irrespective of retirement system affiliation.
- The discount rate was updated from 3.07% as June 30, 2016 to 3.58% as of June 30, 2017 and to 3.87% as of June 30, 2018.
- June 30, 2015 valuation: Decremental and underlying inflation assumptions were changed to reflect the Retirement Systems' experience studies.
- June 30, 2012 valuation: A data audit was performed and data collection procedures and assumptions were changed.

Required Supplementary Information Notes to Required Supplementary Information Methods and Assumptions Multi-Employer and Single-Employer OPEB Plans June 30, 2019

Actuarial Methods and Assumptions - State as Employer Perspective

SEAD-OPEB Plan

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- The discount rate was updated from 7.50% as of June 30, 2017 to 7.30% as of June 30, 2018.
- Subsequent to the June 30, 2017 Measurement Date, the Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for June 30, 2017 actuarial valuation. In addition, based on the Board's new funding policy, the assumed investment rate of return was further reduced by 0.10% from 7.40% to 7.30% as of June 30, 2018 Measurement Date.
- On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the Fund. Primary among the changes were the updates to rates of mortality, retirement, withdrawal, and salary increases.

Regents Plan

Changes of benefit terms: There have been no changes in benefit terms.

Changes of assumptions:

- The discount rate was updated from 2.85% as June 30, 2016 to 3.58% as of June 30, 2017 and to 3.87% as of June 30, 2018.
- Expected claims were updated to reflect actual claims experience. Trend was reset based on current conditions. Disability, Termination, Retirement, and Disabled Mortality were updated to reflect those used in the current TRS actuarial valuation.



Required Supplementary Information Notes to Required Supplementary Information Methods and Assumptions Multi-Employer and Single-Employer OPEB Plans June 30, 2019

Actuarial Methods and Assumptions - State as Employer Perspective

Methods and assumptions used in calculations of actuarially determined contributions: The actuarially determined contribution rates in the schedules of employers' contributions are calculated as of June 30, as listed for all plans. The following actuarial methods and assumptions were used to determine the most recent contribution rates in those schedules:

	State OPEB	School OPEB
Valuation date	June 30, 2018	June 30, 2018
Actuarial cost method	Projected Unit Credit	Projected Unit Credit
Amortization method	Level percent of pay, open	Level percent of pay open
Remaining amortization period	30 years	30 years
Asset Valuation method	Market Value	Market Value
Inflation	2.75%	2.50%
Healthcare cost trend rate		
Pre-Medicare	7.25%	7.25%
Medicare Eligibile	5.375%	5.375%
Investment Rate of return*	4.50%	4.50%
	SEAD-OPEB Plan	Regents Plan
Valuation date	June 30, 2015	May 1, 2018
Actuarial cost method	Entry Age	Entry Age Normal
Amortization method	Projected Unit Credit	Closed amortization period for initial unfunded and subsequent actuarial gains/losses
Remaining amortization period	Infinite	30 year closed
Inflation	2.75%	2.50%
Healthcare cost trend rate	N/A	
Pre-Medicare		7.10%
Medicare Eligibile		4.50%
Investment Rate of return*	7.50%	4.50%

* Includes respective rates of inflation, net of investment expense.

The State OPEB Fund, School OPEB Fund, and the Regents Plan are funded on a pay-as-you basis, and not funded based on the actuarially determined contributions.

COMBINING AND INDIVIDUAL FUND STATEMENTS



NONMAJOR GOVERNMENTAL FUNDS



Description of Nonmajor Governmental Funds



SPECIAL REVENUE FUNDS

Special Revenue Funds account for specific revenue sources that are legally restricted to expenditures for specific purposes. The State's special revenue funds, other than the Transportation Investment Act Fund, include the blended component units that conduct general governmental functions as described below:

The **Georgia Aviation Authority** was created to provide oversight and efficient operation of state aircrafts and aviation operations, and ensure the safety of state air travelers and aviation property.

The **State Road and Tollway Authority** (SRTA) is a legally separate public corporation created to finance transportation projects and operate toll facilities in the State of Georgia.

The **Transportation Investment Act Fund** (TIA) accounts for funds collected by the State and dispensed to the Department of Transportation for TIA projects in the relevant special tax districts.

DEBT SERVICE FUNDS

Debt Service Funds account for the accumulation of resources that are restricted, committed or assigned to expenditures for principal and interest.

The General Obligation Debt Sinking Fund accounts for the payment of principal and interest on the State's general long-term debt.

The **State Road and Tollway Authority Debt Service Fund** accounts for the payment of principal and interest on the debt of the Authority's governmental funds. The Authority issues bonded debt which finances State transportation infrastructure construction. Debt service payments due on outstanding bonds are paid by the Authority from redirected funds from the U. S. Department of Transportation and/or State motor fuel tax funds.

State of Georgia Combining Balance Sheet

Combining Balance Sheet Nonmajor Governmental Funds June 30, 2019

			5	Special Revenue			Debt Service			
	A	Georgia Aviation uthority		State Road and Tollway Authority]	Transportation Investment Act Fund	 General Obligation Debt Sinking Fund	State Road and Tollway Authority		 Total
Assets										
Cash and Cash Equivalents	\$	2,936	\$	396	\$	222,600	\$ —	\$	64,016	\$ 289,948
Pooled Investments with State Treasury		_		5,462		_	_		_	5,462
Investments		—		—		85,030	—		_	85,030
Accounts Receivable		25		25,329		13,332	—		_	38,686
Due From Other Funds		—		25,654		—	—		—	25,654
Restricted Assets										
Pooled Investments with State Treasury		—		174,012		—	—		_	174,012
Other Assets		_		190		_	 _		_	 190
Total Assets	\$	2,961	\$	231,043	\$	320,962	\$ 	\$	64,016	\$ 618,982
Liabilities and Fund Balances Liabilities:										
Accounts Payable and Other Accruals	\$	65	\$	537	\$	1,847	\$ _	\$	_	\$ 2,449
Due to Other Funds		_		_		15,292	_		_	15,292
Contracts Payable		_		22,795		51	_		_	22,846
Other Liabilities		—		55,563		_	_		_	55,563
Total Liabilities		65		78,895		17,190	_		_	96,150
Fund Balances:										
Nonspendable		—		16,770		_	_		_	16,770
Restricted		—		94,017		303,772	_		64,016	461,805
Unrestricted										
Assigned		2,896		41,361			 _		_	 44,257
Total Fund Balances		2,896		152,148		303,772	 		64,016	 522,832
Total Liabilities and Fund Balances	\$	2,961	\$	231,043	\$	320,962	\$ 	\$	64,016	\$ 618,982



Combining Statement of Revenues, Expenditures, and Changes in Fund Balances Nonmajor Governmental Funds

For the Fiscal Year Ended June 30, 2019

		Special Revenue		Debt S	Debt Service		
	Georgia Aviation Authority	State Road and Tollway Authority	Transportation Investment Act Fund	General Obligation Debt Sinking Fund	State Road and Tollway Authority	Total	
Revenues							
Intergovernmental - Other	\$	\$ 4,259	\$ 148,527	\$	\$	\$ 152,786	
Sales and Services	214	—	—	—	—	214	
Interest and Other Investment Income		2,200	7,492		1,012	10,704	
Total Revenues	214	6,459	156,019		1,012	163,704	
Expenditures							
Transportation	_	82,884	_	_	12,251	95,135	
Economic Development and Assistance	1,238	_	30,680	_	_	31,918	
Debt Service							
Principal	_	_	_	833,870	195,205	1,029,075	
Interest	_	_	_	401,239	34,799	436,038	
Accrued Interest on Bonds Retired in Advance	_	_	_	5	_	5	
Discount on Bonds Retired in Advance	—	_	_	27		27	
Other Debt Service Expenditures	_	_	_	_	1,475	1,475	
Total Expenditures	1,238	82,884	30,680	1,235,141	243,730	1,593,673	
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,024)	(76,425)	125,339	(1,235,141)	(242,718)	(1,429,969)	
Other Financing Sources (Uses)							
Debt Issuance - Refunding Bonds	_	_	_	_	285,915	285,915	
Debt Issuance - GARVEE Bonds	—	_	_	_	63,850	63,850	
Debt Issuance - Refunding Bonds - Premium	_	_	_	_	27,159	27,159	
Debt Issuance - GARVEE Bonds - Premium	_	—	—	—	11,455	11,455	
Payment to Refunded Bond Escrow Agent	—	—	—	—	(313,095)	(313,095)	
Transfers In	—	107,992	—	1,235,141	231,214	1,574,347	
Transfers Out		(3,016)	(37,261)		(34)	(40,311)	
Net Other Financing Sources (Uses)		104,976	(37,261)	1,235,141	306,464	1,609,320	
Excess (Deficiency) of Revenues and Other Financing Sources Over (Under) Expenditures and Other Financing Uses	(1,024)	28,551	88,078	_	63,746	179,351	
Fund Balances, July 1 - Restated (Note 3)	3,920	123,597	215,694		270	343,481	
Fund Balances, June 30	\$ 2,896	\$ 152,148	\$ 303,772	\$	\$ 64,016	\$ 522,832	



NONMAJOR ENTERPRISE FUNDS



Description of Nonmajor Enterprise Funds



The Enterprise Funds account for the business type activities of smaller governmental agencies that are funded by the issuance of debt or fees charged to external customers. The State's Nonmajor Enterprise Funds are described below:

The State Employees' Assurance Department - Active is used to account for the accumulation of resources for the purpose of providing survivors' benefits for eligible members of the Employees', Judicial, and Legislative Retirement Systems. SEAD - Active is a cost-sharing multiple employer life insurance plan created in 2007 by the Georgia General Assembly to amend Title 47 of the Official Code of Georgia Annotated, relating to retirement, so as to establish a fund for the provision of term life insurance to active members of ERS, LRS, and GJRS.

The Georgia Higher Education Facilities Authority is a legally separate public corporation created for the purpose of financing eligible construction, renovation, improvement, and rehabilitation or restoration projects for the Board of Regents of the University System of Georgia and the Technical College System of the State of Georgia through the issuance of revenue bonds. The Authority issues debt and enters into lease agreements. The current lease agreements outstanding are with an affiliate of the University System of Georgia Foundation, Inc. (nonmajor enterprise fund). The costs of the Authority's debt are recovered through lease payments from the Higher Education Foundations.

The **State Road and Tollway Authority (SRTA)** is a legally separate public corporation created to finance transportation projects and operate toll facilities in the State of Georgia. SRTA uses an enterprise fund to account for tolling and transit activities, including the Xpress Commuter Bus Service, the I-75 South Metro Express Lanes, and all other facilities of the rolling system (i.e. the I-85 Express Lanes and six toll facilities under planning and/or construction).

State of Georgia Combining Statement of Net Position Nonmajor Enterprise Funds June 30, 2019

	State Employees' Assurance Department - Active	Georgia Higher Education Facilities Authority	State Road and Tollway Authority	Total
Assets				
Current Assets: Cash and Cash Equivalents	\$ 52	\$ 2	\$ 33	\$ 87
	\$ 52			
Pooled Investments with State Treasury	205 705	486	38,618	39,104
Investments	305,795		0.733	305,795
Accounts Receivable (Net)		371	9,733	10,104
Due from Other Funds	72		_	72
Due from Component Units	—	197,575	_	197,575
Inventories	—	—	126	126
Other Assets	—	—	30	30
Restricted Assets:				
Cash and Cash Equivalents	—	—	7,652	7,652
Pooled Investments with State Treasury			124,191	124,191
Total Current Assets	305,919	198,434	180,383	684,736
Noncurrent Assets: Restricted Assets:				
Net OPEB Asset	_	_	402	402
Nondepreciable Capital Assets	—	—	42,065	42,065
Depreciable Capital Assets, net	_	_	57,508	57,508
Total Noncurrent Assets			99,975	99,975
Total Assets	305,919	198,434	280,358	784,711
Deferred Outflows of Resources		10.597	2.612	12 100
Liabilities		10,587	2,612	13,199
Current Liabilities:				
Accounts Payable and Other Accruals	42	_	21,148	21,190
Due to Other Funds	_	_	25,654	25,654
Notes and Loans Payable	_	_	35,000	35,000
Compensated Absences Payable	_	—	179	179
Revenue Bonds Payable	_	5,580		5,580
Other Current Liabilities	_	371	29,457	29,828
Current Liabilities Payable from Restricted Assets	_		29,671	29,671
Total current Liabilities	42	5,951	141,109	147,102
Noncurrent Liabilities:				
Compensated Absences Payable	_	_	559	559
Revenue Bonds Payable	_	202,292	34,131	236,423
Notes and Loans Payable	_	_	221,698	221,698
Other Noncurrent Liabilities	_	_	849	849
Net OPEB Liability	_	_	6,810	6,810
Net Pension Liability	_	—	8,637	8,637
Total Noncurrent Liabilities		202,292	272,684	474,976
Total Liabilities	42	208,243	413,793	622,078
Deferred Inflows of Resources			1,324	1,324
Net Position			00.000	00.000
Net Investment in Capital Assets	_	—	88,992	88,992
Restricted for: Other Benefits	305,877			305,877
Other Purposes	505,077	_	42,582	42,582
Unrestricted		778	42,582 (263,721)	42,582 (262,943)
Total Net Position	\$ 305,877	\$ 778	\$ (132,147)	\$ 174,508



Combining Statement of Revenues, Expenses, and Changes in Net Position Nonmajor Enterprise Funds For the Fiscal Year Ended June 30, 2019

	State Employees' Assurance Department- Active	Georgia Higher Education Facilities Authority	State Road and Tollway Authority	Total
Operating Revenues:				
Contributions/Premiums	\$ 531	\$	\$	\$ 531
Sales and Services		8,698	31,337	40,035
Total Operating Revenues	531	8,698	31,337	40,566
Operating Expenses:				
Personal Services	80	_	9,932	10,012
Services and Supplies	—	10	34,833	34,843
Interest Expense	—	8,698	_	8,698
Benefits	3,424	_	_	3,424
Depreciation	—	_	11,685	11,685
Amortization	—	(21)	(291)	(312)
Other		649		649
Total Operating Expenses	3,504	9,336	56,159	68,999
Operating Income	(2,973)	(638)	(24,822)	(28,433)
Nonoperating Revenues (Expenses):				
Interest and Other Investment Income	19,708	11	2,498	22,217
Interest Expense	(65)	—	(9,947)	(10,012)
Other			(126,283)	(126,283)
Total Nonoperating Revenues (Expenses)	19,643	11	(133,732)	(114,078)
Income (Loss) Before Contributions and Transfers	16,670	(627)	(158,554)	(142,511)
Capital Contributions			84,407	84,407
Transfers:				
Transfers In			14,660	14,660
Change in Net Position	16,670	(627)	(59,487)	(43,444)
Net Position, July 1 - Restated (Note 3)	289,207	1,405	(72,660)	217,952
Net Position, June 30	\$ 305,877	\$ 778	\$ (132,147)	\$ 174,508

Combining Statement of Cash Flows Nonmajor Enterprise Funds For the Fiscal Year Ended June 30, 2019

	State Employees' Assurance Department- Active	Georgia Higher Education Facilities Authority	State Road and Tollway Authority	Total
Cash Flows from Operating Activities:	Active	Autionity	Autionity	Total
Cash Received from Customers	\$	s —	\$ 31,812	\$ 31,812
Cash Received from Other Funds (Internal Activity)	÷ 531	÷	1,223	1,754
Cash Paid to Vendors	(3,504)	(10)	(25,837)	(29,351)
Cash Paid to Employees	(5,501)	(10)	(11,271)	(11,271)
Cash Paid to Other Funds (Internal Activity)		_	(1,223)	(1,223)
Other Operating Receipts		_	27,135	27,135
ould operating receipto				27,100
Net Cash Provided by Operating Activities	(2,973)	(10)	21,839	18,856
Cash Flows from Noncapital Financing Activities:				
Interest Paid on Bonds/Long-Term Debt		(8,788)	—	(8,788)
Transfers from Other Funds		_	8,060	8,060
Payments on Noncapital Financing Debt		(21,970)	_	(21,970)
Other Noncapital Payments				
Net Cash Used in Noncapital Financing Activities		(30,758)	8,060	(22,698)
Cash Flows from Capital and Related Financing Activities:				
Grant Disbursements	_	_	(96,315)	(96,315)
Intergovernmental Grant		_	39,343	39,343
Proceeds from Capital Debt		_	2,459	2,459
Acquisition and Construction of Capital Assets		_	(28,737)	(28,737)
Net Cash Provided by (Used in) Capital and Related Financing				
Activities	_	_	(83,250)	(83,250)
Cash Flows from Investing Activities:				
Proceeds from Sales of Investments	289,087	_	_	289,087
Purchase of Investments	(305,795)	_	_	(305,795)
Interest and Dividends Received	19,643	11	2,498	22,152
Other Investing Activities		30,759		30,759
Net Cash Provided by (Used in) Investing Activities	2,935	30,770	2,498	36,203
Net Increase (Decrease) in Cash and Cash Equivalents	(38)	2	(50,853)	(50,889)
Cash and Cash Equivalents, July 1 - Restated (Note 3)	90	486	221,347	221,923
Cash and Cash Equivalents, June 30	\$ 52	\$ 488	\$ 170,494	\$ 171,034
Cash and Cash Equivalence, valie 50	<u> </u>	• 100	• 170,131	• 1/1,001
Reconciliation of Operating Income to Net Cash				
Provided by (Used in) Operating Activities:				
Operating Income	\$ (2,973)	\$ (638)	\$ (24,822)	\$ (28,433)
Adjustments to Reconcile Operating Income (Loss) to				
Net Cash Provided by (Used in) Operating Activities:				
Depreciation/Amortization Expense	—	(21)	11,394	11,373
Other	-	649	—	649
Changes in Assets and Liabilities:				
Deferred Inflows of Resources:		00	1.55	2//
Accounts Receivable		89	177	266
Other Assets		—	74	74
Net OPEB Asset		—	(402)	(402)
Deferred Outflows of Resources			170	170
Accounts Payable and Other Accruals		(89)	34,770	34,681
Unearned Revenue		_	(7,300)	(7,300)
Compensated Absences	—	—	(82)	(82)
Net OPEB Liability	—	—	(434)	(434)
Net Pension Liability	—	—	(1,851)	(1,851)
Other Liabilities	—	—	8,899	8,899
Deferred Inflows of Resources	¢ (2.072)	e (10)	1,246	1,246
Net Cash Provided by (Used in) Operating Activities	\$ (2,973)	\$ (10)	\$ 21,839	\$ 18,856
Noncash Investing, Capital, and Financing Activities:				
Special Item - Equipment-Capital Asset Transfer	\$ _	\$	\$ 37,942	\$ 37,942
Other			9,947	9,947
Total Noncash Investing, Capital and Financing Activities	\$	\$	\$ 47,889	\$ 47,889

INTERNAL SERVICE FUNDS



State of Georgia Description of Internal Service Funds

Internal Service Funds are used to account for the financing of goods or services provided by one department or agency to other departments or agencies of the government and to other government units, on a cost reimbursement basis. The State's internal service funds are described below:

The **Department of Administrative Services** delivers a variety of supportive services to all state agencies and, upon request, to local governments in Georgia. Among the services provided are purchasing (procurement), surplus property transactions, document services, fleet management, and human resources administration.

The **Georgia Building Authority** is responsible for all services associated with the management of State office buildings, maintaining the grounds within the State Capitol complex, maintaining the Governor's Mansion and operating parking facilities.

The Georgia Correctional Industries Administration utilizes the inmate work force to manufacture products and provide services for the penal system, other units of state government and local governments.

The **Risk Management** column is an accumulation of the funds used to account for the State's self-insurance programs established by individual agreement, statute or administrative action:

The **Cyber Insurance Coverage Fund** was created for the development of a cyber insurance product for direct loss and out of pocket expenses incurred as a result of damage to data, systems or income defense and liability incurred as a result of employees' actions. Department of Administrative Services (DOAS) engaged with an insurance broker to develop an underwriting submission to present to the commercial insurance underwriters. DOAS Risk Management Services manages the insurance product with assistance from Georgia Technology Authority.

The **Liability Insurance Fund** is used to account for the accumulation of funds for the purpose of providing liability insurance coverage for employees of the State against personal liability for damages arising out of performance of their duties.

The **Property Insurance Fund** is used to account for the assessment of premiums against various state agencies for the purpose of providing property, fire and extended coverage, automobile, aircraft and marine insurance.

The **State Indemnification Fund** is used to account for the accumulation of funds for the purpose of providing indemnification with respect to the death of any law enforcement officer, fireman or prison guard killed in the line of duty.

The **Teacher Indemnification Fund** is used to account for the accumulation of funds for the purpose of providing indemnification with respect to the death of any public school employees killed or permanently disabled by an act of violence in the line of duty on or after July 1, 2001.

The **Unemployment Compensation Fund** was created for the purpose of consolidating processing of unemployment compensation claims against state agencies and the payment of sums due to the Department of Labor.

The **Workers' Compensation Fund** was established to authorize insurance coverage for employees of the State and for the receipt of premiums as prescribed by the Workers' Compensation statutes of the State.

The **Georgia Technology Authority** was created to provide technology enterprise management and technology portfolio management to state and local governments.

State of Georgia Combining Statement of Net Position Internal Service Funds June 30, 2019

	Admi	rtment of nistrative rvices	Bu	orgia ilding hority	Ind	Correctional ustries nistration
Assets						
Current Assets:						
Cash and Cash Equivalents	\$	1,656	\$	669	\$	9,287
Pooled Investments with State Treasury	ψ	2,074	ψ	37,334	Ŷ	1,048
Investments		2,074		57,554		1,048
Accounts Receivable (Net)		766		1,252		5,631
Due from Other Funds		700		1,252		5,051
Due from Component Units		_		_		_
Inventories		_		447		15,146
Other Assets		_		143		15,140
Total Current Assets		4,496		39,845		31,113
Total Current Assets		4,490		39,845		51,115
Noncurrent Assets:						
Investments				—		
Restricted Assets:						
Net OPEB Asset		312		750		752
Capital Assets:						
Construction in Progress		_		14,160		_
Land		_		22,359		_
Buildings and Building Improvements		_		613,676		12,923
Improvements Other Than Buildings		_		23,394		_
Machinery and Equipment		_		9,484		29,469
Software		_		_		_
Works of Art and Collections		_		1,274		_
Accumulated Depreciation		_		(328,383)		(34,545)
Total Noncurrent Assets		312		356,714		8,599
Total Assets		4,808		396,559		39,712
Deferred Outflows of Resources		1,939		4,081		4,551
		,				,
Liabilities						
Current Liabilities:						
Cash Overdraft				2 402		4.057
Accounts Payable and Other Accruals		470		2,403		4,957
Due to Other Funds		—		9		3
Unearned Revenue		—		108		
Notes and Loans Payable		—		—		
Claims and Judgments Payable						
Compensated Absences Payable		—		733		444
Capital Leases Payable		_		3,721		220
Other Current Liabilities		824				
Total Current Liabilities		1,294		6,974		5,624
Noncurrent Liabilities:						1 256
Compensated Absences Payable				20.105		1,256
Capital Leases Payable				30,105		344
Notes and Loans Payable		2 (2)		(142		
Net OPEB Liability		2,626		6,143		6,880
Net Pension Liability		4,747		10,439		11,602
Other Noncurrent Liabilities		7 272		46 (97		20.082
Total Noncurrent Liabilities		7,373		46,687		20,082
Total Liabilities		8,667		53,661		25,706
Deferred Inflows of Resources		1,478		3,875		4,379
Net Position						
Net Investment in Capital Assets		—		322,138		7,284
Restricted for:						
Other Purpose		—		691		676
Unrestricted		(3,398)		20,275		6,218
Total Net Position	\$	(3,398)	S	343,104	\$	14,178
		(3,373)		2 /2,101		1,175

Risk Management (see combining)		Georgia Technology Authority	Total
		 2	
\$	10,357	\$ 2,582	\$ 24,551
	34,286	55,210	129,952
	6,290	—	6,290
	90,120	11,618	109,387
	801,796	32,458	834,254
	—	50	50
	—	—	15,593
		 49	 193
	942,849	 101,967	 1,120,270
	35,313	_	35,313
	130	1,930	2 874
	150	1,750	3,874
	—	—	14,160
	—	13	22,372
	—	13,230	639,829
	—	—	23,394
	_	33,707	72,660
	_	55,079	55,079
	—		1,274
		 (97,734)	 (460,662)
	35,443	 6,225	 407,293
	978,292	 108,192	 1,527,563
	678	 8,307	 19,556
	2,799	_	2,799
	599	40,772	49,201
	_	_	12
	_	_	108
	—	3,891	3,891
	916,988	—	916,988
	_	935	2,112
	_	1,607	5,548
	103	 4	 931
	920,489	 47,209	 981,590
	_	1,572	2,828
	_	4,698	35,147
	_	8,662	8,662
	1,100	12,135	28,884
	1,801	21,384	49,973
	2,901	 48,451	 125,494
	923,390	 95,660	 1,107,084
	614	 9,433	 19,779
	017	 	
	_	(5,622)	323,800
	54,966	1,699 15,329	3,066 93,390
\$	54,966	\$ 11,406	\$ 420,256

Combining Statement of Revenues, Expenses, and Changes in Net Position Internal Service Funds For the Fiscal Year Ended June 30, 2019

	Department of Administrative Services	Georgia Building Authority	Georgia Correctional Industries Administration
Operating Revenues:			
Contributions/Premiums	\$	\$	\$
Rents and Royalties	_	49,177	1
Sales and Services	7,345	2,700	68,481
Other	6,478	881	25
Total Operating Revenues	13,823	52,758	68,507
Operating Expenses:			
Personal Services	3,591	9,096	11,131
Services and Supplies	9,021	30,904	47,825
Claims and Judgments	—	—	—
Depreciation		18,793	6,713
Total Operating Expenses	12,612	58,793	65,669
Operating Income (Loss)	1,211	(6,035)	2,838
Nonoperating Revenues (Expenses):			
Interest and Other Investment Income	48	975	28
Nonoperating Grants & Contributions	7,388	—	—
Other	(7,388)	240	13
Total Nonoperating Revenues (Expenses)	48	1,215	41
Income (Loss) Before Contributions and Transfers	1,259	(4,820)	2,879
Capital Contributions		73,306	
Transfers:			
Transfers In	—	_	—
Transfers Out			
Net Transfers			
Change in Net Position	1,259	68,486	2,879
Net Position, July 1	(4,657)	274,618	11,299
Net Position, June 30	\$ (3,398)	\$ 343,104	\$ 14,178

Risk Management (see combining)		Georgia Technology Authority	Total
\$ 241,29	96 \$	2,356	\$ 243,652
-	_	—	49,178
19	96	276,842	355,564
			7,384
241,45	02	279,198	655,778
64	15	16,768	41,231
35,12	28	241,314	364,192
250,58	35	_	250,585
		2,151	27,657
286,3:	58	260,233	683,665
(44,80	56)	18,965	(27,887)
3,0	.5	989	5,055 7,388
8,7	0	(3,400)	(1,825)
11,72	.5	(2,411)	10,618
(33,14	11)	16,554	(17,269)
		45,033	118,339
15,00	55	(100,846)	15,065 (100,846)
15,00	55	(100,846)	(85,781)
(18,0	76)	(39,259)	15,289
73,04	12	50,665	404,967
\$ 54,90	56 \$	11,406	\$ 420,256

State of Georgia Combining Statement of Cash Flows **Internal Service Funds** For the Fiscal Year Ended June 30, 2019

	Adn	artment of ninistrative services	В	Georgia uilding uthority	Georgia Correctional Industries dministration
Cash Flows from Operating Activities:					
Cash Received from Customers	\$	2,061	\$	5,102	\$ 13,123
Cash Received from Other Funds (Internal Activity)		11,645		47,031	57,505
Cash Received from Required Contributions/Premiums		—		—	—
Cash Received from Required Contributions/Premiums (Internal Activity)		_		_	—
Cash Paid to Vendors		(9,197)		(31,299)	(48,491)
Cash Paid to Employees		(4,417)		(11,690)	(14,051)
Cash Paid for Claims and Judgments		—		—	—
Other Operating Payments		(467)			
Net Cash Provided by (Used in) Operating Activities		(375)		9,144	 8,086
Cash Flows from Noncapital Financing Activities:					
Transfers from Other Funds		—		—	—
Transfers to Other Funds		—		—	—
Other Noncapital Receipts		7,388		—	13
Other Noncapital Payments		(7,388)			
Net Cash Provided by (Used in) Noncapital Financing Activities					 13
Cash Flows from Capital and Related Financing Activities:					
Capital Contributions		—		1,726	—
Proceeds from Sale of Capital Assets		—		2,224	—
Acquisition and Construction of Capital Assets		_		(12,412)	(7,041)
Principal Paid on Capital Debt				(7,178)	 (670)
Net Cash Used in Capital and Related Financing Activities				(15,640)	 (7,711)
Cash Flows from Investing Activities:					
Proceeds from Sales of Investments		—		—	—
Purchase of Investments		—		—	—
Interest and Dividends Received		48		975	 29
Net Cash Provided by Investing Activities		48		975	 29
Net Increase (Decrease) in Cash and Cash Equivalents		(327)		(5,521)	417
Cash and Cash Equivalents, July 1		4,057		43,524	 9,918
Cash and Cash Equivalents, June 30	\$	3,730	\$	38,003	\$ 10,335

Risk Management (see combining)		Georgia echnology Authority	 Total
\$ 196	\$	66,839	\$ 87,321
_		208,612	324,793
23,688		—	23,688
150,710		—	150,710
(35,441))	(245,576)	(370,004)
(1,915))	(22,942)	(55,015)
(160,763))	—	(160,763)
		(71)	 (538)
(23,525)	<u> </u>	6,862	 192
9,411		_	9,411
		(3,201)	(3,201)
14,365			21,766
		(5,588)	 (12,976)
23,776		(8,789)	 15,000
_		41,633	43,359
_			2,224
—		(28,811)	(48,264)
		(1,242)	 (9,090)
		11,580	 (11,771)
53,459			53,459
(42,082)			(42,082)
3,494		991	 5,537
14,871		991	 16,914
15,122		10,644	20,335
26,722		47,148	 131,369
\$ 41,844	\$	57,792	\$ 151,704
			(continued)

State of Georgia Combining Statement of Cash Flows **Internal Service Funds** For the Fiscal Year Ended June 30, 2019

	epartment of Iministrative Services	E	Georgia Building uthority	 Georgia Correctional Industries Administration
Reconciliation of Operating Income (Loss) to Net Cash provided by (Used in) Operating Activities:				
Operating Income (Loss)	\$ 1,211	\$	(6,035)	\$ 2,838
Reconciliation of Operating Income (Loss) to Net Cash provided by (Used in) Operating Activities:				
Depreciation Expense	_		18,792	6,713
Changes in Assets, Deferred Outflows of Resources, Liabilities, and Deferred Inflows of Resources:				
Accounts Receivable	(117)		(633)	1,794
Due from Other Funds	—		—	113
Due from Component Units	—		—	—
Other Assets	—		(162)	402
Net OPEB Asset	(13)		(7)	(49)
Deferred Outflows of Resources	(306)		(1,043)	(1,080)
Accounts Payable and Other Accruals	(202)		(87)	(1,044)
Due to Other Funds	—		(148)	—
Unearned Revenue	—		9	—
Claims and Judgments Payable	—		—	—
Compensated Absences Payable	—		(52)	206
Net OPEB Liability	(1,570)		(3,896)	(4,130)
Net Pension Liability	(20)		(423)	102
Other Liabilities	(442)		—	—
Deferred Inflows of Resources	 1,084		2,829	 2,221
Net Cash Provided by (Used in) Operating Activities	\$ (375)	\$	9,144	\$ 8,086
Noncash Investing, Capital, and Financing Activities:				
Change in Fair Value of Investments	\$ 	\$		\$

Risk Management		Georgia Technology		
(see combinin	g)	Authority		Total
\$ (*	44,866)	\$ 18,96;	5 \$	(27,887)
Ψ (1,000)	φ 10,70.	ψ	(27,007)
	_	2,15	1	27,656
	(4,020)	(3,22	5)	(6,201)
(62,877)	(519	9)	(63,283)
	_	(3	3)	(3)
	—	(49	9)	191
	26	(16	7)	(210)
	(79)	(1,774		(4,282)
	(410)	(4,21)	3)	(5,956)
	—	_	-	(148)
	_	_	-	9
:	89,820	_	_	89,820
	_	(90		58
	(1,091)	(7,89:		(18,582)
	(532)	(49)		(1,364)
	95	(7		(418)
	409	4,249	9	10,792
\$ (:	23,525)	\$ 6,862	2 \$	192
\$	(479)	\$	- \$	(479)

State of Georgia Combining Statement of Net Position **Internal Service Funds Risk Management** June 30, 2019 (dollars in thousands)

	Cyber Liability Insurance Fund	Liability Insurance Fund	Property Insurance Fund	
Assets				
Current Assets:				
Cash and Cash Equivalents	\$ 76	\$	\$ 7,275	
Pooled Investments with State Treasury	728	_	21,963	
Investments	46	_	4,408	
Accounts Receivable (Net)	118	23,306	1,057	
Due From Other Funds	_	161,179	226	
Total Current Assets	968	184,485	34,929	
Noncurrent Assets:				
Investments	259	—	24,777	
Restricted Assets:				
Net OPEB Asset		48	33	
Total Noncurrent Assets	259	48	24,810	
Total Assets	1,227	184,533	59,739	
Deferred Outflows of Resources		249	175	
Liabilities				
Current Liabilities:				
Cash Overdraft	—	592	—	
Accounts Payable and Other Accruals	—	227	21	
Claims and Judgments Payable	—	182,659	29,161	
Other Current Liabilities	2	14	79	
Total Current Liabilities	2	183,492	29,261	
Noncurrent Liabilities:				
Net OPEB Liability	—	404	282	
Net Pension Liability		661	462	
Total Noncurrent Liabilities	—	1,065	744	
Total Liabilities	2	184,557	30,005	
Deferred Inflows of Resources		225	158	
Net Position				
Restricted for:				
Unrestricted	1,225	_	29,751	
Total Net Position	\$ 1,225	\$	\$ 29,751	

Total		Workers' Compensation Fund	oyment nsation nd	Comp	Teacher tion Indemnification Fund		State nification Fund	Indem
10,357	\$	\$	2,604	\$	402	\$	_	\$
34,286		253	7,846		1,212		2,284	
6,290		_	1,590		246		_	
90,120		65,457	182		_		—	
801,796		640,391	_		_		_	
942,849		706,101	12,222		1,860		2,284	
35,313		_	8,902		1,375		_	
130		47	1				1	
35,443		47	8,903		1,375		1	
978,292		706,148	21,125		3,235		2,285	
678		244	5				5	
2,799		1,900	—		—		307	
599		351	1.5((
916,988 103		702,867 8	1,566		34		701	
920,489		705,126	1,566		34		1,008	
1,100		396 648	8		_		10	
1,801			14				16	
2,901		1,044	22				26	
923,390		706,170	1,588		34		1,034	
614		222	4				5	
			10.000					
54,966	¢		19,538		3,201	¢	1,251	
54,966	\$	\$	19,538	\$	3,201	\$	1,251	\$

Combining Statement of Revenues, Expenses, and Changes in Net Position Internal Service Funds Risk Management For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

	Cyber Liability Insurance Fund	Liability Insurance Fund	Property Insurance Fund		
Operating Revenues:					
Contributions/Premiums	\$ 1,822	\$ 51,170	\$ 19,396		
Sales and Services					
Total Operating Revenues	1,822	51,170	19,396		
Operating Expenses:					
Personal Services	3	437	4		
Services and Supplies	1,777	4,934	15,738		
Claims and Judgments	48	45,979	34,088		
Total Operating Expenses	1,828	51,350	49,830		
Operating Income (Loss)	(6)	(180)	(30,434)		
Nonoperating Revenues (Expenses):					
Interest and Other Investment Income	10	180	1,847		
Other					
Total Nonoperating Revenues (Expenses)	10	180	1,847		
Income (Loss) Before Transfers	4		(28,587)		
Transfers:					
Transfers In	500		8,981		
Net Transfers	500		8,981		
Change in Net Position	504	_	(19,606)		
Net Position, July 1	721		49,357		
Net Position, June 30	\$ 1,225	\$	\$ 29,751		

State Indemnification Fund	Teacher Indemnification Fund	Unemployment Compensation Fund	Workers' Compensation Fund	Total
\$	\$	\$ 3,983	\$	\$ 241,296 196
196		3,983	164,925	241,492
18 30 550	2	4 56 3,601	179 12,591 166,319	645 35,128 250,585
598	2	3,661	179,089	286,358
(402)	(2)	322	(14,164)	(44,866)
	86	574	300 8,710	3,015 8,710
18	86	574	9,010	11,725
(384)	84	896	(5,154)	(33,141)
430			5,154	15,065
430			5,154	15,065
46	84	896	_	(18,076)
1,205	3,117	18,642		73,042
\$ 1,251	\$ 3,201	\$ 19,538	<u>\$ </u>	\$ 54,966

State of Georgia Combining Statement of Cash Flows **Internal Service Funds Risk Management** For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

	Cyber Liability Insurance Fund	Liability Insurance Fund	Property Insurance Fund
Cash Flows from Operating Activities:			
Cash Received from Customers	\$	\$	\$
Cash Received from Required Contributions/Premiums	204	5,214	1,262
Cash Received from Required Contributions/Premiums (Internal Activity)	1,770	44,726	17,164
Cash Paid to Vendors	(1,773)	(5,021)	(15,730)
Cash Paid to Employees	(3)	(620)	(413)
Cash Paid for Claims and Judgments	(48)	(45,030)	(11,063)
Net Cash Provided by (Used in) Operating Activities	150	(731)	(8,780)
Cash Flows from Noncapital Financing Activities:			
Transfers from Other Funds	_	_	8,981
Other Noncapital Receipts	500		
Net Cash Provided by (Used in) Noncapital Financing Activities	500		8,981
Cash Flows from Investing Activities:			
Proceeds from Sales and Maturities of Investments	299	—	37,305
Purchase of Investments	(306)	—	(30,022)
Interest and Dividends Received	10	180	2,684
Net Cash Provided by (Used in) Investing Activities	3	180	9,967
Net Increase (Decrease) in Cash and Cash Equivalents	653	(551)	10,168
Cash and Cash Equivalents, July 1	151	(41)	19,070
Cash and Cash Equivalents, June 30	\$ 804	\$ (592)	\$ 29,238
Reconciliation of Operating Income (Loss) to Net Cash provided by (Used in) Operating Activities:		<u> </u>	<u> </u>
Operating Income (Loss)	\$ (6)	\$ (180)	\$ (30,434)
Adjustments to Reconcile Operating Income (Loss) to			
Net Cash Provided by (Used in) Operating Activities:			
Changes in Assets, Deferred Outflows of Resources, Liabilities, and Deferred Inflows of Resources:			
Accounts Receivable	153	(73)	(744)
Due from Other Funds	_	(1,157)	(226)
Net OPEB Asset	—	_	9
Deferred Outflows of Resources	—	(33)	(19)
Accounts Payable and Other Accruals	—	(98)	(70)
Claims and Judgments Payable	—	949	23,025
Net OPEB Liability	—	(263)	(320)
Net Pension Liability	—	(49)	(179)
Other Liabilities	3	10	77
Deferred Inflows of Resources		163	101
Net Cash Provided by (Used in) Operating Activities	\$ 150	\$ (731)	\$ (8,780)
Noncash Investing Activities:			
Change in Fair Value of Investments	\$	\$	\$ (837)

 State Indemnification Fund	Teacher Indemnification Fund		Unemployment Compensation Fund		Workers' ompensation Fund	 Total
\$ 196	\$	_	\$	_	\$ _	\$ 196
—		_		303	16,705	23,688
—		—		3,571	83,479	150,710
(33)		(2)		(61)	(12,821)	(35,441)
(22)		—		(8)	(849)	(1,915)
 (687)		(15)		(3,917)	 (100,003)	 (160,763)
 (546)		(17)		(112)	 (13,489)	 (23,525)
430		_		—	_	9,411
 				_	 13,865	14,365
 430					 13,865	 23,776
129		2,106		13,620	_	53,459
		(1,573)		(10,181)	_	(42,082)
18		38		264	300	3,494
147		571		3,703	300	 14,871
31		554		3,591	676	15,122
 1,946		1,060		6,859	 (2,323)	 26,722
\$ 1,977	\$	1,614	\$	10,450	\$ (1,647)	\$ 41,844
\$ (402)	\$	(2)	\$	322	\$ (14,164)	\$ (44,866)
				(110)	(2.246)	(4,020)
		_		(110)	(3,246) (61,494)	(4,020) (62,877)
_		_		_	(01,191)	26
(1)		_		(1)	(25)	(79)
(2)		_		(3)	(237)	(410)
(138)		(15)		(317)	66,316	89,820
(6)		_		(5)	(497)	(1,091)
(1)		_		(1)	(302)	(532)
		_			5	95
 4				3	 138	 409
\$ (546)	\$	(17)	\$	(112)	\$ (13,489)	\$ (23,525)
\$ 	\$	48	\$	310	\$ 	\$ (479)



FIDUCIARY FUNDS





Fiduciary funds are used to account for assets held by the State in a fiduciary capacity. The State has the following fiduciary funds.

PENSION AND OTHER EMPLOYEE BENEFIT TRUST FUNDS

Pension and Other Employee Benefit Trust Funds are used to account for activities and balances of the public employee retirement systems and other employee benefit plans. The State's pension and other employee benefit trust funds are described below:

Pension Trust Funds

Defined Benefit Pension Plans

The **Employees' Retirement System** is used to account for the accumulation of resources for the purpose of providing retirement allowances for qualified employees of the State and its political subdivisions.

The **Firefighters' Pension Fund** is used to account for the accumulation of resources for the purpose of paying retirement benefits to the firefighters of the State.

The **Georgia Judicial Retirement System** is used to account for the accumulation of resources for the purpose of providing retirement allowances for trial judges and solicitors of certain courts in Georgia, and their survivors and beneficiaries, superior court judges of the State, and district attorneys of the State.

Other Defined Benefit Plans is comprised of the following smaller plans:

The **District Attorneys Retirement Fund** (old plan) is used to account for the accumulation of resources for the purpose of paying retirement benefits to the district attorneys of the State.

The **Augusta University Early Retirement Pension Plan** is a single-employer defined benefit pension plan designed to provide eligible participants additional benefits above the amounts payable through Teachers Retirement System of Georgia (TRS). The plan was designed to allow vested employees aged 55 or employees of any age with 25 years of creditable service to retire without penalties as applied by the TRS for early retirement.

The **Judges of the Probate Courts Retirement Fund** is used to account for the accumulation of resources for the purpose of paying retirement benefits to the judges of the Probate Courts of the State.

The **Legislative Retirement System** is used to account for the accumulation of resources for the purpose of providing retirement allowances and other benefits for all members of the Georgia General Assembly.

The **Magistrates Retirement Fund** is used to account for the accumulation of resources for the purpose of providing retirement benefits for those serving as duly qualified and commissioned chief magistrates of counties in the State.

The **Georgia Military Pension Fund** is used to account for the accumulation of resources for the purpose of providing retirement allowances and other benefits to members of the Georgia National Guard.

The **Sheriffs' Retirement Fund** is used to account for the accumulation of resources for the purpose of paying retirement benefits to the sheriffs of the State.

State of Georgia Description of Fiduciary Funds



The **Superior Court Clerks' Retirement Fund** is used to account for the accumulation of resources for the purpose of paying retirement benefits to the Superior Court clerks of the State.

The **Superior Court Judges Retirement Fund** (old plan) is used to account for the accumulation of resources for the purpose of paying retirement benefits to the Superior Court judges of the State.

The **Peace Officers' Annuity and Benefit Fund** is used to account for the accumulation of resources for the purpose of paying retirement benefits to the peace officers of the State.

The **Public School Employees Retirement System** is used to account for the accumulation of resources for the purpose of providing retirement allowances for public school employees who are not eligible for membership in the Teachers Retirement System.

The **Teachers Retirement System** is used to account for the accumulation of resources for the purpose of providing retirement allowances and other benefits for teachers and administrative personnel employed in State public schools and the University System of Georgia (except those professors and principal administrators electing to participate in an optional retirement plan), and for certain other designated employees in educational-related work.

Defined Contribution / Deferred Compensation Pension Plans

The **Georgia Defined Contribution Plan** is used to account for the accumulation of resources for the purpose of providing retirement allowances for State employees who are not members of a public retirement or pension system.

The **Deferred Compensation Plans** are used to account for the accumulation of resources for the purpose of providing retirement allowances for State and Board of Regents employees and employees of Community Service Boards who elect to defer a portion of their annual salary until future years.

Other Postemployment Benefit Plans

The **Board of Regents Retiree Health Benefit Fund** is used to account for the accumulation of resources necessary to meet employer costs of retiree post-employment health insurance benefits.

The Georgia State Employees Postemployment Health Benefit Fund (State OPEB Fund) pays postemployment health benefits (including benefits to qualified beneficiaries of eligible former employees) due under the group health plan for employees of State organizations and other entities authorized by law to contract with the Department of Community Health for inclusion in the plan. It also pays administrative expenses for the Fund. By law, no other use of assets of the State OPEB Fund is permitted.

The Georgia School Personnel Postemployment Health Benefit Fund (School OPEB Fund) pays postemployment health benefits (including benefits for qualified beneficiaries of eligible former employees) due under the group health plan for public school teachers including librarians and other certified employees of the public schools and regional educational service agencies, postemployment health benefits due under the group health plan for non-certificated public school employees, and administrative expenses of the Fund. By law, no other use of assets of the School OPEB Fund is permitted.

The **State Employees' Assurance Department (SEAD) - OPEB** is used to account for the accumulation of resources for the purpose of providing term life insurance to retired and vested inactive members of Employees', Judicial, and Legislative Retirement Systems.



INVESTMENT TRUST FUNDS

Investment Trust Funds are used to account for the external portion of a government sponsored investment pool. The State's investment trust funds are described below:

The **Georgia Fund 1** (GF1) is an investment pool of the LGIP Trust and an investment pool for the State and local governments, including state agencies, colleges and universities, counties, school districts, special districts, or any department, agency, or board of a political subdivision. The primary objectives of the pool is the prudent management of public funds on behalf of the State and local governments seeking income higher than money market rates.

The **Georgia Fund 1 Plus** (GF1+) is an additional investment option for the State, state agencies, and eligible municipalities looking to benefit from higher yields available by adding credit exposure.

PRIVATE PURPOSE TRUST FUNDS

Private Purpose Trust Funds are used to report resources of all other trust arrangements in which principal and income benefit individuals, private organizations, or other governments. The State's private purpose trust funds are described below:

The Auctioneers Education, Research and Recovery Fund provides for actual or compensatory damages in instances where a person is aggrieved by an act, representation, transaction, or conduct of a person licensed under OCGA 43-6 (duly licensed auctioneer, apprentice auctioneer, or auction company) who is in violation of state law. Also, the fund is used to help underwrite the cost of education and research programs for the benefit of licensees and the public.

The **Real Estate Education, Research and Recovery Fund** provides for actual or compensatory damages in instances where a person is aggrieved by an act, representation, transaction, or conduct of a duly licensed broker, associate broker or salesperson who is in violation of state law. Also, the fund is used to help underwrite the cost of developing courses, conducting seminars, conducting research projects on matters affecting real estate brokerage, publishing and distributing educational materials, or other education and research programs for the benefit of licensees and the public.

The **Subsequent Injury Trust Fund** is a special workers' compensation fund designed to encourage employers to hire workers with pre-existing impairments by insuring against the aggravating impact such impairment could have if the worker were subsequently injured on the job.

AGENCY FUNDS

Agency Funds are used to report assets and liabilities for deposits and investments entrusted to the State as an agent for others. The State's significant agency funds are described below:

The **Child Support Recovery Program** accounts for the collection of court ordered child support or child support amounts due as determined in conformity with the Social Security Act. Amounts collected are distributed and deposited in conformity with state law and the standards prescribed in the Social Security Act.

The **Detainees' Accounts** are held for the detainees of statewide probation offices, correctional institutions, diversion centers, detention centers, transitional centers and boot camps for the purpose of paying court-ordered fines, fees and restitutions and for operating recreational activities for detainees.



The **Flexible Benefits Program** accounts for participant payroll deductions for benefits and spending accounts; disbursements are made to insurance companies for premiums and to participants for spending account reimbursements.

The **Insurance Premium Tax Collections for Local Governments Fund** accounts for the pro-rata share of premium taxes collected on the behalf of each participating municipality and county. The participating counties and municipalities may have the distributions deposited directly into their Georgia Fund 1 account through the Office of the State Treasurer.

Sales Tax Collections for Local Governments Fund is used to account for the collection and disbursement of local option sales taxes on behalf of county and municipal governments. This fund includes activity for Education Local Option Sales Tax, Homestead Option Sales Tax, Local Option Sales Tax, MARTA Sales Tax, Special Purpose Local Option Sales Tax, and the Transportation Investment Act.

Survivor Benefit Fund (SBF) is within the Employees Retirement System (ERS) trust and is solely for maintaining group term life insurance coverage for members of the plan. All assets are limited to the payment of benefits and expenses for such coverage and cannot be used to pay pension benefits and expenses of ERS.

The **Telecommunications Relay Service Fund** was established to provide telecommunication services to hearing/ speech impaired Georgians. All local exchange telephone companies in the State impose a monthly maintenance surcharge on residential and business local exchange access facilities, which are deposited into this fund solely for the provisions of the Dual Party Relay System.

The Universal Service Fund was established for the purpose of assisting low-income customers in times of emergency by providing energy conservation assistance to such customers; and to provide contributions in aid of construction to permit the electing distribution company to extend and expand its facilities from time to time as the Public Service Commission deems to be in the public interest. Funding comes from rate refunds from interstate pipeline suppliers, funds deposited by marketers, and various other refunds, surcharges and earnings.

Miscellaneous funds include agency funds not considered significant enough to warrant separate presentation.



State of Georgia Combining Statement of Fiduciary Net Position Pension and Other Employee Benefit Trust Funds June 30, 2019

			Defined Contr	ibution Plans	
	Defined	Georgia	De	eferred Compensation P	lans
	Benefit	Defined	State of Georgia	State of Georgia	Regents
	Pension Plans	Contribution	401 (K)	457	457 (F)
	(see combining)	Plan	Plan	Plan	Plan
Assets Cash and Cash Equivalents	\$ 2,792,472	\$ 16,425	\$ 11,633	\$ 1,525	\$ 339
Pooled Investments with State Treasury	4				
Restricted Pooled Investments with State Treasury	602	_	_	24	_
Receivables					
Interest and Dividends	269,281	454	20	13	_
Due from Brokers for Securities Sold	26,706	_	—	_	_
Other	278,455	1,051	4,192	604	_
Due from Other Funds	_			—	
Investments					
Pooled Investments	14,632,566			—	
Mutual Funds	701,747	_	1,138,219	631,098	1,833
Municipal, U.S. and Foreign Government Obligations	17,824,365	87,300	_	_	_
Corporate Bonds/Notes/Debentures	5,229,036	20,908	_	_	1,384
Stocks	54,281,416	_	9,873	7,927	_
Asset-backed Securities	43,332	_	_	_	_
Exchange Traded Funds	9,044		—	_	_
Mortgage Investments	104,022	_	_	_	_
Real Estate Investment Trusts	56,446	_	_	_	882
Capital Assets					
Land	8,883		—	_	_
Buildings	7,793		—	_	_
Software	29,325	_	—	_	—
Machinery and Equipment	6,804		—	_	_
Works of Art	114		—	_	_
Construction in Progress	550		—	_	_
Accumulated Depreciation	(37,369) —	—	_	_
Net OPEB Asset	2,883				
Total Assets	96,268,477	126,138	1,163,937	641,191	4,438
Deferred Outflows of Resources	12,167				
Liabilities					
Accounts Payable and Other Accruals	34,773	488	2,728	1,217	_
Due to Other Funds	567		2,720		
Due to Brokers for Securities Purchased	96,527	_		_	
Salaries/Withholdings Payable	2	_	_	_	_
Benefits Payable	_	_	_	_	_
Unearned Revenue	3	_	_	_	_
Compensated Absences Payable	71	_	_	_	_
Net OPEB Liability	22,840	_	_	_	_
Net Pension Liability	27,823				
Total Liabilities	182,606	488	2,728	1,217	
Deferred Inflows of Resources	12,131				
Net Position					
Restricted for:					
Pension Benefits	96,085,905	125,650	1,161,209	639,974	4,438
Other Postemployment Benefits	2				
Total Net Position	\$ 96,085,907	\$ 125.650	\$ 1,161,209	\$ 639,974	\$ 4,438
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- 120,000	- 1,101,207	- 557577	÷ 1,120



		Other Post Employment Benefit Plans												
Tetel	Employees' ssurance partment - OPEB	Assu Depar	Georgia School Personnel Postemployment Health Benefit Fund		Georgia State Employees Postemployment		oard of legents ree Health lefit Fund	R Retir						
Total	JPEB	0			n Benefit Fund	Health	lent Fund	Ben						
\$ 2,846,035	3	\$	180	\$	463	\$	22,995	\$						
1,729,573		φ	469,931	φ	1,259,638	φ		Φ						
626	—		—		_		—							
457,099	_		50,896		136,435		_							
26,706	_		_		_		_							
324,703	_		28,872		11,529		—							
478	478		—		—		—							
16,268,876	1,233,750		103,452		299,108		_							
2,579,070	—		—		—		106,173							
17,911,665	—		_		—		—							
5,251,328	—		—		—		—							
54,320,924	—		—		—		21,708							
43,332	—		—		—		—							
9,044	—		—		—		—							
104,022	—		—		—		—							
57,328	—		—		—		_							
8,883	—		—		—		—							
7,793	—		—		—		—							
29,325	_		—		—		_							
6,804	—		—		—		—							
114	—		—		—		—							
550	—		—		—		—							
(37,369 2,883	_				_		_							
101,949,792	1,234,231		653,331		1,707,173		150,876							
	1,234,231		055,551	·	1,707,175		130,870							
12,167														
46,378	375		5,415		1,382		_							
567	_		_		_		_							
204,494	_		29,123		78,844		_							
2	_		_		_		—							
39,825	_		23,664		9,740		6,421							
3	_		_		_		—							
71	—		—		—		—							
22,840	—		—		—		—							
27,823	<u> </u>													
342,003	375		58,202		89,966		6,421							
12,131														
98,017,176	_		_		_		_							
3,590,649	1,233,856		595,129		1,617,207		144,455							

Combining Statement of Changes in Fiduciary Net Position Pension and Other Employee Benefit Trust Funds For the Fiscal Year Ended June 30, 2019

						Defined Contr	ibution P	lans		
		Defined		Georgia		D	eferred Co	ompensation Plar	ıs	
	Benefit Pension Plans (see combining)			Defined Contribution Plan		State of Georgia 401 (K) Plan		State of Georgia 457 Plan		Regents 457 (F) Plan
Additions:										
Contributions										
Employer	\$	3,216,653	\$	—	\$	47,170	\$	_	\$	502
NonEmployer		108,720		_		—		_		
Plan Members		811,956		14,578		119,770		20,264		
Insurance Premiums		_		_		_		_		—
Other Fees		444		_		—		53		
Interest and Other Investment Income										
Dividends and Interest		2,087,731		2,759		185		1,332		133
Net Appreciation (Depreciation) in										
Investments Reported at Fair Value		4,059,302		5,627		62,954		38,546		73
Less: Investment Expense		(74,251)		(62)		(2,033)		(778)		(13)
Other										
Transfers from Other Funds		2,727		_		_		_		—
Miscellaneous		501				544				
Total Additions		10,213,783		22,902		228,590		59,417		695
Deductions:										
General and Administrative Expenses		28,451		882		3,431		724		
Benefits		6,607,854		10		79,644		42,081		—
Refunds		87,093		10,931		—		—		
Pool Participant Withdrawals										5,753
Total Deductions		6,723,398		11,823		83,075		42,805		5,753
Change in Net Position Restricted for:										
Pension and Other Employee Benefits		3,490,385		11,079		145,515		16,612		(5,058)
Net Position, July 1		92,595,522		114,571		1,015,694		623,362		9,496
Net Position, June 30	\$	96,085,907	\$	125,650	\$	1,161,209	\$	639,974	\$	4,438

Board of	Georgia	Georgia	State Employees'	
Regents	State Employees	School Personnel	Assurance	
Retiree Health	Postemployment	Postemployment	Department -	
Benefit Fund	Health Benefit Fund	Health Benefit Fund	OPEB	Total
\$ 160,383	\$ 534,673	\$ 538,569	\$ 5	\$ 4,497,955 108,720
_			_	966,568
_	_		3,328	3,328
_	_	_	_	497
3,844	32,988	11,356	27,064	2,167,392
3,406	18,749	6,129	53,311	4,248,097
(124)	(50)	(17)	(1,182)	(78,510)
				2 727
_	_	_	_	2,727 1,045
				1,045
167,509	586,360	556,037	82,526	11,917,819
535	2,025	4,417	716	41,181
98,563	168,993	339,754	37,416	7,374,315
_	_	—	_	98,024
				5,753
99,098	171,018	344,171	38,132	7,519,273
68,411	415,342	211,866	44,394	4,398,546
76.044	1 001 075	202.272	1 100 4/2	07 000 270
76,044	1,201,865	383,263	1,189,462	97,209,279
\$ 144,455	\$ 1,617,207	\$ 595,129	\$ 1,233,856	\$ 101,607,825

Combining Statement of Fiduciary Net Position Pension and Other Employee Benefit Trust Funds Defined Benefit Pension Plans June 30, 2019

	Employees' Retirement System	Firefighters' Pension Fund	Georgia Judicial Retirement System	Other Defined Benefit Plans (see combining)
Assets				
Cash and Cash Equivalents	\$ 407,897	\$ 45,016	\$ 510	\$ 13,264
Pooled Investments with State Treasury	—	—	—	—
Restricted Pooled Investments with State Treasury	572	—	2	28
Receivables				
Interest and Dividends	46,236	1,672	_	689
Due from Brokers for Securities Sold	1,374	11,357	_	2,401
Other	39,387	_	766	334
Investments				
Pooled Investments	13,150,679	_	478,823	60,963
Mutual Funds	_	345,435	—	91,637
Municipal, U.S. and Foreign Government Obligations	_	64,016	—	63,691
Corporate Bonds/Notes/Debentures	_	108,343	—	18,918
Stocks	_	231,028	_	233,638
Asset-backed Securities	_	12,821	_	7,926
Exchange Traded Funds	_	_	_	2,853
Mortgage Investments	_	93,437	_	3,672
Real Estate Investment Trusts	_	46,099	_	812
Capital Assets				
Land	4,350	85	_	_
Buildings	2,800	1,535	_	_
Software	14,345		_	_
Machinery and Equipment	3,511	147	_	_
Works of Art		114	_	_
Accumulated Depreciation	(18,454)	(758)	_	_
Net OPEB Asset	541	()	_	_
		·		
Total Assets	13,653,238	960,347	480,101	500,826
Deferred Outflow of Resources	1,156			
Liabilities				
Accounts Payable and Other Accruals	19,088	2,650	719	602
Due to Other Funds	547	_,000	10	3
Due to Brokers for Securities Purchased	10,149	23,274	_	1,705
Salaries/Withholdings Payable			_	2
Unearned Revenue	_	_	_	3
Compensated Absences Payable	_	71	_	_
Net OPEB Liability	4,749	_	_	_
Net Pension Liability	.,,	_	_	_
i tension Endonny				
Total Liabilities	34,533	25,995	729	2,315
Deferred Inflow of Resources	2,389			
Net Position				
Restricted for Pension Benefits	\$ 13,617,472	\$ 934,352	\$ 479,372	\$ 498,511

Peace Officers' Annuity and Benefit Fund	Public School Employees Retirement System	Teachers Retirement System	Total
\$ 26,082	\$ 212	\$ 2,299,491	\$ 2,792,472
_	_	4	4
_	_	—	602
1,406	_	219,278	269,281
4,902	_	6,672	26,706
10	261	237,697	278,455
_	942,101	_	14,632,566
264,675	_	—	701,747
64,276	_	17,632,382	17,824,365
49,839	_	5,051,936	5,229,036
383,454	_	53,433,296	54,281,416
22,585	_	—	43,332
6,191	_	—	9,044
6,913	_	—	104,022
9,535	—		56,446
98	_	4,350	8,883
658	_	2,800	7,793
_	_	14,980	29,325
193	_	2,953	6,804
_	_	_	114
(395)		(17,762)	(37,369)
		2,342	2,883
840,422	942,574	78,890,419	96,267,927
		11,011	12,167
590	986	10,138	34,773
—	—	7	567
14,707	—	46,692	96,527
—	—	—	2
_	—	—	3
—	—		71
—	—	18,091	22,840
		27,823	27,823
15,297	986	102,751	182,606
		9,742	12,131
\$ 825,675	\$ 941,588	\$ 78,788,937	\$ 96,085,907

Combining Statement of Changes in Fiduciary Net Position Pension and Other Employee Benefit Trust Funds Defined Benefit Pension Plans For the Fiscal Year Ended June 30, 2019

	Employees' Retirement System		Firefighters' Pension Fund		Georgia Judicial Retirement System		Judicial Retirement		Other Defined Benefit Plans (see combining)	
Additions:										
Contributions										
Employer	\$	638,989	\$	_	\$	3,117	\$	13,737		
NonEmployer		10,220		37,902		2,137		8,340		
Plan Members		36,252		4,022		5,469		941		
Other Fees		10		431		—		3		
Interest and Other Investment Income										
Dividends and Interest		299,029		23,003		10,522		8,540		
Net Appreciation (Depreciation) in Investments										
Reported at Fair Value		589,035		32,484		20,726		28,913		
Less: Investment Expense		(14,660)		(5,378)		(421)		(2,617)		
Other										
Transfers from Other Funds		_		_		_		2,548		
Miscellaneous				379				3		
Total Additions		1,558,875		92,843		41,550		60,408		
Deductions:										
General and Administrative Expenses		7,142		1,507		820		1,137		
Benefits		1,443,756		50,704		27,462		35,146		
Refunds		7,691		1,149		553		88		
Total Deductions		1,458,589		53,360		28,835		36,371		
Change in Net Position Restricted for Pension Benefits		100,286		39,483		12,715		24,037		
Net Position, July 1		13,517,186		894,869		466,657		474,474		
Net Position, June 30	\$	13,617,472	\$	934,352	\$	479,372	\$	498,511		

Peace Officers' Annuity and Benefit Fund	Public School Employees Retirement System	Teachers Retirement System	Total		
\$	\$ —	\$ 2,560,810	\$ 3,216,653		
14,444	30,263	5,414	108,720		
3,542	2,256	759,474	811,956		
—	—	—	444		
20,088	20,675	1,705,874	2,087,731		
34,840	40,726	3,312,578	4,059,302		
(4,295)	(847)	(46,033)	(74,251)		
_	_	179	2,727		
119			501		
68,738	93,073	8,298,296	10,213,783		
1,193	1,378	15,276	28,453		
36,683	63,636	4,950,465	6,607,852		
460	609	76,543	87,093		
38,336	65,623	5,042,284	6,723,398		
30,402	27,450	3,256,012	3,490,385		
795,273	914,138	75,532,925	92,595,522		
\$ 825,675	\$ 941,588	\$ 78,788,937	\$ 96,085,907		

Combining Statement of Fiduciary Net Position Pension and Other Employee Benefit Trust Funds Defined Benefit Pension Plans Other Defined Benefit Pension Plans June 30, 2019 (dollars in thousands)

	District Attorneys Augusta University Retirement Early Retirement Fund Pension Plan		Judges of the Probate Courts Retirement Fund	Legislative Retirement System	Magistrates Retirement Fund	
Assets						
Cash and Cash Equivalents	\$	2	\$ 3,476	\$ 2,325	\$ 23	\$ 1,048
Restricted Pooled Investments with State Treasury		_	—	—	28	—
Receivables						
Interest and Dividends		_	—	286	—	93
Due from Brokers for Securities Sold		_	—	611	—	87
Other		_	—	—	28	—
Investments						
Pooled Investments		_	—	—	34,559	—
Mutual Funds		_	67,692	—	—	—
Municipal, U.S. and Foreign Government Obligations		_	—	8,814	—	3,458
Corporate Bonds/Notes/Debentures		_	—	8,171	—	5,124
Stocks		_	34,208	67,324	—	17,333
Asset-backed Securities		_	—	3,639	—	—
Exchange Traded Funds		_	—	—	—	—
Mortgage Investments		_	—	—	—	587
Real Estate Investment Trusts						408
Total Assets		2	105,376	91,170	34,638	28,138
Liabilities						
Accounts Payable and Other Accruals		_	—	(2)	97	_
Due to Other Funds		_	—	2	1	_
Due to Brokers for Securities Purchased		_	—	60	—	90
Salaries/Withholdings Payable		_	—	—	—	2
Unearned Revenue						
Total Liabilities		_		60	98	92
Net Position						
Restricted for Pension Benefits	\$	2	\$ 105,376	\$ 91,110	\$ 34,540	\$ 28,046

Georgia Military Pension Fund	Sheriffs' Retirement Fund	Superior Court Clerks' Retirement Fund	Superior Court Judges Retirement Fund	Total	
\$ 84	\$ 2,760	\$ 3,535	\$ 11	\$ 13,264	
—	_	—	_	28	
		210		(00	
_	125	310 1,578	_	689 2,401	
	123	306		334	
—		500		554	
26,404	_	_	_	60,963	
_	23,945	_	_	91,637	
_	9,495	41,924	_	63,691	
_	5,623	_	_	18,918	
—	44,445	70,328	—	233,638	
—	4,287	—	—	7,926	
—	2,853	—	—	2,853	
_	3,085	—	—	3,672	
	404			812	
26,488	97,022	117,981	11	500,826	
71	235	196	5	602	
_	—	—	—	3	
_	—	1,555	—	1,705	
_	_	_	—	2	
		3		3	
71	235	1,754	5	2,315	
\$ 26,417	\$ 96,787	\$ 116,227	\$ 6	\$ 498,511	

Combining Statement of Changes in Fiduciary Net Position Pension and Other Employee Benefit Trust Funds **Defined Benefit Pension Plans Other Defined Benefit Pension Plans** For the Fiscal Year Ended June 30, 2019 (dollars in thousands)

District Judges of the Attorneys Early Retirement Probate Courts Legislative Magistrates Retirement Retirement Retirement Pension Plan -Retirement Fund Augusta University Fund System Fund Additions: Contributions \$ 37 \$ 13,085 \$ Employer \$ \$ NonEmployer 1,455 339 Plan Members 198 Other Contributions Other Fees 1 Interest and Other Investment Income Dividends and Interest 2,215 1,981 761 Net Appreciation (Depreciation) in Investments Reported at Fair Value 5,318 6,588 1,499 Less: Investment Expense (164) (775) (32) Other Transfers from Other Funds _ Miscellaneous Total Additions 38 20,454 9,447 2,567 **Deductions:** 106 290 General and Administrative Expenses 1 Benefits 37 14,100 4,437 1,856 Refunds _ ____ 7 70 Total Deductions 38 14,100 4,550 2,216 Change in Net Position Restricted for Pension Benefits 6,354 4,897 351 Net Position, July 1 2 99,022 86,213 34,189 25,094 Net Position, June 30 2 105,376 91,110 34,540 28,046 \$ \$ \$

1,658

187

542

1,378

(378)

3,387

100

329

435

2,952

6

Geor Milit Pens Fur	ary ion	Sheriffs' etirement Fund	ment Retirement		Cour Ret	iperior rt Judges irement Fund	Total		
\$	(11)	\$ —	\$	—	\$	626	\$	13,737	
	—	2,053		3,174				8,340	
	—	90		127		_		941	
	_	—		—		2		3	
	573	2,468		_		_		8,540	
	1,129	4,579		8,422		_		28,913	
	(19)	(631)		(618)		—		(2,617)	
	2,548	_		_		_		2,548	
		 3						3	
	4,220	 8,562		11,105		628		60,408	
	235	267		135		2		1,136	
	1,221	6,512		6,029		626		35,147	
		 		5				88	
	1,456	 6,779		6,169		628		36,371	
	2,764	1,783		4,936		_		24,037	
	23,653	 95,004		111,291		6		474,474	
\$	26,417	\$ 96,787	\$	116,227	\$	6	\$	498,511	

State of Georgia Combining Statement of Fiduciary Net Position **Investment Trust Funds**

June 30, 2019

				Georgia	
		Georgia		Fund 1	
	Fund 1			Plus	 Total
Assets					
Pooled Investments with State Treasury	\$	9,139,858	\$	152,307	\$ 9,292,165
Interest Receivable		4,887		218	 5,105
Total Assets		9,144,745		152,525	 9,297,270
Liabilities					
Accounts Payable and Other Accruals				13	 13
Total Liabilities				13	 13
Net Position					
Restricted for Pool Participants	\$	9,144,745	\$	152,512	\$ 9,297,257

Combining Statement of Changes in Fiduciary Net Position Investment Trust Funds For the Fiscal Year Ended June 30, 2019

		Georgia		
		Georgia	Fund 1	
		Fund 1	 Plus	 Total
Additions:				
Pool Participant Deposits	\$	12,286,525	\$ 125,000	\$ 12,411,525
Interest and Other Investment Income				
Dividends and Interest		208,185	2,509	210,694
Net Appreciation (Depreciation) in Investments Reported at Fair Value		_	53	53
Less: Investment Expense		(4,411)	 (53)	 (4,464)
Total Additions		12,490,299	 127,509	 12,617,808
Deductions:				
Pool Participant Withdrawals		10,678,886	 	 10,678,886
Change in Net Position Restricted for Pool Participants		1,811,413	127,509	1,938,922
Net Position, July 1		7,333,332	 25,003	 7,358,335
Net Position, June 30	\$	9,144,745	\$ 152,512	\$ 9,297,257

State of Georgia Combining Statement of Fiduciary Net Position Private Purpose Trust Funds June 30, 2019

	Auctioneers		Real Estate			
	Education,		Education,		Subsequent	
	Research and		Research and		Injury	
						T ()
	Recovery Fund		Recovery Fund		Trust Fund	 Total
Assets						
Cash and Cash Equivalents	\$ 1	34	\$ -	- \$	11,822	\$ 11,956
Pooled Investments with State Treasury	5	568	2,31	0	271,851	274,729
Receivables						
Other			-	_	21,106	21,106
Capital Assets						
Buildings			-	_	826	826
Machinery and Equipment			-	_	94	94
Accumulated Depreciation			-	_	(698)	(698)
Net OPEB Asset		_	-	_	114	114
Total Assets	7	702	2,31	0	305,115	 308,127
Deferred Outflows of Resources		_			421	 421
Liabilities						
Accounts Payable and Other Accruals				2	36	38
Cash Overdraft			64		_	649
Compensated Absences Payable			-	_	68	68
Net OPEB Liability			-	_	658	658
Net Pension Liability			-	_	1,153	1,153
Other Liabilities		_			282	 282
Total Liabilities		<u> </u>	65	1	2,197	 2,848
Deferred Inflows of Resources		_			626	 626
Net Position						
Restricted for Other Purposes	\$ 7	702	\$ 1,65	9 \$	302,714	\$ 305,075

Combining Statement of Changes in Fiduciary Net Position Private Purpose Trust Funds For the Fiscal Year Ended June 30, 2019

	Auctioneers		Rea	al Estate			
	Educatio	n,	Ed	ucation,	Sub	sequent	
	Research and		Rese	earch and	Ι	njury	
	Recovery I	Fund	Recovery Fund		Trust Fund		 Total
Additions:							
Contributions/Assessments							
Participants	\$	11	\$	195	\$	110,133	\$ 110,339
Interest and Other Investment Income							
Dividends and Interest		_		52		5,471	 5,523
Total Additions		11		247		115,604	 115,862
Deductions:							
General and Administrative Expenses		_		127		1,121	1,248
Benefits		_		_		33,734	33,734
Total Deductions		_		127		34,855	 34,982
Change in Net Position Restricted for Other Purposes		11		120		80,749	80,880
Net Position, July 1		691		1,539		221,965	 224,195
Net Position, June 30	\$	702	\$	1,659	\$	302,714	\$ 305,075

State of Georgia Combining Statement of Fiduciary Assets and Liabilities

Agency Funds

June 30, 2019

	Child Support Recovery Detainees' Program Accounts		Flexible Benefits Program		Sales Tax Collections for Local Governments		
Assets							
Cash and Cash Equivalents	\$	36,639	\$ 54,651	\$	2,480	\$	—
Pooled Investments with State Treasury		—	—		10,548		2,576
Accounts Receivable		—	—		_		4,444
Investments, at Fair Value							
Certificates of Deposit		—	—		_		—
Pooled Investments		—	—		_		—
Municipal, U. S. and Foreign Government Obligations		—	—		_		—
Other Assets			 		_		
Total Assets	\$	36,639	\$ 54,651	\$	13,028	\$	7,020
Liabilities							
Accounts Payable and Other Accruals		26	_		759		_
Funds Held for Others		36,613	54,651		12,269		7,020
Other Liabilities			 _		_		_
Total Liabilities	\$	36,639	\$ 54,651	\$	13,028	\$	7,020

 Survivor's Benefit Fund	Telecom- munications Relay Service Fund			Universal Service Fund	Mis	cellaneous	Total		
\$ 86	\$	102	\$	_	\$	43,953	\$	137,911	
_		5,133		—		52,236		70,493	
—		—		—		1,126		5,570	
—		—		—		1,394		1,394	
158,658		_		—		249		158,907	
—		_		24,758		_		24,758	
 						10,369		10,369	
\$ 158,744	\$	5,235	\$	24,758	\$	109,327	\$	409,402	
_		_		_		1,703		2,488	
158,744		5,235		24,758		107,422		406,712	
 						202		202	
\$ 158,744	\$	5,235	\$	24,758	\$	109,327	\$	409,402	

Combining Statement of Changes in Fiduciary Assets and Liabilities Agency Funds For the Fiscal Year Ended June 30, 2019

		Balance y 1, 2018		Additions	D	eductions		Balance e 30, 2019
Child Support Recovery Program Assets								
Cash and Cash Equivalents	\$	39,468	\$	796,366	\$	799,195	\$	36,639
Liabilities						´		^
Accounts Payable and Other Accruals	\$	26	\$	_	\$	_	\$	26
Funds Held for Others	Ψ	39,442	Ψ	796,366	Ψ	799,195	Ψ	36,613
Total Liabilities	\$	39,468	\$	796,366	\$	799,195	\$	39,468
Detainees' Accounts								
Assets Cash and Cash Equivalents	\$	50,099	\$	173,392	\$	168,840	\$	54,65
Liabilities								
Funds Held for Others	\$	50,099	\$	173,392	\$	168,840	\$	54,65
Electric Dece 64 Decement								
Flexible Benefits Program Assets								
Cash and Cash Equivalents	\$	3,407	\$	113,299	\$	114,226	\$	2,48
Pooled Investments with State Treasury		9,620		132,814		131,886		10,54
Total Assets	\$	13,027	\$	246,113	\$	246,112	\$	13,02
Liabilities								
Accounts Payable and Other Accruals	\$	909	\$	154,554	\$	154,704	\$	75
Funds Held for Others		12,118		163,116		162,965		12,26
Total Liabilities	\$	13,027	\$	317,670	\$	317,669	\$	13,02
Insurance Premium Tax Collections for Local Governments								
Assets								
Cash and Cash Equivalents	\$	_	\$	654,596	\$	654,596	\$	
Liabilities								
Funds Held for Others	\$	_	\$	654,596	\$	654,596	\$	_
Sales Tax Collections for Local Governments								
Assets Cash and Cash Equivalents	\$		\$	6,012,534	\$	6,012,534	\$	_
Pooled Investments with State Treasury	Ψ	2,948	φ	73	Φ	445	φ	2,57
Accounts Receivable		3,134		4,444		3,134		4,44
Total Assets	\$	6,082	\$	6,017,051	\$	6,016,113	\$	7,02
Liabilities								
Funds Held for Others	\$	6,082	\$	6,017,051	\$	6,016,113	\$	7,02
Survivor's Benefit Fund Assets								
Cash and Cash Equivalents	\$	91	\$	_	\$	5	\$	8
Investments		148,450		10,208		_		158,65
Total Assets	\$	148,541	\$	10,208	\$	5,000	\$	158,74
Liabilities								
Funds Held for Others	\$	148,541	\$	10,208	\$	5	\$	158,74
								(continued



]	Balance					Balance	
	Jul	ly 1, 2018	A	Additions	D	eductions	June	30, 2019
Telecommunications Relay Service Fund								
Assets								
Cash and Cash Equivalents	\$	102	\$	2,722	\$	2,722	\$	102
Pooled Investments with State Treasury		5,031		200		98		5,133
Total Assets	\$	5,133	\$	2,922	\$	2,820	\$	5,235
Liabilities								
Funds Held for Others	\$	5,133	\$	2,837	\$	2,735	\$	5,235
Universal Service Fund Assets								
Cash and Cash Equivalents	s	3,334	\$	19,956	\$	23,290	\$	
Investments	ψ	26,113	Ψ	30,860	Ψ	32,215	ψ	24,758
Total Assets	\$	29,447	\$	50,816	\$	55,505	\$	24,758
× • • • ••··				<u>_</u>				<u>_</u>
Liabilities	¢	20.447	¢	26.061	¢	41 (50	¢	24.759
Funds Held for Others	\$	29,447	\$	36,961	\$	41,650	\$	24,758
Miscellaneous Assets								
Cash and Cash Equivalents	s	39,852	\$	630,897	\$	626,796	\$	43,953
Pooled Investments with State Treasury	ψ	51,849	Ψ	161,245	Ψ	160,858	ψ	52,236
Accounts Receivable		7,621		3,091		9,586		1,126
Investments		1,674		14		45		1,643
Other Assets		12,620		10,380		12,631		10,369
Total Assets	\$	113,616	\$	805,627	\$	809,916	\$	109,327
Liabilities								
Accounts Payable and Other Accruals	\$	7,305	\$	11,898	\$	17,500	\$	1,703
Funds Held for Others		106,061		665,548		664,187		107,422
Other Liabilities		250		199		247		202
Total Liabilities	\$	113,616	\$	677,645	\$	681,934	\$	109,327
TOTAL - ALL AGENCY FUNDS								
Assets								
Cash and Cash Equivalents	\$	136,353	\$	8,403,762	\$	8,402,204	\$	137,911
Pooled Investments with State Treasury		69,448		294,332		293,287		70,493
Accounts Receivable		10,755		7,535		12,720		5,570
Investments		176,237		41,082		32,260		185,059
Other Assets		12,620		10,380		12,631		10,369
Total Assets	\$	405,413	\$	8,757,091	\$	8,753,102	\$	409,402
Liabilities								
Accounts Payable and Other Accruals	\$	8,240	\$	166,452	\$	172,204	\$	2,488
Funds Held for Others		396,923		8,520,075		8,510,286		406,712
Other Liabilities		250		199		247		202
Total Liabilities	\$	405,413	\$	8,686,726	\$	8,682,737	\$	409,402



NONMAJOR COMPONENT UNITS



Description of Nonmajor Component Units

Component units are legally separate organizations for which the State's elected officials are considered to be financially accountable. Nonmajor component units are described below:

Economic Development Organizations

The Economic Development organizations cultivate business for the State. These organizations are described below:

The **Georgia Development Authority** is a body corporate and politic. The Authority was created to assist agricultural and industrial interests by providing credit and servicing functions to better enable farmers and businessmen to obtain needed capital funds. The Board consists of three State officials designated by statute and four members appointed by the Governor.

The **Georgia International and Maritime Trade Center Authority** is a body corporate and politic. The Authority was created to develop and promote the growth of the State's import and export markets through its ports and other transportation modes, and to construct, operate and maintain the Savannah International Trade and Convention Center. State officials appoint nine of the 12 members of the Board.

The **OneGeorgia Authority** is a body corporate and politic and an instrumentality and public corporation of the State. The purpose of the Authority is to promote the health, welfare, safety and economic society of the rural citizens of the State through the development and retention of employment opportunities in rural areas and the enhancement of the infrastructures that accomplish that goal. The six members of the Authority are State officials designated by statute.

The **Georgia Higher Education Assistance Corporation** is a nonprofit public authority, body corporate and politic. The Corporation was created to improve the higher educational opportunities of eligible students by guaranteeing educational loan credit to students and to parents of students. The Corporation is governed by the Board of Commissioners of the Georgia Student Finance Commission. The Board consists of 14 members appointed by the Governor.

The **Georgia Military College** (GMC) is a public authority, body corporate and politic, and is an instrumentality and a public corporation of the State. GMC is dedicated to providing a high-quality military education to the youth of the State. The Board of Trustees consists of the mayor of the City of Milledgeville and six additional members, one of which is elected from each of the six municipal voting districts of the City, as required by statute. The government, control, and management of GMC are vested in the Board of Trustees. GMC receives any designated funds appropriated by the General Assembly through the Board of Regents of the University System of Georgia.

The **Georgia Public Telecommunications Commission** is a body corporate and politic. This Commission is a public charitable organization created for the purpose of providing educational, instructional and public broadcasting services to citizens of Georgia. The budget of the Commission must be approved by the State. The Board consists of nine members appointed by the Governor. Financial information presented for the Commission includes its component unit, Foundation for Public Broadcasting in Georgia, Inc.

The **Georgia Regional Transportation Authority** is a body corporate and politic. Within its jurisdiction, the purpose of the Authority is to manage land transportation and air quality, review all Developments of Regional Impact (DRI), and approve the allocation of state and federal transportation resources in metro Atlanta via the Atlanta Transportation Improvement Program (TIP). The Authority also serves in an advisory capacity to the State Road and Tollway Authority related to the management and operations of the Xpress Commuter Bus Service. The Governor appoints all 15 Board Members of the Authority.

Description of Nonmajor Component Units

The **Georgia Student Finance Authority** is a body corporate and politic. This Authority was created for the purpose of improving higher educational opportunities by providing educational scholarship, grant and loan assistance. A substantial amount of funding is provided to the Authority by the State. State officials comprise four of the 14 members of the Board, and the Governor appoints the remaining 10.

The **Higher Education Foundations** are nonprofit organizations established to secure and manage support for various projects including acquisitions and improvements of properties and facilities for the University System of Georgia.

The **REACH Georgia Foundation** is a nonprofit organization that was formed to ensure that Georgia's academically promising students have the academic, social and financial support needed to graduate from high school, access college and achieve postsecondary success. The REACH Georgia Program is the State of Georgia's first needs-based mentorship and college scholarship program and the Foundation's mission is to raise and invest funds.

The **Regional Educational Service Agencies** were established to provide shared services to improve the effectiveness of educational programs and services of local school systems and to provide direct instructional programs to selected public school students. The State has 16 of these agencies.

The **Superior Court Clerks' Cooperative Authority** is a body corporate and politic and an instrumentality and public corporation of the State created to provide a cooperative for the development, acquisition and distribution of record management systems, information, services, supplies and materials for superior court clerks of the State. Of the 10 members of the Board, the Governor appoints four. The nature of this organization is such that it would be misleading to exclude it from the reporting entity.

Tourism / State Attractions

These organizations promote State interests or encourage visitation to the State through the operation and maintenance of various attractions. Organizations involved in such activities are described below:

The **Georgia Agricultural Exposition Authority** is a body corporate and politic. This Authority is responsible for provision of a facility for the agricultural community, for public events, exhibits and other activities and for promotion and staging of a statewide fair. The Governor appoints the nine Board members.

The **Jekyll Island State Park Authority** is a body corporate and politic and an instrumentality and public corporation of the State. The Authority was created to operate and manage resort recreational facilities on Jekyll Island. The Board consists of one State official designated by statute and eight members appointed by the Governor. Financial information presented for the Authority includes its component unit, Jekyll Island Foundation, Inc.

The **Lake Lanier Islands Development Authority** is a body corporate and politic and an instrumentality and public corporation of the State. The purpose of the Authority is to manage, preserve and protect projects on Lake Lanier Islands. The Board consists of one State official designated by statute and eight members appointed by the Governor.

The **North Georgia Mountains Authority** is a body corporate and politic and an instrumentality and public corporation of the State responsible for the construction and management of recreation, accommodation and tourist facilities and services. The Governor appoints the nine members of the Board.

The **Stone Mountain Memorial Association** is a body corporate and politic and an instrumentality and public corporation of the State. The Authority is responsible for the maintaining and operating of Stone Mountain as a Confederate memorial and public recreational area. The Board consists of one State official designated by statute and nine members appointed by the Governor.



State of Georgia Combining Statement of Net Position Nonmajor Component Units June 30, 2019

	Economic Development Organizations	Georgia Higher Education Assistance Corporation	Higher Education Foundations	Georgia Military College	Georgia Public Telecommunications Commission	
Assets						
Current Assets:						
Cash and Cash Equivalents	\$ 13,375	\$ 7,033	\$ 380,052	\$ 14,223	\$ 2,170	
Pooled Investments with State Treasury	102,462	15,593	279	—	_	
Investments	—	_	90,582	—	18,756	
Receivables						
Accounts (Net)	847	_	406,193	6,314	673	
Capital Leases from Primary Government	—	—	84,743	—	_	
Interest and Dividends	2,548	—	—	—	—	
Notes and Loans (Net)	16,913	—	16	—	—	
Taxes	859	—	—	—	—	
Due from Primary Government	62,719	78	10,942	—	—	
Due from Component Units	—	—	6,414	—	—	
Intergovernmental Receivables	20	233	—	—	—	
Inventory	1,617		20,647	2,254		
Other Current Assets	35	—	68,481	4	_	
Restricted Assets						
Cash and Cash Equivalents	_	_	74,424	_	_	
Investments	_	_	154,443	_	_	
Other	_	_	46,474	_	_	
Total Current Assets	201,395	22,937	1,343,690	22,795	21,599	
Noncurrent Assets:						
Investments	—	—	458,393	—	—	
Receivables						
Capital Leases from Primary Government	—	—	2,170,155	—	—	
Notes and Loans	175,848	—	—	—	—	
Other (Net)	—	—	43,108	—	_	
Restricted Assets						
Cash and Cash Equivalents	11	—	263,607	—	_	
Investments	_	_	1,638,877	—	_	
Net OPEB Asset				30	504	
Receivables						
Other	_	_	75,438	_	_	
Non-depreciable Capital Assets	8,402		232,628	3,240	1,479	
Depreciable Capital Assets (Net)	2,654	_	858,453	73,803	1,512	
Other Noncurrent Assets	_	_	20,608	_	_	
Total Noncurrent Assets	186,915		5,761,267	77,073	3,495	
Total Assets	388,310	22,937	7,104,957	99,868	25,094	
Deferred Outflows of Resources	_	_	50,520	16,870	3,369	



Total	 Tourism State Attractions	perior Court Clerks' poperative Authority	С	Georgia Student Finance Authority		Georgia Regional Transportation Authority		Educational Regional Service Transportation		Educational Service		REACH Georgia Foundation	
493,851	\$ 18,453	\$ 10,634	\$	26,369	\$	44	\$	21,413	\$	85	\$		
147,894	7,483	—		19,761		4		2,312		—			
138,816	149	—		—		—		418		28,911			
428,264	11,299	1,158		_		_		1,780		_			
84,743	_	_		_				_					
4,040	_	—		1,492		_		_		—			
168,199	_	_		151,270				_		—			
859	—	—		—				—		—			
75,539	—	_		1,600		—		—		200			
25,385	—	—		18,971		—		—		—			
11,666	—	—		_		2,263		9,150		—			
28,191	1,172	—		—				2,501					
73,584	4,578	56		234		—		196		—			
85,169	_	10,616		_		_		_		129			
154,443	_	_		—				—		—			
46,474	 	 								—			
1,967,117	 43,134	 22,464		219,697		2,311		37,770		29,325			
458,393		—		—		_		—		—			
2,170,155		_		_		_		_					
175,848		_		_		_		_		_			
43,108	—	—		—		—		—		—			
263,618	_	_		_		_		_		_			
1,638,877	_	_		_				_		_			
1,362	632	133		—		_		63		—			
75,438	_	_		_		_		_		_			
281,043	34,064	_		655				575					
1,147,592	203,157	2,133		1,158		_		4,722		_			
20,608						_				_			
6,276,042	 237,853	 2,266		1,813				5,360		_			
8,243,159	 280,987	 24,730		221,510		2,311		43,130		29,325			
00 512	1 007	421						24.426					
99,513	3,887	 431		-		_		24,436					

State of Georgia Combining Statement of Net Position Nonmajor Component Units June 30, 2019

	Economic Development Organizations	Georgia Higher Education Assistance Corporation	Higher Education Foundations	Georgia Military College	Georgia Public Telecommunications Commission
Liabilities					
Current Liabilities:					
Accounts Payable and Other Accruals	5,302	100	138,944	3,837	878
Due to Primary Government	_	_	463,692	_	15
Due to Component Units	_	83	373	_	_
Funds Held for Others	_	_	43,338	_	_
Unearned Revenue	_	_	110,347	3,715	47
Notes and Loans Payable	_	_	41,079	236	_
Revenue/Mortgage Bonds Payable	_	_	112,684	_	_
Other Current Liabilities	4,064	34	88,442	578	285
Current Liabilities Payable from Restricted Assets:					
Other					
Total Current Liabilities	9,366	217	998,899	8,366	1,225
Noncurrent Liabilities:					
Unearned Revenue	_	_	15,142	_	_
Notes and Loans Payable	_	_	108,027	2,143	_
Revenue/Mortgage Bonds Payable	_	_	2,749,687		_
Derivative Instrument Payable	_	_	37,493	_	_
Net OPEB Liability	_	_	6,759	27,264	15,683
Net Pension Liability	_	_		34,822	12,204
Other Noncurrent Liabilities	50,253	1,545	110,568		822
Total Noncurrent Liabilities	50,253	1,545	3,027,676	64,229	28,709
		1,010	5,027,070	01,227	20,707
Total Liabilities	59,619	1,762	4,026,575	72,595	29,934
Deferred Inflows of Resources	_	_	16,363	7,386	3,540
Net Position					
Net Investment in Capital Assets,	11,057	—	323,708	74,663	2,991
Restricted for:					
Bond Covenants/Debt Service	—	—	13,128	—	—
Capital Projects	—	—	200,246	—	—
Permanent Trust Expendable	—	—	629,143	—	—
Other Purposes	80,638	—	112,760	—	—
Nonexpendable:					
Permanent Trust	_	—	1,002,281	—	—
Other Purposes	_	—	46,977	—	—
Unrestricted	236,996	21,175	784,296	(37,906)	(8,002)
Total Net Position	\$ 328,691	\$ 21,175	\$ 3,112,539	\$ 36,757	\$ (5,011)

REACH Georgia Foundation	Georgia Service Transportation		Georgia Student Finance Authority	Superior Court Clerks' Cooperative Authority	Tourism State Attractions	Total
	7 207	2 202	700	4.147	2.400	166 077
_	7,297	2,292	780	4,147	3,400	166,977
18,888	1		_		6	463,714 19,344
10,000	—	—	_	—	—	43,338
	348		479		2,324	117,260
_	116	_		_	1,028	42,459
_	485	_	_	_	518	113,687
_	56	1	17	_	1,348	94,825
	20		.,		1,510	71,020
			_	7,317	_	7,317
18,888	8,303	2,293	1,276	11,464	8,624	1,068,921
—	—	—	—	—	—	15,142
_	137	_	—	—	7,264	117,571
—	1,030	_	—	—	5,285	2,756,002
_	_	_	—	—	—	37,493
—	52,269	—	—	697	2,146	104,818
—	69,125	—	—	1,251	13,164	130,566
	161		3,440		797	167,586
	122,722		3,440	1,948	28,656	3,329,178
18,888	131,025	2,293	4,716	13,412	37,280	4,398,099
	23,280			475	1,690	52,734
_	4,390	_	1,791	2,132	231,230	651,962
_	_	_	_	_	_	13,128
_	_	_	_	_	_	200,246
_		_	_	_	_	629,143
10,351	62	—	181,376	—	5,328	390,515
_	_	_	_	_	_	1,002,281
_	_	_	_	_	_	46,977
86	(91,191)	18	33,627	9,142	9,346	957,587
error	\$ (86,739)	\$ 18	\$ 216,794	\$ 11,274	\$ 245,904	\$ 3,891,839
61101	* (00,759)	÷ 18	φ 210,79 1	Ψ 11,2/ 1	÷ 255,704	÷ 5,671,659

State of Georgia Combining Statement of Activities Nonmajor Component Units For the Fiscal Year Ended June 30, 2019

	Dev	Economic Development Organizations		Georgia Higher Education Assistance Corporation		Higher Education Foundations		Georgia Military College		Georgia Public Telecommunications Commission	
Expenses	\$	80,607	\$	1,384	\$	2,743,688	\$	80,898	\$	41,001	
Program Revenues:											
Sales and Charges for Services		13,166		2,873		1,327,333		37,179		5,682	
Operating Grants and Contributions		77,773		352		1,420,295		46,379		13,572	
Capital Grants and Contributions						18,467				576	
Total Program Revenues		90,939		3,225		2,766,095		83,558		19,830	
Net (Expenses) Revenue		10,332		1,841		22,407		2,660		(21,171)	
General Revenues:											
Taxes		4,291		_		_		—		_	
Unrestricted Investment Income		—		—		41,424		—		—	
Payments from the Primary Government		62,719		—		31,992		—		15,198	
Contributions to Permanent Endowments				—		57,200				—	
Total General Revenues		67,010				130,616				15,198	
Change in Net Position		77,342		1,841		153,023		2,660		(5,973)	
Net Position, July 1 - Restated (Note 3)		251,349		19,334		2,959,516		34,097		962	
Net Position, June 30	\$	328,691	\$	21,175	\$	3,112,539	\$	36,757	\$	(5,011)	



REACH Georgia Foundation		Regional Educational Service Agencies	Georgia Regional Transportation Authority	Georgia Student Finance Authority	Superior Court Clerks' Cooperative Authority	Tourism State Attractions	Total	
\$	556	\$ 94,298	\$ 27,181	\$ 47,260	\$ 17,975	\$ 65,135	\$ 3,199,983	
	3,703	21,147 78,715	14,372	42,844 26,000	17,384 222	56,273 1,326	1,523,881 1,682,709	
						14,460	33,503	
	3,703	99,862	14,372	68,844	17,606	72,059	3,240,093	
	3,147	5,564	(12,809)	21,584	(369)	6,924	40,110	
	_	_	_	_	_	2,467	6,758	
	400	_	_	_	_	_	41,824	
	—	_	12,809	_	_	1,075	123,793	
	—		—	—	—	—	57,200	
	400		12,809			3,542	229,575	
	3,547	5,564	-	21,584	(369)	10,466	269,685	
	6,890	(92,303)	18	195,210	11,643	235,438	3,622,154	
\$	10,437	\$ (86,739)	\$ 18	\$ 216,794	\$ 11,274	\$ 245,904	\$ 3,891,839	



STATISTICAL SECTION



HICKORY LOG CREEK Canton, Georgia Submitted by the Georgia Environmental Finance Authority



Statistical Section

This part of the *Comprehensive Annual Financial Report* presents detailed information as a context for understanding what the information in the financial statements, note disclosures and required supplementary information says about the State's overall financial health.

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Financial Trends Information

These schedules contain trend information to help the reader understand how the State's financial performance and well-being have changed over time.

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Debt Capacity Information

These schedules present information to help the reader assess the affordability of the State's current levels of outstanding debt and the State's ability to issue additional debt in the future.

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These schedules offer demographic and economic indicators to help the reader understand the environment within which the State's financial activities take place.

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Operating Information

These schedules contain service and infrastructure data to help the reader understand how the information in the State's financial report relates to the services the State provides and the activities it performs.

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Sources: Unless otherwise noted, the information in these schedules is derived from the *Comprehensive Annual Financial Reports* for the relevant year.

Schedule 1 Net Position by Component For the Last Ten Fiscal Years

(accrual basis of accounting)

(dollars in thousands)

	2019	2018	2017	2016
Governmental Activities ^{(1) (3)}				
Net Investment in Capital Assets	\$ 20,361,680	\$ 19,542,361	\$ 18,575,368	\$ 17,213,380
Restricted	6,275,129	5,792,152	5,013,504	4,499,014
Unrestricted	 (7,660,565)	 (8,506,350)	 (5,210,957)	 (5,745,504)
Total Governmental Activities Net Position	\$ 18,976,244	\$ 16,828,163	\$ 18,377,915	\$ 15,966,890
Business-type Activities ^{(1) (2)}				
Net Investment in Capital Assets	\$ 8,429,136	\$ 7,849,961	\$ 7,773,009	\$ 7,529,660
Restricted	3,349,557	2,955,296	2,639,561	1,837,521
Unrestricted	 (6,201,340)	 (6,250,035)	 (4,484,701)	 (3,857,184)
Total Business-type Activities Net Position	\$ 5,577,353	\$ 4,555,222	\$ 5,927,869	\$ 5,509,997
Total Primary Government ^{(1) (2) (3)}				
Net Investment in Capital Assets	\$ 25,566,212	\$ 24,372,160	\$ 23,502,948	\$ 21,892,080
Restricted	9,624,686	8,747,448	7,653,065	6,336,535
Unrestricted	 (10,637,301)	 (11,736,223)	 (6,850,229)	 (6,751,728)
Total Primary Government Net Position	\$ 24,553,597	\$ 21,383,385	\$ 24,305,784	\$ 21,476,887

(1) In fiscal year 2015, the activities of SRTA were re-examined and all activities of this blended component unit was reported as governmental activities. In fiscal year 2017, SRTA was re-examined again and it was determined that the toll facilities and customer service center (previously part of governmental activities) are now reported as part of business-type activities.

- (2) Beginning in fiscal year 2013, the activity of the Armstrong Atlantic State University Educational Properties Foundation, Inc., the Georgia State University Foundation, Inc., the Georgia State University Research Foundation, Inc., the Georgia Tech Facilities, Inc., the University System of Georgia Foundation, Inc. and the VSU Auxiliary Services Real Estate Foundation, Inc., component units, are blended with those of the nonmajor enterprise funds (previously discretely presented). Beginning in the fiscal year 2014, the activity of the Georgia Real Estate Foundation, Inc., the North Georgia Real Estate Foundation, Inc., and the UWG Real Estate Foundation, Inc. component units, are blended with those of the nonmajor enterprise funds (previously discretely presented). Beginning in the fiscal year 2015, the activity of the Georgia State University Foundation, Inc. is discretely presented (previously blended) and the activity of the Armstrong Atlantic State University Educational Properties Foundation, Inc. is discretely presented (previously blended) and the activity of the Armstrong Atlantic State University Educational Properties Foundation, Inc., the Middle Georgia State University Real Estate Foundation, Inc., the University of North Georgia Real Properties Foundation, Inc., the Middle Georgia State University as nonmajor enterprise funds. Beginning in fiscal year 2016, the Georgia Tech Facilities, Inc., the Middle Georgia State University Real Estate Foundation, Inc., and the University System of Georgia Foundation, Inc. are discretely presented (previously blended) and the activity of Georgia Foundation, Inc. are discretely presented (previously blended) and the activity of the Georgia Southern University Housing Foundation, Inc., UWG Real Estate Foundation, Inc., and VSU Auxiliary Services Real Estate Foundation, Inc. are reported as discretely presented component units (previously Higher Education Fund).
- (3) Beginning in fiscal year 2015, Governmental Activities classification of outstanding general obligation bonds for the purposes of capital acquisition and construction on behalf of Business Type Activities, previously reported as net investment in capital assets, is presented as unrestricted. For the Primary Government, the presentation of these outstanding general obligation bonds is presented as net investment in capital assets.

Source: Financial Statements included in Current and Prior Years' Comprehensive Annual Financial Reports



Fiscal Year

 2015	 2014	 2013	 2012	 2011	 2010
\$ 16,562,899 3,668,030 (6,914,616)	\$ 13,186,605 3,653,903 (1,644,265)	\$ 13,737,276 3,301,316 (1,781,096)	\$ 13,355,209 3,968,493 (2,456,411)	\$ 12,880,313 4,031,347 (2,106,699)	\$ 12,550,617 2,605,116 (648,171)
\$ 13,316,313	\$ 15,196,243	\$ 15,257,496	\$ 14,867,291	\$ 14,804,961	\$ 14,507,562
\$ 7,344,726 1,546,723 (3,957,761)	\$ 6,575,166 1,367,598 (820,616)	\$ 6,502,029 816,428 (1,063,406)	\$ 6,257,436 457,265 (1,293,130)	\$ 5,952,035 489,736 (1,069,413)	\$ 5,426,787 423,325 (546,363)
\$ 4,933,688	\$ 7,122,148	\$ 6,255,051	\$ 5,421,571	\$ 5,372,358	\$ 5,303,749
\$ 20,926,469 5,214,753 (7,891,221)	\$ 19,761,771 5,021,501 (2,464,881)	\$ 20,239,305 4,117,744 (2,844,502)	\$ 19,612,645 4,425,758 (3,749,541)	\$ 18,832,348 4,521,083 (3,176,112)	\$ 17,977,404 3,028,441 (1,194,534)
\$ 18,250,001	\$ 22,318,391	\$ 21,512,547	\$ 20,288,862	\$ 20,177,319	\$ 19,811,311

Schedule 2 Changes in Net Position For the Last Ten Fiscal Years

(accrual basis of accounting)

		2019		2018		2017		2016
Expenses								
Governmental Activities								
General Government	\$	1,262,837	\$	1,380,132	\$	1,229,891	\$	1,385,643
Education		13,892,451		13,266,545		12,655,824		12,024,645
Health and Welfare		18,015,041		18,082,536		17,238,499		16,795,986
Transportation ⁽¹⁾		2,668,539		2,400,875		1,964,380		1,917,223
Public Safety		2,605,402		2,525,521		2,628,645		2,145,769
Economic Development and Assistance		465,465		524,516		645,604		509,074
Culture and Recreation		309,863		308,917		279,375		279,772
Conservation		54,758		72,135		60,603		59,409
Interest and Other Charges on Long- Term Debt ⁽¹⁾		381,895		379,211		394,388		424,595
Total Governmental Activities		39,656,251		38,940,388	_	37,097,209		35,542,116
Business-type Activities								
Higher Education Fund ⁽²⁾		9,739,025		9,300,291		9,063,716		8,576,540
State Health Benefit Plan		2,613,192		2,882,954		2,296,062		2,153,073
Unemployment Compensation Fund		319,367		325,523		328,266		379,714
Nonmajor Enterprise Funds ⁽¹⁾⁽²⁾		205,638		207,054		194,402		11,587
Total Business-type Activities		12,877,222		12,715,822		11,882,446		11,120,914
Total Primary Government Expenses	\$	52,533,473	\$	51,656,210	\$	48,979,655	\$	46,663,030
Program Revenues								
Governmental Activities ⁽¹⁾⁽²⁾⁽³⁾								
Sales and Charges for Services								
General Government	\$	761,015	\$	724,539	\$	698,096	\$	799,281
Health and Welfare	Ψ	75,300	Ŷ	78,995	Ψ	292,832	φ	91,838
Public Safety		187,020		184,472		186,972		167,297
Other Sales and Charges for		,		,		,		,
Services		277,008		273,257		236,843		275,045
Operating Grants and Contributions		16,236,248		16,277,251		15,611,324		15,372,385
Capital Grants and Contributions Total Governmental Activities		1,614,685		1,560,745		1,608,086		1,377,654 18,083,500
		- , - ,		- , ,		- , ,		-,,
Business-type Activities ⁽¹⁾								
Sales and Charges for Services								
Higher Education Fund ⁽²⁾		3,730,124		3,578,611		3,552,863		3,509,384
State Health Benefit Plan ⁽⁴⁾		2,523,714		2,965,082		2,188,034		2,121,100
Unemployment Compensation Fund		592,707		649,655		709,830		785,392
Nonmajor Enterprise Funds ⁽¹⁾⁽²⁾		40,566		43,124		30,181		11,640
Operating Grants and Contributions		3,354,730		3,031,969		2,788,516		2,636,285
Capital Grants and Contributions		109,838		107,167		79,085		60,543
Total Business-type Activities		10,351,679		10,375,608		9,348,509		9,124,344
Total Primary Government Program Revenues	\$	29,502,955	\$	29,474,867	\$	27,982,662	\$	27,207,844
Net (Expense) Revenue								
Governmental Activities (1)	\$	(20,504,975)	\$	(19,841,129)	\$	(18,463,056)	\$	(17,458,616)
Business-type Activities (2) (3) (4)		(2,525,543)		(2,340,214)		(2,533,937)		(1,996,570)
Total Primary Government	\$	(23,030,518)	\$	(22,181,343)	\$	(20,996,993)	\$	(19,455,186)
		/						



Fiscal Year

 2015		2014		2013	 2012		2011		2010		
\$ 1,735,174	\$	1,658,846	\$	1,606,626	\$ 1,326,657	\$	1,222,954	\$	1,467,147		
11,408,408		10,788,262		10,770,532	10,100,155		10,002,351		10,731,693		
16,589,708		16,107,840		16,033,221	15,657,704		14,745,268		14,210,928		
1,904,464		1,845,850		1,656,662	1,519,707		1,517,213		1,752,933		
1,994,413		2,002,615		2,012,501	1,912,814		1,974,964		1,834,315		
590,676		510,338		515,874	783,308		843,912		808,742		
236,922		247,170		240,018	233,043		233,608		287,860		
54,280		37,002		51,038	50,334		59,159		62,059		
678,888		592,668		616,328	 638,775		462,602		446,520		
 35,192,933		33,790,591		33,502,800	 32,222,497		31,062,031		31,602,197		
8,323,884		7,984,962		7,931,918	7,916,281		7,622,542		7,067,724		
2,025,638		2,032,910		2,193,829	2,362,677		2,224,280		2,298,354		
458,112		1,152,763		1,858,989	2,240,295		2,954,208		4,011,802		
158,809		229,630		191,949	35,735		26,613		26,174		
 10,966,443		11,400,265		12,176,685	 12,554,988		12,827,643		13,404,054		
\$ 46,159,376	\$	45,190,856	\$	45,679,485	\$ 44,777,485	\$	43,889,674	\$	45,006,251		
\$ 621,448 134,140 157,056	\$	2,770,681 562,606 154,324	\$	2,205,860 576,110 161,190	\$ 1,912,183 489,289 162,970	\$	1,887,736 473,934 160,161	\$	1,763,847 245,953 135,736		
\$ 134,140 157,056 260,346	\$	562,606 154,324 236,035	\$	576,110 161,190 235,067	\$ 489,289 162,970 264,309	\$	473,934 160,161 248,385	\$	245,953 135,736 263,202		
\$ 134,140 157,056 260,346 15,758,799	\$	562,606 154,324 236,035 14,780,822	\$	576,110 161,190 235,067 15,317,258	\$ 489,289 162,970 264,309 14,764,360	\$	473,934 160,161 248,385 14,029,675	\$	245,953 135,736 263,202 15,656,694		
\$ 134,140 157,056 260,346 15,758,799 1,182,723	\$	562,606 154,324 236,035 14,780,822 1,239,876	\$	576,110 161,190 235,067 15,317,258 1,310,696	\$ 489,289 162,970 264,309 14,764,360 1,142,924	\$	473,934 160,161 248,385 14,029,675 1,473,052	\$	245,953 135,736 263,202 15,656,694 1,599,721		
\$ 134,140 157,056 260,346 15,758,799	\$	562,606 154,324 236,035 14,780,822	\$	576,110 161,190 235,067 15,317,258	\$ 489,289 162,970 264,309 14,764,360	\$	473,934 160,161 248,385 14,029,675	\$	245,953 135,736 263,202 15,656,694		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333	\$	562,606 154,324 236,035 14,780,822 1,239,876	\$	576,110 161,190 235,067 15,317,258 1,310,696	\$ 489,289 162,970 264,309 14,764,360 1,142,924	\$	473,934 160,161 248,385 14,029,675 1,473,052	\$	245,953 135,736 263,202 15,656,694 1,599,721		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512	\$	562,606 154,324 236,035 14,780,822 1,239,876 19,744,344	\$	576,110 161,190 235,067 15,317,258 1,310,696 19,806,181	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035	\$	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943	\$	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070	\$	562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 —	\$	576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 —	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 —	\$	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943	\$	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917	\$	562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 — 146,407	\$	576,110 161,190 235,067 15,317,258 1,310,696 19,806,181	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035	\$	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943	\$	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070 95,020 2,611,058	\$	562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 — 146,407 6,695,670	\$	576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 114,152 7,251,162	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 —	\$	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943 2,647,604 35,476 7,557,366	\$	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153 2,408,042 		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070 95,020	\$	562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 146,407 6,695,670 36,664	\$	576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 114,152 7,251,162 90,665	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 	\$	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943 2,647,604 35,476 7,557,366 106,217	\$	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153 2,408,042 34,142 7,837,041 41,634		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070 95,020 2,611,058 102,216 9,262,614		562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 — 19,744,344 2,993,298 — 146,407 6,695,670 36,664 9,872,039		576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 — 114,152 7,251,162 90,665 10,448,016	 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 — 38,716 7,245,740 36,157 10,243,323		473,934 160,161 248,385 14,029,675 1,473,052 18,272,943 2,647,604 — 35,476 7,557,366 106,217 10,346,663		245,953 135,736 263,202 15,656,694 1,599,721 19,665,153 2,408,042 34,142 7,837,041 41,634 10,320,859		
\$ 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070 95,020 2,611,058 102,216	\$	562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 146,407 6,695,670 36,664	\$ 	576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 114,152 7,251,162 90,665	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 	\$ 	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943 2,647,604 35,476 7,557,366 106,217	\$ <u></u>	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153 2,408,042 34,142 7,837,041 41,634		
 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070 95,020 2,611,058 102,216 9,262,614		562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 — 19,744,344 2,993,298 — 146,407 6,695,670 36,664 9,872,039		576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 — 114,152 7,251,162 90,665 10,448,016	 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 — 38,716 7,245,740 36,157 10,243,323		473,934 160,161 248,385 14,029,675 1,473,052 18,272,943 2,647,604 — 35,476 7,557,366 106,217 10,346,663		245,953 135,736 263,202 15,656,694 1,599,721 19,665,153 2,408,042 34,142 7,837,041 41,634 10,320,859		
 134,140 157,056 260,346 15,758,799 1,182,723 18,114,512 3,241,333 2,363,917 849,070 95,020 2,611,058 102,216 9,262,614 27,377,126		562,606 154,324 236,035 14,780,822 1,239,876 19,744,344 2,993,298 146,407 6,695,670 36,664 9,872,039 29,616,383		576,110 161,190 235,067 15,317,258 1,310,696 19,806,181 2,992,037 114,152 7,251,162 90,665 10,448,016 30,254,197	\$ 489,289 162,970 264,309 14,764,360 1,142,924 18,736,035 2,922,710 — 38,716 7,245,740 36,157 10,243,323 28,979,358	<u></u>	473,934 160,161 248,385 14,029,675 1,473,052 18,272,943 2,647,604 — 35,476 7,557,366 106,217 10,346,663 28,619,606	<u></u>	245,953 135,736 263,202 15,656,694 1,599,721 19,665,153 2,408,042 		

Schedule 2 Changes in Net Position For the Last Ten Fiscal Years

(accrual basis of accounting)

(dollars in thousands)

	 2019	2018	2017	2016
General Revenues and Other Changes in Net				
Position Governmental Activities ^{(1) (2)}				
General Revenues				
Taxes				
Individual Income	\$ 12,255,424	\$ 11,109,361	\$ 11,318,052	\$ 9,799,035
Sales - General	6,226,817	5,905,929	5,798,400	5,730,560
Motor Fuel Tax	1,836,890	1,800,191	1,741,413	1,668,568
Motor Vehicle License and Title Ad Valorem Taxes ⁽⁴⁾	1,253,113	1,314,354	1,347,626	1,307,054
Corporate Tax	1,272,157	1,004,524	955,791	981,475
Other Taxes	939,419	1,124,370	607,929	1,515,674
Lottery for Education - Lottery Proceeds ⁽⁴⁾	1,207,369	1,143,515	1,101,062	1,097,823
Proceeds ⁽⁴⁾ Nursing Home and Hospital Provider Fees ⁽⁴⁾	488,218	465,595	442,576	434,126
Tobacco Settlement Funds ⁽⁴⁾	163,851	168,926	140,938	137,035
Unrestricted Investment Income	205,072	104,230	50,631	33,936
Unclaimed Property	144,841	151,462	143,683	153,257
Other	221,221	184,240	196,046	12,916
Special Items	_	_	_	—
Transfers	 (3,485,850)	 (2,993,509)	 (2,803,960)	 (2,639,131)
Total Governmental Activities	 22,728,542	 21,483,188	 21,040,187	 20,232,328
Business-type Activities ^{(1) (2)} General Revenues				
Contributions to Permanent Endowments	1,300	345	833	137
Transfers	3,485,850	2,993,509	2,803,960	2,639,131
Total Business-type Activities	 3,487,150	 2,993,854	 2,804,793	 2,639,268
Total Primary Government General Revenues				
and Other Changes in Net Position	\$ 26,215,692	\$ 24,477,042	\$ 23,844,980	\$ 22,871,596
Changes in Net Position				
Governmental Activities (1) (2)	\$ 2,223,567	\$ 1,642,059	\$ 2,577,131	\$ 2,773,712
Business-type Activities (1) (2) (3)	 961,607	653,640	270,856	 642,698
Total Primary Government	\$ 3,185,174	\$ 2,295,699	\$ 2,847,987	\$ 3,416,410

(1) Beginning in fiscal year 2013, the activity of the Armstrong Atlantic State University Educational Properties Foundation, Inc., the Georgia State University Research Foundation, Inc., the Georgia Tech Facilities, Inc., the University System of Georgia Foundation, Inc. and the VSU Auxiliary Services Real Estate Foundation, Inc., component units, are blended with those of the nonmajor enterprise funds (previously discretely presented). Beginning in the fiscal year 2014, the activity of the Georgia State University Housing Foundation, Inc., the Middle Georgia State University Real Estate Foundation, Inc., the North Georgia Real Estate Foundation, Inc., and the UWG Real Estate Foundation, Inc., the Middle Georgia State University Foundation, Inc., the North Georgia Real Estate Foundation, Inc., and the UWG Real Estate Foundation, Inc., the Georgia State University Foundation, Inc., is discretely presented (previously discretely presented). Beginning in fiscal year 2015, the activity of the Georgia State University Foundation, Inc. is discretely presented (previously blended) and the activity of the Armstrong Atlantic State University Educational Properties Foundation, Inc. is removed as it no longer met requirements for inclusion in the financial reporting entity as nonmajor enterprise funds. Reginning in fiscal year 2016, the Georgia Tech Facilities, Inc., the Middle Georgia State University presented (previously blended) and the activity of the Georgia State University Research Foundation, Inc., and the University System of Georgia Foundation, Inc. are discretely presented (previously blended) and the activity of the Georgia State University Research Foundation, Inc., the Middle Georgia State University Research (previously blended) and the activity of the Georgia Real Estate Foundation, Inc., and the University System of Georgia Foundation, Inc. are discretely presented (previously blended) and the activity of the Georgia State University Research Foundation, Inc. is removed as it no longer met requiremen

(2) In fiscal year 2015, the activities of SRTA were re-examined and all activities of this blended component unit are reported as Governmental Activities. In fiscal year 2017, SRTA was re-examined again and it was determined that the toll facilities and customer service center (previously part of governmental activities) are now reported as part of business-type activities.



 2015	 2014	 2013	 2012	 2011	2010	
9,769,658	\$ 8,976,720	\$ 8,854,916	\$ 8,196,187	\$ 7,797,739	\$	7,109,984
5,235,481	4,988,620	5,082,342	5,141,871	5,133,404		5,196,117
1,210,079	1,196,154	1,149,110	1,201,532	931,443		853,740
1,167,421	_	_	_	_		
1,014,290	949,815	806,881	658,303	582,039		728,740
774,605	801,605	752,103	776,813	816,856		752,448
980,653	—	_	—	—		_
454,372	_	_	_	_		_
138,385	_	_	_	_		_
9,103	4,995	323	6,183	(3,066)		993
156,360	148,129	138,832	83,215	98,098		85,277
9,646	12,112	126,862	12,909	30,285		44,183
_	_	—	_	288,000		(10,090
(2,657,978)	 (2,308,895)	 (2,377,595)	 (2,346,986)	 (2,532,118)		(2,269,701
18,262,075	 14,769,255	 14,533,774	 13,730,027	 13,142,680		12,491,691
_	7,522	1,231	_	_		_
2,657,978	2,308,895	2,377,595	2,346,986	2,532,118		2,269,701
2,657,978	 2,316,417	 2,378,826	 2,346,986	 2,532,118		2,269,701
20,920,053	\$ 17,085,672	\$ 16,912,600	\$ 16,077,013	\$ 15,674,798	\$	14,761,392
1,183,654	\$ 723,008	\$ 837,155	\$ 243,565	\$ 353,592	\$	554,647
954,149	788,191	650,157	35,321	51,138		(813,494
2,137,803	\$ 1,511,199	\$ 1,487,312	\$ 278,886	\$ 404,730	\$	(258,847

Beginning in fiscal year 2015, Motor Vehicle License and Title ad valorem Taxes, Lottery for Education - Lottery Proceeds, Nursing Home and Hospital Provider Fees, and Tobacco Settlement Funds, previously reported within the General Government function program revenues, are reported as general revenues of the Governmental Activities.

Beginning in fiscal year 2015, State Health Benefit Plan - Contributions/Premiums and Unemployment Compensation Fund - Contributions, previously reported within Program Revenues, Business-type Activities, Operating Grants and Contributions are reported as Sales and Charges for Services.

Financial Statements included in Current and Prior Years' Comprehensive Annual Financial Reports and supporting working papers (certain amounts restated for purposes of comparability)

Schedule 3 Fund Balances of Governmental Funds For the Last Ten Fiscal Years

(modified accrual basis of accounting)

(dollars in thousands)

	 2019	2018	2017	2016	2015
General Fund					
Nonspendable	\$ 20,780	\$ 35,375	\$ 82,570	\$ 66,744	\$ 50,979
Restricted	5,438,608	5,118,497	4,652,244	4,112,561	3,284,676
Unrestricted					
Committed	9,385	11,753	10,921	9,287	7,713
Assigned	522,273	437,737	418,815	345,667	444,077
Unassigned	2,833,072	2,506,449	2,211,442	1,795,230	1,282,974
Reserved		_		_	
Unreserved		_		_	
Total General Fund	\$ 8,824,118	\$ 8,109,811	\$ 7,375,992	\$ 6,329,489	\$ 5,070,419
All Other Governmental Funds ^{(1) (2)}					
Nonspendable	\$ 16,770	\$ 16,770	\$ 15,289	\$ 136	\$ 257
Restricted	1,916,578	1,475,928	1,310,861	1,242,119	1,074,877
Unrestricted					
Assigned	72,796	84,912	74,100	69,288	60,062
Reserved	_	_	_	_	_
Unreserved, Reported in					
Special Revenue Funds	_	_	_	_	_
Capital Projects Funds	_	_	_	_	_
Total All Other Governmental Funds	\$ 2,006,144	\$ 1,577,610	\$ 1,400,250	\$ 1,311,543	\$ 1,135,196

(1)

Beginning in fiscal year 2015, all activities of SRTA, a blended component unit, are reported as Special Revenue Funds (previously only the balances of its General Fund are included in the State's Special Revenue Funds). In fiscal year 2017, the activities of SRTA were re-examined, and only SRTA's General Fund is included in the State's Special Revenue Funds.

(2) Beginning in fiscal year 2011, fund balance categories were reclassified as a result of implementing GASB Statement No. 54. Fund balance was not restated to the new categories for prior years.

Source: Financial Statements included in Current and Prior Years' Comprehensive Annual Financial Reports (certain amounts restated for purposes of comparability)



2014	 2013	 2012	 2011	2010		
\$ 54,972	\$ 56,937	\$ 74,206	\$ 94,810	\$	_	
3,371,495	3,177,010	3,004,697	2,951,729		—	
3,232	4,954	7,695	9,403		_	
325,552	365,985	298,557	256,676		_	
1,073,662	798,630	334,655	401,414		_	
_	_	—	—		3,737,311	
	 	 	 		(41,837)	
\$ 4,828,913	\$ 4,403,516	\$ 3,719,810	\$ 3,714,032	\$	3,695,474	
\$ 14	\$ 14	\$ 8,398	\$ 68	\$	_	
1,216,195	1,065,153	963,782	1,079,604		—	
74,489	55,061	18,227	20,442		_	
_	—	_	—		43,114	
—	—	—	_		33,319	
	 	 	 		1,323,352	
\$ 1,290,698	\$ 1,120,228	\$ 990,407	\$ 1,100,114	\$	1,399,785	

Schedule 4 Changes in Fund Balances of Governmental Funds For the Last Ten Fiscal Years

(modified accrual basis of accounting)

	2010	2010	2017	2016	2015
Revenues ⁽¹⁾	 2019	 2018	 2017	 2016	 2015
Taxes					
Individual Income	\$ 12,202,473	\$ 11,644,160	\$ 11,023,806	\$ 10,078,312	\$ 9,714,090
Sales - General	6,286,292	6,019,297	5,781,149	5,473,282	5,263,011
Motor Fuel Tax	1,836,890	1,800,191	1,741,414	1,668,568	1,210,079
Motor Vehicle License and Title ad valorem Taxes ⁽³⁾	1,253,113	1,314,354	1,347,626	1,307,054	1,167,421
Corporate Tax	1,272,157	1,004,524	955,790	981,475	1,014,290
Other Taxes	851,105	1,057,108	977,494	1,186,308	871,158
Licenses and Permits	406,811	423,796	392,102	499,313	328,028
Intergovernmental - Federal	16,930,680	16,926,361	16,543,931	15,946,548	16,056,116
Intergovernmental - Other	663,598	637,053	519,077	547,897	646,442
Sales and Services	429,050	426,328	608,204	403,849	439,342
Fines and Forfeits	523,033	475,711	475,421	464,064	444,301
Interest and Other Investment Income	285,225	142,282	68,780	50,219	26,243
Unclaimed Property	144,841	151,462	143,683	153,257	156,360
Lottery Proceeds	1,207,369	1,143,515	1,101,062	1,097,823	980,653
Nursing Home Provider Fees	154,263	161,575	156,746	163,524	175,414
Hospital Provider Payments	333,955	304,020	285,830	270,602	278,958
Other	 328,212	 308,655	 288,396	 130,774	 129,092
Total Revenues	 45,109,067	 43,940,392	 42,410,511	 40,422,869	 38,900,998
Expenditures ⁽¹⁾					
Current					
General Government	1,018,790	963,123	915,149	1,021,257	1,059,255
Education	13,859,041	13,271,141	12,605,566	12,010,308	11,435,031
Health and Welfare	18,192,601	18,205,579	17,225,344	16,872,312	16,713,851
Transportation	3,239,744	2,882,072	2,901,428	2,181,785	2,095,554
Public Safety	2,697,770	2,607,044	2,540,030	2,193,494	2,122,905
Economic Development and Assistance	525,126	565,462	692,393	600,031	610,472
Culture and Recreation	311,170	302,262	301,768	304,703	263,263
Conservation	62,549	85,328	58,888	56,514	53,394
Capital Outlay	890,631	902,083	889,793	765,976	1,010,110
Debt Service					
Principal	1,029,075	1,068,590	1,042,625	988,145	966,445
Interest	436,216	430,077	419,177	449,666	460,214
Other Charges	23,765	27,036	26,541	25,848	27,284
Intergovernmental	 178,421	 246,015	 175,136	 200,373	 223,531
Total Expenditures	 42,464,899	 41,555,812	 39,793,838	 37,670,412	 37,041,309
Excess (Deficiency) of Revenues Over (Under) Expenditures	2,644,168	2,384,580	2,616,673	2,752,457	1,859,689
Experientered	 , ,	 , - ,*	 , .,	 , - , - ,	 , ,

Fiscal Year

2014	2013	2012	2011	2010
\$ 8,976,720	\$ 8,854,916	\$ 8,196,187	\$ 7,797,739	\$ 7,109,984
4,988,620	5,082,342	5,141,871	5,133,404	5,196,11
1,196,153.73	1,149,110	1,201,532	931,443	853,74
—	—	—	—	_
949,815.07	806,881	658,303	582,039	728,74
801,605.2	752,103	776,813	816,856	752,44
1,387,113	753,517	593,541	581,994	507,76
15,359,809	15,935,839	15,294,531	14,709,708	16,456,05
590,000	626,723	505,974	652,244	569,17
449,697	483,606	440,951	471,236	490,95
446,646	607,862	450,457	458,341	300,03
23,365	7,244	18,580	12,930	41,53
148,129	138,832	83,215	98,098	85,27
945,097	927,479	901,329	846,106	883,88
169,521	176,864	132,393	128,771	122,04
237,978	232,080	225,260	215,080	-
68,375	75,148	72,657	94,327	96,39
36,738,644	36,610,546	34,693,594	33,530,316	34,194,15
1,119,722	1,045,120	920,513	873,658	860,55
10,787,182	10,768,786	10,099,224	9,981,903	10,719,21
16,106,379	16,031,121	15,668,820	14,721,528	14,211,76
1,847,149	1,879,877	1,664,812	1,699,712	2,127,59
1,969,468	2,033,814	1,921,717	1,874,257	1,895,65
512,286	494,016	782,055	836,341	787,26
257,416	263,636	258,472	275,974	275,74
47,471 699,126	51,314 600,128	54,694 674,905	51,573 882,731	62,43 500,16
850,290	774,855	803,600	845,300	804,56
466,787	461,432	475,208	493,845	485,19
75,372	155,290	98,368	57,923	485,19
209,097	138,161	239,879	153,190	220,11
34,947,745	34,697,550	33,662,267	32,747,935	32,992,46
1,790,899	1,912,996	1,031,327	782,381	1,201,68
-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,001,027	, 02,001	(continue

Schedule 4 Changes in Fund Balances of Governmental Funds For the Last Ten Fiscal Years

(modified accrual basis of accounting)

(dollars in thousands)

	 2019	2018	2017	2016	2015
Other Financing Sources (Uses) ⁽¹⁾	 	 	 	 	
General Obligation Bonds Issuance	1,228,625	1,041,015	920,035	1,008,355	823,555
Refunding Bonds Issuance	285,915	634,545	1,340,265	275,985	159,350
Revenue Bond Issuance	_	_	_	_	11,057
Debt Issuance - Other	63,850	63,850	52,720	20,926	—
Premium on General Obligation Bonds Sold	95,163	119,498	111,054	94,194	78,602
Premium on Refunding Bonds Sold	27,159	91,178	283,301	_	13,819
Premium on GARVEE Bonds Sold	11,455	11,455	_	_	_
Payment to Refunded Bond Escrow Agent	(313,095)	(724,870)	(1,620,595)	(302,322)	(173,032)
Capital Leases	16,304	9,625	35,155	27,617	12,825
Transfers In	1,653,039	1,705,963	1,594,219	1,718,186	1,609,361
Transfers Out	 (4,477,445)	 (4,425,660)	 (4,165,721)	 (4,081,733)	 (3,882,868)
Net Other Financing Sources (Uses)	(1,409,030)	(1,473,401)	(1,449,567)	(1,238,792)	(1,347,331)
Special Item	 	 	 	 	
Net Change in Fund Balance	\$ 1,235,138	\$ 911,179	\$ 1,167,106	\$ 1,513,665	\$ 512,358
Debt Service Expenditures as a Percentage	2 (00/	2 770/	2.000/	2.000/	2.000/
of Noncapital Expenditures (2)	3.60%	3.77%	3.90%	3.98%	3.989

(1)

Beginning in fiscal year 2015, all activities of SRTA, a blended component unit, are reported as Special Revenue Funds (previously only the balances of its General Fund are included in the State's Special Revenue Funds). In fiscal year 2017, the activities of SRTA were re-examined, and only SRTA's General Fund is included in the State's Special Revenue Funds.

(2) Noncapital expenditures are calculated as total expenditures less capital outlay expenditures less capital expenditures in current expenditure functions. Capital expenditures in current expenditure functions are identified in the process of reconciling Governmental Funds to Governmental Activities.

(3) Beginning in fiscal year 2015, Motor Vehicle License and Title ad valorem Taxes previously reported as Licenses and Permits are reported as Taxes.

Source: Financial Statements included in Current and Prior Years' Comprehensive Annual Financial Reports and supporting working papers

	ear
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2014	2013		2012	2011	2010
857,670	83	4,870	803,615	653,925	793,855
	48	6,825	719,465	344,420	640,825
32,718		—	_	_	_
_		—	_	_	_
62,075	12	4,742	78,781	32,170	25,206
_	10	2,681	86,523	55,821	112,131
_		—	_	_	_
_	(58	37,396)	(805,945)	(398,339)	(750,209)
8,207		5,847	11,179	25,851	6,201
1,550,566	1,42	4,420	1,414,093	1,467,443	1,959,530
(3,706,268) (3,48	1,263)	(3,409,603)	(3,532,786)	(3,923,140)
(1,195,032) (1,08	9,274)	(1,101,892)	(1,351,495)	(1,135,601)
			_	288,000	
\$ 595,867	\$ 82	\$	(70,565)	\$ (281,114)	\$ 66,084
3.91	%	3.67%	3.95%	4.27%	4.09%

Schedule 5 Revenue Base - Personal Income by Industry For the Last Ten Calendar Years

(dollars in millions)

	 2018		2017		2016		2015
Accommodation and Food Services	\$ 10,980	\$	10,507	\$	10,209	\$	9,838
Administrative and Waste Management Services	17,805		16,932		15,610		15,166
Arts, Entertainment and Recreation	2,527		2,483		2,171		2,231
Construction	21,267		18,941		17,604		15,391
Educational Services	5,362		5,120		4,849		4,705
Farm Earnings	2,649		1,946		1,814		2,476
Federal Government - Civilian	11,313		11,183		10,806		10,421
Federal Government - Military	6,838		6,579		6,446		6,825
Finance and Insurance	22,063		21,193		19,269		18,663
Forestry, Fishing and Related Activities	1,000		973		1,045		1,010
Health Care and Social Assistance	34,561		32,850		31,688		29,914
Information	21,089		21,069		18,669		15,118
Management of Companies and Enterprises	10,529		9,189		8,443		8,179
Manufacturing	31,805		30,423		29,125		27,921
Mining	862		783		787		560
Other Services, Except Public Administration	11,361		10,875		10,528		10,309
Professional, Scientific and Technical Services	34,522		32,809		31,180		30,183
Real Estate, Rental and Leasing	7,766		7,335		6,262		5,784
Retail Trade	20,738		20,097		19,375		19,046
State and Local Government	37,692		37,087		35,643		33,051
Transportation and Warehousing	17,980		17,013		16,172		14,838
Utilities	3,012		2,935		2,902		2,657
Wholesale Trade	20,846		21,385		21,150		20,493
Other	 126,646		120,696		112,931		106,943
Total Personal Income	\$ 481,213	\$	460,403	\$	434,678	\$	411,722

(1) The total direct rate for personal income is not available. The average effective rate was calculated by dividing individual income tax collections on a fiscal year basis (see Schedule 4) by total personal income on a calendar year basis.

Source: U. S. Department of Commerce, Bureau of Economic Analysis



Calendar Year

2014	 2013	 2012	 2011	2010		 2009	
9,551	\$ 8,969	\$ 8,595	\$ 8,040	\$	7,625	\$ 7,504	
14,828	13,744	12,873	12,418		11,618	11,128	
2,379	2,277	2,162	2,066		1,995	1,970	
14,766	13,365	12,471	12,113		12,274	13,103	
4,638	4,391	4,318	4,134		3,980	3,857	
3,230	3,640	3,429	1,982		1,749	1,972	
9,824	9,796	10,076	10,303		10,043	9,332	
6,833	7,048	7,229	7,500		7,529	7,251	
18,200	17,386	16,492	15,364		15,007	16,574	
1,010	872	847	761		778	700	
28,658	27,487	26,127	25,083		24,282	23,570	
12,225	11,414	10,922	10,239		9,974	10,627	
7,776	7,009	6,626	5,974		5,471	5,504	
26,822	25,876	24,977	24,267		22,969	22,986	
592	558	524	505		412	375	
10,460	10,055	9,619	9,095		8,807	8,687	
28,908	26,708	25,972	24,313		22,853	23,092	
6,454	6,135	5,740	4,780		3,852	3,683	
18,127	17,303	16,415	15,985		15,472	15,391	
32,454	32,139	32,100	31,825		31,814	30,909	
13,881	13,143	12,498	11,945		11,092	10,708	
2,435	2,401	2,294	2,422		2,161	2,355	
19,539	18,709	17,917	17,238		16,700	16,701	
101,183	 97,731	 98,926	 98,954		85,102	 82,481	
394,773	\$ 378,156	\$ 369,149	\$ 357,306	\$	333,559	\$ 330,460	

Schedule 6 Individual Income Tax Rates by Filing Status and Income Level For the Last Ten Calendar Years

Filing Status

	Georgia Taxable Net Income Level							
Income Level	2019 - 2018	2017 - 2010						
Single	Tax Rate	Tax Rate						
Not Over \$750	1%	1%						
Over \$750 But Not Over \$2,250	\$7.50 Plus 2% of Amount Over \$750	\$7.50 Plus 2% of Amount Over \$750						
Over \$2,250 But Not Over \$3,750	\$37.50 Plus 3% of Amount Over \$2,250	\$37.50 Plus 3% of Amount Over \$2,250						
Over \$3,750 But Not Over \$5,250	\$82.50 Plus 4% of Amount Over \$3,750	\$82.50 Plus 4% of Amount Over \$3,750						
Over \$5,250 But Not Over \$7,000	\$142.50 Plus 5% of Amount Over \$5,250	\$142.50 Plus 5% of Amount Over \$5,250						
Over \$7,000	\$230.00 Plus 5.75% of Amount Over \$7,000	\$230.00 Plus 6% of Amount Over \$7,000						
Married Filing Separately								
Not Over \$500	1%	1%						

Over \$500 But Not Over \$1,500 Over \$1,500 But Not Over \$2,500 Over \$2,500 But Not Over \$3,500 Over \$3,500 But Not Over \$5,000 Over \$5,000 \$5.00 Plus 2% of Amount Over \$500 \$25.00 Plus 3% of Amount Over \$1,500 \$55.00 Plus 4% of Amount Over \$2,500 \$95.00 Plus 5% of Amount Over \$3,500 \$170.00 Plus 5.75% of Amount Over \$5,000

\$5.00 Plus 2% of Amount Over \$500 \$25.00 Plus 3% of Amount Over \$1,500 \$55.00 Plus 4% of Amount Over \$2,500 \$95.00 Plus 5% of Amount Over \$3,500 \$170.00 Plus 6% of Amount Over \$5,000

Head of Household and Married Filing Jointly

Not Over \$1,000	1%	1%
Over \$1,000 But Not Over \$3,000	\$10.00 Plus 2% of Amount Over \$1,000	\$10.00 Plus 2% of Amount Over \$1,000
Over \$3,000 But Not Over \$5,000	\$50.00 Plus 3% of Amount Over \$3,000	\$50.00 Plus 3% of Amount Over \$3,000
Over \$5,000 But Not Over \$7,000	\$110.00 Plus 4% of Amount Over \$5,000	\$110.00 Plus 4% of Amount Over \$5,000
Over \$7,000 But Not Over \$10,000	\$190.00 Plus 5% of Amount Over \$7,000	\$190.00 Plus 5% of Amount Over \$7,000
Over \$10,000	\$340.00 Plus 5.75% of Amount Over \$10,000	\$340.00 Plus 6% of Amount Over \$10,000

Source: OCGA Section 48-7-20, Paragraph (b) (1)



Schedule 7 Individual Income Tax Filers and Liability by Income Level For Calendar Years 2017(1) and 2008

(dollars, except income level, are in thousands)

	2017(1)								
		Personal							
	Number	Percentage	Income T	ax	Percentage				
	of Filers	of Total	Liabilit	У	of Total				
Income Level									
\$1,000 and under (2)	853,881	18.8%	\$	768,284	7.2%				
\$1,001 to \$5,000	217,705	4.8%		1	0.0%				
\$5,001 to \$10,000	309,842	6.8%		10,399	0.1%				
\$10,001 to \$15,000	345,563	7.6%		47,947	0.4%				
\$15,001 to \$20,000	308,893	6.8%		97,480	0.9%				
\$20,001 to \$25,000	266,460	5.9%		146,393	1.4%				
\$25,001 to \$30,000	239,880	5.3%		187,606	1.8%				
\$30,001 to \$50,000	674,084	14.9%		894,680	8.4%				
\$50,001 to \$100,000	740,251	16.4%	2	2,086,239	19.5%				
\$100,001 to \$500,000	543,628	12.0%	4	,310,935	40.2%				
\$500,001 to \$1,000,000	22,179	0.5%		744,315	7.0%				
\$1,000,001 and higher	10,194	0.2%	1	,403,891	13.1%				
Totals	4,532,560	100.0%	\$ 10),698,170	100.0%				

	2008								
		Personal							
	Number	Percentage		Income Tax	Percentage				
	of Filers	of Total		Liability	of Total				
Income Level									
\$1,000 and under (2)	689,595	16.3%	\$	437,826	5.7%				
\$1,001 to \$5,000	256,327	6.1%		(14)	0.0%				
\$5,001 to \$10,000	342,421	8.1%		9,022	0.1%				
\$10,001 to \$15,000	345,713	8.2%		41,644	0.5%				
\$15,001 to \$20,000	311,521	7.4%		92,546	1.2%				
\$20,001 to \$25,000	278,659	6.6%		140,485	1.8%				
\$25,001 to \$30,000	245,256	5.8%		176,572	2.3%				
\$30,001 to \$50,000	645,585	15.3%		790,915	10.3%				
\$50,001 to \$100,000	699,227	16.4%		1,829,639	23.7%				
\$100,001 to \$500,000	395,492	9.3%		2,820,540	36.6%				
\$500,001 to \$1,000,000	13,604	0.3%		456,614	5.9%				
\$1,000,001 and higher	6,529	0.2%		920,307	11.9%				
Totals	4,229,929	100.0%	\$	7,716,096	100.0%				

(1) Most recent available data.

(2) Category also includes payments from out-of-state residents and partial-year payers

Source: Georgia Department of Revenue

Schedule 8 Ratios of Outstanding Debt by Type For the Last Ten Fiscal Years

(dollars in thousands, except per capita amounts)

		Governmental Activities ⁽¹⁾							
Fiscal Year	(General Dbligation Bonds]	Revenue(2) Bonds		Capital Leases	Notes and Loans		
2019	\$	10,352,603	\$	613,770	\$	219,259	\$	69,262	
2018		10,043,489		613,770		233,398		74,141	
2017		9,851,713		745,477		237,505		78,450	
2016		9,493,441		983,947		184,689		87,228	
2015		9,367,381		1,200,365		221,690		21,662	
2014		9,437,844		1,367,068		252,830		4,024	
2013		9,072,784		1,503,925		255,763		4,000	
2012		8,889,868		1,678,744		262,111		14,600	
2011		8,774,586		1,848,570		223,429		19,600	
2010		8,837,728		2,009,489		242,430		27,614	

- (1) In fiscal year 2015, the activities of State Road and Tollway Authority (SRTA), a blended component unit, were reported as Governmental Activities. In fiscal year 2017, a re-examination determined that activities of this blended component unit should be reported in both Governmental Activities and Business-type Activities as was the presentation in fiscal years 2014 and prior.
- (2) The Governmental Activities Revenue Bonds include \$202.6 million of bonds secured by a joint resolution between the Department of Transportation (DOT) (General Fund) and the SRTA (Nonmajor Governmental Fund) whereby DOT has pledged to provide sufficient motor fuel tax funds to pay the principal and interest of the revenue bonds. According to the State Constitution, motor fuel tax funds are imposed and appropriated for all activities incident to maintaining an adequate system of roads and bridges in the State. In fiscal year 2019, the State collected \$1.8 billion of motor fuel tax funds. The principal and interest on the revenue bonds for fiscal year 2019 was \$53.8 million. The debt service requirements to maturity on these bonds is included in the Notes to the Financial Statements.
- (3) See Schedule 11 (Population/Demographics) for personal income and population data.

Source: Financial Information included in Current and Prior Years' Comprehensive Annual Financial Reports



В	usines	s -Type Activities	(1)						
 Revenue Capital Bonds Leases		Notes and Loans		Total Primary Government		Percentage of Personal Income ⁽³⁾		Outstanding Debt Per Capita ⁽³⁾	
\$ 231,706	\$	2,856,209	\$	269,459	\$	14,612,268	3.0%	\$	1,389
263,281		2,914,195		264,793		14,407,067	3.1%		1,376
269,136		3,044,125		256,768		14,483,174	3.3%		1,400
756,539		2,633,261		11,677		14,150,782	3.4%		1,380
1,384,058		1,948,804		6,027		14,149,987	3.6%		1,396
1,781,514		1,829,517		3,923		14,676,720	3.9%		1,464
1,211,200		2,370,028		397,692		14,815,392	4.0%		1,488
319,247		3,436,099		751,299		15,351,968	4.3%		1,559
328,597		3,170,521		734,189		15,099,492	4.5%		1,549
213,814		2,648,321		424,424		14,403,820	4.3%		1,459

Schedule 9 Ratios of General Bonded Debt Outstanding For the Last Ten Fiscal Years

(dollars in thousands, except per capita amounts)

Fiscal Year	Net General Bonded Debt ⁽¹⁾		Percentage of Personal Income ⁽²⁾	utstanding Debt er Capita ⁽²⁾
2019	\$	10,450,756	2.17%	\$ 993.47
2018		10,141,642	2.20%	972.41
2017		10,061,106	2.31%	975.82
2016		9,720,956	2.36%	951.65
2015		9,620,047	2.44%	952.75
2014		9,767,110	2.58%	977.54
2013		9,427,553	2.55%	950.58
2012		9,278,490	2.60%	945.60
2011		9,197,267	2.76%	946.86
2010		9,272,313	2.81%	943.34

(1) In fiscal year 2015, the activities of SRTA were re-examined and all activities of this blended component unit are reported as Governmental Activities. In fiscal year 2017, SRTA's activities reverted back to the blended presentation, where its activity and balances are included in both Governmental Activities and Business-type Activities.

(2) See Schedule 11 (Population/Demographics) for personal income and population data.

Source: Financial Information included in Current and Prior Years' Comprehensive Annual Financial Reports



Schedule 10 Computation of Legal Debt Margin For the Last Ten Fiscal Years

(in whole dollars)

	2019	2018	2017	2016	2015
Revenue Base:					
Treasury Receipts for the Preceding Fiscal Year (1)	\$25,649,496,147	\$4,519,402,190	\$3,476,964,889	\$1,557,498,541	\$0,256,765,494
Debt Limit Amount:					
Highest Aggregate Annual Commitments					
(Principal and Interest) Permitted Under					
Constitutional Limitation (10% of above)	\$ 2,564,949,615	\$2,451,940,219	\$ 2,347,696,489	\$2,155,749,854	\$2,025,676,549
Debt Applicable to the Limit:					
Highest Total Annual Commitments in Current or					
any Subsequent Fiscal Year (2)	1,432,215,164	1,398,096,186	1,405,379,184	1,311,486,764	1,305,012,971
Legal Debt Margin	\$ 1,132,734,451	\$ 1,053,844,033	\$ 942,317,305	\$ 844,263,090	\$ 720,663,578
Total Debt Applicable to the Limit as Percentage of Debt Limit Amount	55.8%	57.0%	59.9%	60.8%	64.4%

(1) Includes Indigent Care Trust Fund Receipts, Brain and Spinal Injury Trust Fund Receipts, Lottery Proceeds and Tobacco Settlement Funds.

(2) Includes issued and outstanding debt as of the end of each fiscal year and appropriated debt service for any authorized but unissued general obligation (and guaranteed revenue) bonds.

Source: Prior Year's Comprehensive Annual Financial Reports, other annual state reports, Georgia State Financing and Investment Commission, Constitution of the State of Georgia.

Note: The Constitution of the State of Georgia limits the combined total of highest annual debt service requirements for general obligation and guaranteed revenue debt to 10% of the prior year's revenue collections.

 2014		2013		2013		2013 2012		2011		2010		
\$ 19,539,691,058	\$	18,316,797,048	\$	17,546,376,094	\$	16,251,244,423	\$	17,841,696,614				
\$ 1,953,969,106	\$	1,831,679,705	\$	1,754,637,609	\$	1,625,124,442	\$	1,784,169,661				
1,320,929,740		1,289,411,544		1,310,228,303		1,328,679,199		1,369,585,101				
\$ 633,039,366	\$	542,268,161	\$	444,409,306	\$	296,445,243	\$	414,584,560				

Year

2018

2017

2016

2015

2014

2013

2012

2011

2010

2009

Schedule 11 Population/Demographics For the Last Ten Calendar Years

10,097,132

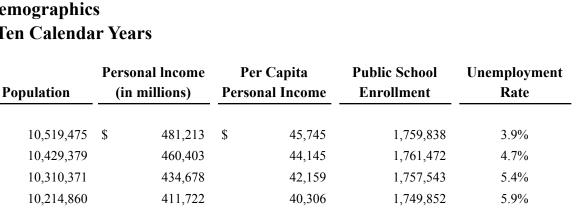
9,991,562

9,917,639

9,812,280

9,713,454

9,829,211



39,097

37,845

37,229

36,422

34,341

34,348

1,736,416

1,716,905

1,693,374

1,673,740

1,665,557

1,656,689

7.1%

8.2%

9.2%

10.2%

10.5%

9.9%

Sources:	Population - U. S. Department of Commerce, Bureau of the Census (midyear population estimates)
	Personal Income - U. S. Department of Commerce, Bureau of Economic Analysis
	Public School Enrollment - Georgia Department of Education (March of each school year)
	Unemployment Rate - U. S. Department of Labor (annual average)

394,773

378,156

369,149

357,306

333,559

330,460

State of Georgia

Schedule 12 Principal Private Sector Employers Fiscal Year 2019 and Nine Years Previous (2010)

2019 Employers

Children's Healthcare of Atlanta Delta Air Lines. Inc. Emory Healthcare, Inc. Emory University G4 Secure Solutions USA, Inc Lowe's Home Centers, Inc. Northside Hospital Publix Super Markets, Inc. Shaw Industries Group, Inc. Synergy RI-Og Target The Home Depot, Inc. The Kroger Company United Parcel Service, Inc. Waffle House Wal-Mart Stores, Inc. Wellstar Health System, Inc.

2010 Employers

Delta Air Lines, Inc. Emory System of Heath Care Emory University Georgia Power Company GMRI Inc. Lowe's Home Centers Mohawk Carpet Publix Supermarkets, Inc. Shaw Industries Group, Inc. Target The Home Depot, Inc. The Kroger Company United Parcel Wal-Mart Stores, Inc. Wellstar Health System

To protect employer confidentiality, OCGA Section 34-8-121(b)(3) prohibits the release of employee numbers by employer.

Sources:2019 - Georgia Department of Labor (1st quarter 2019)2010 - Comprehensive Annual Financial Report - Fiscal Year Ended June 30, 2010

State of Georgia

Schedule 13 State Government Employment by Function For the Last Ten Fiscal Years ⁽¹⁾

	2019	2018	2017	2016	2015
Governmental Activities	2019	2018	2017	2010	2013
General Government	8,619	8,408	8,432	8,722	8,402
Education	2,513	2,342	2,152	2,184	1,836
Health and Welfare	20,922	21,203	21,845	21,073	22,102
Transportation	5,012	4,979	4,979	5,023	5,102
Public Safety	26,789	28,686	27,780	25,728	25,513
Economic Development and Assistance	2,092	2,258	2,421	2,487	2,760
Culture and Recreation	3,227	3,112	3,080	2,982	2,838
Conservation	808	818	852	820	837
	69,982	71,806	71,541	69,019	69,390
Business-Type Activities ^{(2) (5)}					
State Road and Tollway Authority ⁽³⁾	_	_	_	_	_
Higher Education Fund ⁽⁴⁾	82,525	80,237	79,456	80,004	76,972
-	82,525	80,237	79,456	80,004	76,972
Total Employment	152,507	152,043	150,997	149,023	146,362

(1) Includes employees that were active at any time during the Fiscal Year. An individual employee may, therefore, be included in multiple functions if the employee transferred among functions during the fiscal year. This does not represent the number of active employees at the end of the year.

(2) Employees of certain Business-Type Activities organizations are included in Governmental Activities as follows:

Employees of the State Health Benefit Plan are included as employees of the Department of Community Health in Health and Welfare. Employees of the Unemployment Compensation Fund are included as employees of the Department of Labor in Economic Development and Assistance.

(3) In fiscal year 2015, the activities of State Road and Tollway Authority (SRTA) were examined and all activity was reported as Governmental Activities. In fiscal year 2017 SRTA, was re-examined and it was determined that the toll facilities and customer service center (previously part of Governmental Activities) are now reported as part of Business-Type Activities.

(4) Beginning in fiscal year 2013, Georgia Military College, formerly a blended component unit included in the Higher Education Fund, is reported as a discretely presented component unit and is no longer included in this schedule.

(5) No employees for the Nonmajor Enterprise Funds (Business-Type Activities) Georgia Higher Education Finance Authority and Higher Education Foundations are included as these organizations either have no employees, their data is not available or their employees are already reported as employees of another organization in either the Governmental Activities or Business-Type Activities.

Source: Open.Georgia.gov

Fiscal Year

2014	2013	2012	2011	2010
7,848	8,194	7,729	9,658	9,103
1,419	1,422	1,371	1,213	1,399
18,868	20,463	18,007	18,616	27,653
4,379	4,385	4,577	5,273	5,363
23,430	21,418	20,449	21,997	25,014
2,757	2,459	4,802	5,144	5,375
2,284	2,403	3,169	2,548	3,184
638	647	664	686	845
61,623	61,391	60,768	65,135	77,936
70	79	71	52	64
76,594	74,503	82,109	79,174	96,739
76,664	74,582	82,180	79,226	96,803
138,287	135,973	142,948	144,361	174,739

State of Georgia

Schedule 14 Operating Indicators and Capital Assets by Function For the Last Ten Years ⁽¹⁾

	2019	2018		_	2017		2016
General Government							
Department of Revenue							
Number of Personal Income Tax Filers	NCA		NCA		4,532,560		4,389,98
Education							
Department of Education							
Public School Enrollment (March FTE Count)							
Pre Kindergarten through Grade 5	841,190	850	0,534		856,077		856,41
Grades 6 through 8	409,008	400	0,469		394,565		392,09
Grades 9 through 12	509,640	510	0,469		506,901		500,80
Board of Regents of the University System of Georgia							
Number of Separate Institutions	26		29		29		2
Number of Active Educators	15,197	1:	5,161		15,012		14,60
Number of Students	328,712	32:	5,203		321,551		318,16
Health and Welfare							
Department of Human Services							
Food Stamp Recipients	1,379,463	1,564	4,906		1,654,152		1,745,87
Temporary Assistance for Needy Families Recipients	18,968	2	1,993		21,876		26,63
Transportation							
Department of Transportation							
Miles of State Highway	17,943	17	7,959		17,912		17,90
Public Safety							
Department of Corrections							
Number of Inmates	54,757	54	4,758		54,636		53,85
Number of Probationers	NCA	-	NCA		165,635		168,08
Number of Offenders	221,434	27:	5,777		258,843		_
Economic Development and Assistance							
Department of Economic Development							
Economic Impact of Tourism (in millions):							
Domestic Traveler Spending - Direct	NCA	\$ 2	7,902	\$	26,483	\$	25,55
Domestic Travel-generated State Tax Revenues	NCA	\$	1,421	\$	1,356	\$	1,30
Culture and Recreation:							
Department of Natural Resources							
Number of State Parks	50		49		49		4
Number of Historic Sites	15		15		15		1
Acreage of State Parks and Historic Sites (in acres)	79,216	8	5,490		85,430		85,43
Number of Daily Park Passes Sold	871,566	87:	5,817		905,504		802,26
Number of Annual Park Passes Sold	26,981	1:	5,498		11,954		9,44
Number of Hunting and Fishing Licenses Sold	1,443,657	1,19	5,097		1,335,703		1,346,36
Number of Registered Boats	368,094	33	8,210		134,095		143,58
Conservation							
Forestry Commission							
Economic Impact of Forestry Industry			NG -	¢		ć	
Output (in millions)	NCA		NCA	\$	21,300	\$	20,80
Employment	NCA		NCA		53,933	c.	51,90
Compensation (in millions)	NCA		NCA	\$	3,840	\$	3,74

(1) Data is presented by either fiscal year or calendar year based on availability of information.

(2) As of 2017 -DCS no longer uses the categories Parolees and Probationers. DCS has one category-Felony Offenders

Source: NCA - Not Currently Available; Information obtained from the individual organizations listed.

Fisca	2015	2014	2013	2012		2011		2010
	4,423,664	4,471,307	4,319,711	4,226,144		4,265,347		4,266,318
	954 252	946 264	82((27	820.000		828.005		825.044
	854,352 392,433	846,364 392,381	836,627 388,542	829,900 383,553		828,005 376,315		825,044
	489,631	478,160	468,205	460,287		461,237		371,759 459,886
	489,031	478,100	408,205	400,287		401,237		439,000
	30	31	31	35		35		35
	14,478	14,309	13,903	13,855		13,311		12,828
	312,936	309,469	314,365	318,027		311,442		301,892
	1,825,606	1,823,017	1,957,886	1,875,000		1,737,545		1,389,935
	27,219	31,598	35,185	35,887		36,534		90,581
	17,907	17,912	17,967	17,985		17,985		18,093
	51,002	51,216	53,168	54,336		55,162		52,291
	165,926	165,560	164,051	163,265		156,630		154,989
	_	_	_	_		_		_
\$	24,526	\$ 23,707	\$ 22,354	\$ 21,489	\$	20,537	\$	18,906
\$	1,170	\$ 1,059	\$ 989	\$ 949	\$	919	\$	855
	49	49	49	48		48		48
	15	15	15	18		18		15
	85,647	92,880	92,880	86,000+		86,000+		84,000+
	790,020	659,391	650,651	659,860		679,838		840,000
	7,852	6,187	5,595	8,042		10,792		9,470
	1,346,360	1,025,782	955,340	1,004,771		997,651		1,038,015
	144,979	147,854	125,280	124,610		132,832		134,815
	19,200	\$ 16,800	\$ 16,900	\$ 16,313	\$	15,100	\$	14,500
\$	17,200					,	Ψ	,
\$	50,385	48,740	50,110	49,516	*	46,378	φ	43,425

State of Georgia

Single Audit Report

For the Year Ended June 30, 2019



Georgia Department of Audits and Accounts



DEPARTMENT OF AUDITS AND ACCOUNTS

270 Washington Street, S.W., Suite 1-156 Atlanta, Georgia 30334-8400

GREG S. GRIFFIN STATE AUDITOR (404) 656-2174

February 28, 2020

The Honorable Brian P. Kemp Governor of Georgia and Members of the General Assembly Citizens of the State of Georgia

We are honored to present the State of Georgia Single Audit Report for the year ended June 30, 2019. The single audit satisfies the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). All of the information required for the single audit is included in this report except for the State's financial statements and our report thereon, which are included in the State of Georgia Comprehensive Annual Financial Report. The Single Audit Report contains our:

- Report on Internal Control Over Financial Reporting and Compliance;
- Report on Compliance for Each Major Federal Program;
- Report on Internal Control Over Compliance;
- Report on Schedule of Expenditures of Federal Awards (SEFA); and
- Schedule of Findings and Questioned Costs.

The report also contains the statewide SEFA, Summary Schedule of Prior Audit Findings, Corrective Action Plan for Current Year Findings, and Listing of Organizational Units Comprising the State of Georgia Reporting Entity.

We would like to express our appreciation to all those involved in the preparation and completion of this report. We believe the results of this statewide audit provide valuable information to the State's decision makers and others interested in the activities of the State of Georgia.

Respectfully submitted,

Gregs Buff-

Greg S. Griffin State Auditor



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DEPARTMENT OF AUDITS AND ACCOUNTS

270 Washington Street, S.W., Suite 1-156

Atlanta, Georgia 30334-8400

GREG S. GRIFFIN STATE AUDITOR (404) 656-2174

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Independent Auditor's Report

The Honorable Brian P. Kemp, Governor of Georgia and Members of the General Assembly of the State of Georgia

We have audited the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the State of Georgia (State) as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the State's basic financial statements, and have issued our report thereon dated December 30, 2019.

Our report includes a reference to other auditors who audited the financial statements of the State entities listed below, as described in our report on the State's basic financial statements.

AU Health System, Inc.	Georgia Student Finance Authority
Augusta University Foundation, Inc. and Subsidiaries	Georgia Tech Athletic Association
Augusta University Research Institute, Inc.	Georgia Tech Facilities, Inc.
Employees' Retirement System of Georgia	Georgia Tech Foundation, Inc.
Georgia Advanced Technology Ventures, Inc.	Georgia Tech Research Corporation
and Subsidiaries	Kennesaw State University Foundation, Inc.
Georgia College & State University Foundation,	Medical College of Georgia Foundation, Inc.
Inc. and Subsidiaries	Middle Georgia State University Real Estate
Georgia Gwinnett College Foundation, Inc.	Foundation, Inc. and Subsidiaries
Georgia Health Sciences Foundation, Inc.	Teachers Retirement System of Georgia
Georgia Higher Education Facilities Authority	University of Georgia Foundation
Georgia Housing and Finance Authority	University of Georgia Athletic Association, Inc.
Georgia Lottery Corporation	University of Georgia Research Foundation, Inc.
Georgia Ports Authority	and Subsidiaries
Georgia Southern University Housing Foundation,	University of North Georgia Real Estate
Inc. and Subsidiaries	Foundation, Inc. and Subsidiaries
Georgia State Financing and Investment Commission	UWG Real Estate Foundation, Inc.
Georgia State University Athletic Association, Inc.	University System of Georgia Foundation, Inc.
Georgia State University Foundation, Inc.	and Affiliates
Georgia State University Research Foundation, Inc.	VSU Auxiliary Services Real Estate Foundation, Inc.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. The financial statements of the State entities listed below were not audited in accordance with *Government Auditing Standards*, and accordingly, this report does not include reporting on internal control over financial reporting or instances of reportable noncompliance associated with those entities.

Georgia Advanced Technology Ventures, Inc. and Subsidiaries	Georgia Tech Foundation, Inc. Georgia State University Athletic Association, Inc.
Georgia College & State University Foundation,	Kennesaw State University Foundation, Inc.
Inc. and Subsidiaries	Medical College of Georgia Foundation, Inc.
Georgia Gwinnett College Foundation, Inc.	Middle Georgia State University Real Estate
Georgia Health Sciences Foundation, Inc.	Foundation, Inc. and Subsidiaries
Georgia Lottery Corporation	University of Georgia Foundation
Georgia Southern University Housing	University of Georgia Athletic Association, Inc.
Foundation, Inc. and Subsidiaries	University of North Georgia Real Estate Foundation,
Georgia State University Foundation, Inc.	Inc. and Subsidiaries
Georgia Tech Athletic Association	UWG Real Estate Foundation, Inc.
Georgia Tech Facilities, Inc.	VSU Auxiliary Services Real Estate Foundation, Inc.

This report includes our consideration of the results of other auditors' testing of internal control over financial reporting and compliance and other matters that are reported on separately by those other auditors. However, this report, insofar as it relates to the results of the other auditors, is based solely on the reports of the other auditors.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the State's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the State's internal control. Accordingly, we do not express an opinion on the effectiveness of the State's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we and the other auditors did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying *Schedule of Findings and Questioned Costs* in findings 2019-001, 2019-002, 2019-003, 2019-004, 2019-005, 2019-006, 2019-007, 2019-008, 2019-009, and 2019-010 that we consider to be significant deficiencies.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the State's basic financial statements are free from material misstatement, we and other auditors performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and which are described in the accompanying *Schedule of Findings and Questioned Costs* in findings 2019-002, 2019-003, 2019-004, 2019-005, 2019-006, 2019-007, 2019-008, 2019-009, and 2019-010.

State's Responses to Findings

The State's responses to the findings identified in our audit consist of views of responsible officials and corrective action plans. The views of responsible officials are described in the accompanying *Schedule of Findings and Questioned Costs*, and the corrective action plans are described in the accompanying *Corrective Action Plan for Current Year Findings*. The State's responses were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the State's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the State's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Respectfully submitted,

Sug Stuff

Greg S. Griffin State Auditor

December 30, 2019





DEPARTMENT OF AUDITS AND ACCOUNTS

270 Washington Street, S.W., Suite 1-156 Atlanta, Georgia 30334-8400

GREG S. GRIFFIN STATE AUDITOR (404) 656-2174

Report on Compliance for Each Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

Independent Auditor's Report

The Honorable Brian P. Kemp, Governor of Georgia and Members of the General Assembly of the State of Georgia

Report on Compliance for Each Major Federal Program

We have audited the State of Georgia's (State's) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the State's major federal programs for the year ended June 30, 2019. The State's major federal programs are identified in the summary of auditor's results section of the accompanying *Schedule of Findings and Questioned Costs*.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the State's major federal programs based on our audit of the types of compliance requirements referred to above.

As stated in our report on the basic financial statements, we did not audit the financial statements of the State entities listed below nor did we audit compliance for the major federal programs or percentages of these federal programs at the State entities identified in the table on the following page.

AU Health System, Inc.	Georgia Student Finance Authority
Augusta University Foundation, Inc. and Subsidiaries	Georgia Tech Athletic Association
Augusta University Research Institute, Inc.	Georgia Tech Facilities, Inc.
Employees' Retirement System of Georgia	Georgia Tech Foundation, Inc.
Georgia Advanced Technology Ventures, Inc.	Georgia Tech Research Corporation
and Subsidiaries	Kennesaw State University Foundation, Inc.
Georgia College & State University Foundation,	Medical College of Georgia Foundation, Inc.
Inc. and Subsidiaries	Middle Georgia State University Real Estate
Georgia Gwinnett College Foundation, Inc.	Foundation, Inc. and Subsidiaries
Georgia Health Sciences Foundation, Inc.	Teachers Retirement System of Georgia

Georgia Higher Education Facilities Authority	University of Georgia Foundation
Georgia Housing and Finance Authority	University of Georgia Athletic Association, Inc.
Georgia Lottery Corporation	University of Georgia Research Foundation, Inc.
Georgia Ports Authority	and Subsidiaries
Georgia Southern University Housing Foundation,	University of North Georgia Real Estate
Inc. and Subsidiaries	Foundation, Inc. and Subsidiaries
Georgia State Financing and Investment Commission	UWG Real Estate Foundation, Inc.
Georgia State University Athletic Association, Inc.	University System of Georgia Foundation, Inc.
Georgia State University Foundation, Inc.	and Affiliates
Georgia State University Research Foundation, Inc.	VSU Auxiliary Services Real Estate Foundation, Inc.

The financial statements of the above mentioned State entities and the compliance for the federal programs/clusters identified in the table below were audited by other auditors whose reports, including reports on compliance and internal control over compliance, have been furnished to us. This report includes our consideration of the results of the other auditors' testing of compliance and internal control over compliance that are reported on separately by those other auditors. However, this report, insofar as it relates to the results of the other auditors, is based solely on the reports of the other auditors.

State Entity	CFDA Number(s)	Program or Cluster Title	% of Program or Cluster Audited by Other Auditors
University System of Georgia Foundation, Inc. and Affiliates	10.766, 10.780	Community Facilities Loans and Grants Cluster	100%
Department of Community Affairs	14.871, 14.879	Housing Voucher Cluster	100%
Georgia Ports Authority	20.934	Nationally Significant Freight and Highway Projects	100%
Georgia Environmental Finance	66.458, 66.482	Clean Water State Revolving Fund Cluster	100%
Authority	66.468, 66.483	Drinking Water State Revolving Fund Cluster	100%

The federal award expenditures audited by Other Auditors comprise one percent of the State's total expenditures of federal awards.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the State's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the State's compliance.

Opinion on Each Major Federal Program

In our opinion, based on our audit and the reports of other auditors, the State complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs identified in the summary of auditor's results section of the accompanying *Schedule of Findings and Questioned Costs* for the year ended June 30, 2019.

Other Matters

The results of our auditing procedures disclosed instances of noncompliance which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying *Schedule of Findings and Questioned Costs* in findings 2019-011, 2019-012, 2019-013, 2019-014, 2019-015, 2019-016, 2019-017, 2019-018, 2019-019, 2019-020, 2019-021, 2019-022, 2019-023, 2019-027, 2019-029, 2019-030, and 2019-031. Our opinion on each major federal program is not modified with respect to these matters.

The State's responses to the noncompliance findings identified in our audit consist of views of responsible officials and corrective action plans. The views of responsible officials are described in the accompanying *Schedule of Findings and Questioned Costs*, and the corrective action plans are described in the accompanying *Corrective Action Plan for Current Year Findings*. The State's responses were not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the responses.

Report on Internal Control Over Compliance

Management of the State is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the State's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the State's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance is a deficiency of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. We and the other auditors did not identify any deficiencies in internal control over compliance, that we consider to be material weaknesses. However, we did identify certain deficiencies in internal control over compliance, described in the accompanying *Schedule of Findings and Questioned Costs* in findings 2019-021, 2019-022, 2019-023, 2019-024, 2019-025, 2019-026, 2019-027, and 2019-028 that we consider to be significant deficiencies.

The State's responses to the internal control over compliance findings identified in our audit consist of views of responsible officials and corrective action plans. The views of responsible officials are described in the accompanying *Schedule of Findings and Questioned Costs*, and the corrective action plans are described in the accompanying *Corrective Action Plan for Current Year Findings*. The State's responses were not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the responses.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the State as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the State's basic financial statements. We have issued our report thereon dated December 30, 2019, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the State's basic financial statements. The accompanying Schedule of Expenditures of Federal Awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied by us and other auditors in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, based on our audit, the procedures performed as described above, and the reports of the other auditors, the Schedule of Expenditures of Federal Awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

Respectfully submitted,

Jug Stiff:

Greg S. Griffin State Auditor

February 28, 2020

Schedule of Findings and Questioned Costs

The Schedule of Findings and Questioned Costs (Schedule) was prepared in accordance with Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). The Schedule contains the following sections:

Section I - Summary of Auditor's Results

A summary of the results of our audit and a list of the State's major federal programs are presented in this section of the Schedule.

Section II - Financial Statement Findings

This section presents findings related to the financial statements, including any material weaknesses or significant deficiencies in internal control over financial reporting and noncompliance and other matters that are required to be reported in accordance with *Government Auditing Standards*. Financial statement findings are organized by State entity (entity number).

Section III - Federal Award Findings and Questioned Costs

This section presents federal award findings and questioned costs. Findings are reported for material weaknesses or significant deficiencies in internal control over compliance and material noncompliance with the compliance requirements that have a direct and material effect on each of the State's major federal programs and other findings and questioned costs that are required to be reported pursuant to Title 2 CFR 200.516(a). Federal award findings are organized by federal agency, State entity (entity number), federal program, and compliance requirement.



SUMMARY OF AUDITOR'S RESULTS

Financial Statements

Type of auditor's report issued: Governmental Activities; Business-Type Activities; Aggregate Discretely Presented Component Units; Each Major Fund; and Aggregate Remaining	
Fund Information	Unmodified
Internal control over financial reporting: Significant Deficiencies identified? Significant Deficiencies evaluated as Material Weaknesses?	Yes No
Noncompliance material to financial statements noted?	No
Federal Awards	
Internal control over major programs: Significant Deficiencies identified? Significant Deficiencies evaluated as Material Weaknesses?	Yes No
Type of auditor's report issued on compliance for major programs: All major programs	Unmodified
Any audit findings disclosed that are required to be reported in accordance with Title 2 CFR 200.516(a)?	Yes
Dollar threshold used to distinguish between Type A and Type B programs:	\$31,714,054
Auditee Qualified as low-risk auditee?	No
Identification of Major Programs: The table on the following page lists the major programs in order by CFDA number. For each cluster, the first CFDA number in the cluster designates its placement within the table.	

Major Programs

Federal Agency	Program or Cluster Title	CFDA No.
U.S. Department of	WIC Special Supplemental Nutrition Program for Women, Infants, and Children	10.557
Agriculture	Community Facilities Loans and Grants Cluster	10.766, 10.780
U.S. Department of Housing and Urban Development	Housing Voucher Cluster	14.871, 14.879
Department of the Interior	Fish and Wildlife Cluster	15.605, 15.611, 15.626
U.S. Department of	Unemployment Insurance	17.225
Labor	Workforce Innovation and Opportunity Act Cluster	17.258, 17.259, 17.278
U.S. Department of Transportation	Nationally Significant Freight and Highway Projects	20.934
U.S. Environmental	Clean Water State Revolving Fund Cluster	66.458, 66.482
Protection Agency	Drinking Water State Revolving Fund Cluster	66.468, 66.483
	Special Education Cluster (IDEA)	84.027, 84.173
U.S. Department of	Rehabilitation Services Vocational Rehabilitation Grants to States	84.126
Education	English Language Acquisition State Grants	84.365
	Supporting Effective Instruction State Grants (formerly Improving Teacher Quality State Grants)	84.367
	Promoting Safe and Stable Families	93.556
	Community Services Block Grant	93.569
U.S. Department of	CCDF Cluster	93.575, 93.596
Health and Human Services	Adoption Assistance	93.659
	Medicaid Cluster	93.775, 93.777, 93.778
	HIV Care Formula Grants	93.917
U.S. Social Security Administration	Disability Insurance/SSI Cluster	96.001, 96.006

FINANCIAL STATEMENT FINDINGS REPORTED UNDER GOVERNMENT AUDITING STANDARDS

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STATE ¹ ENTITY	FINDING NUMBER AND TITLE	PAGE NUMBER
	Statewide	B-6
	2019-001 Continue to Improve Financial Statement Preparation	
	2019-002 Strengthen Logical Access Controls	
405	Department of Public Health	B-11
	2019-003 Improve Financial Reporting Controls	
419	Department of Community Health	B-13
	2019-004 Continue to Improve Internal Controls over Claim Processing	
	2019-005 Continue to Strengthen Financial Reporting Controls	-
	2019-006 Continue to Strengthen Application Risk Management Progra	am
427	Department of Human Services	B-18
	2019-007 Strengthen Logical Access Controls	
	2019-008 Strengthen Logical Access Controls	
474	Department of Revenue	B-22
	2019-009 Strengthen Logical Access Controls	
922	Georgia World Congress Center Authority	B-24
	2019-010 Continue to Strengthen Logical Access Controls	

¹*The entity number represents the control number that was assigned to each State entity.*

STATEWIDE FINDINGS

2019-001 Continue to Improve Financial Statement Preparation

Internal Control Impact:	Significant Deficiency
Compliance Impact:	None
Repeat of Prior Year Finding:	2018-001, 2017-001, 2016-001, 2015-041, 2014-054

The State Accounting Office (SAO) should continue to improve controls over financial statement preparation to ensure the accuracy of the State's basic financial statements, including the note disclosures and required supplementary information.

Background Information:

As part of our fiscal year 2019 audit, we followed up on SAO's efforts to implement its corrective action plans for the prior year findings. We noted ongoing efforts are being made by SAO to improve controls over financial reporting. The SAO continues to provide training on financial accounting and reporting to all internal staff and guidance to all State organizations through training and working group sessions, the issuance of accounting policies and procedures, and detailed instructions for financial reporting forms. The SAO also continues to update the disclosure checklist and reporting forms for new accounting standards.

However, the utilization of year-end financial reporting forms to gather information needed to prepare the State's financial statements, combined with other sources of information, and the extent of modification necessary to such information, results in a financial reporting process that continues to be highly complex and manual in nature, and therefore, susceptible to errors.

Criteria:

The SAO is responsible for maintaining a system of controls over the preparation of the State's financial statements in accordance with generally accepted accounting principles (GAAP). The design and operation of SAO's controls should allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements of the financial statements in a timely manner as well as facilitate the timely preparation of complete and accurate financial statements.

Condition:

Our audit of the State's basic financial statements, including the note disclosures, revealed errors that were not detected by SAO's review processes. The more significant items found were as follows:

- Benefits expense totaling \$68 million for the Higher Education opinion unit was misclassified and should have been classified as personnel services. An audit adjustment was proposed and accepted to correct the overstatement of benefit expenses and understatement of personnel services.
- Non-Current Assets Restricted Investments totaling \$154 million for the aggregate discretely
 presented component units was misclassified and should have been classified as Current Assets Restricted Investments. In addition, Non-Current Assets Restricted Cash/Cash Equivalents
 totaling \$74 million for the aggregate discretely presented component units was misclassified and
 should have been classified as Current Restricted Cash/Cash Equivalents. An audit adjustment
 was proposed and accepted to correct these misclassifications.
- Note 3 to the Financial Statements Government-wide Adjustments reported for Other Noncurrent Assets and Liabilities were understated by \$248 million. In addition, Government-wide Adjustments reported for Long-Term Liabilities Related to Debt were overstated by \$263 million.

• Note 7 to the Financial Statements – General Fund Other Receivables totaling \$1.9 billion was misclassified and should have been classified as Intergovernmental Receivable. An audit adjustment was proposed and accepted to correct this misclassification.

Cause:

For some of the conditions noted above, SAO did not ensure all the manual reclassifications were performed accurately and timely. For the Note 7 condition, noted above, SAO did not perform a control it had designed to catch the type of misclassification that had occurred. There continues to be a need for SAO to standardize its manual preparation process.

Effect:

Weaknesses in the review processes increase the likelihood of untimely detection and correction of errors in the financial statements.

Recommendation:

The SAO should strengthen its financial statement preparation processes by focusing on implementing detective controls for areas that are highly manual in nature and more susceptible to the risk of a material misstatement. In addition, SAO should continue its efforts to ensure all its designed controls are followed to timely detect and correct reporting errors.

Views of Responsible Officials:

We concur with the finding.

STATEWIDE FINDINGS (continued)

2019-002 Strengthen Logical Access Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance

Strengthen TeamWorks Financials Logical Access Controls.

Background Information:

The State Accounting Office (SAO) and the majority of state agencies rely extensively on the statewide TeamWorks Financials information system to process financial transactions and provide accurate financial reporting. Controls over the system are essential for the reliability and integrity of the State's financial data and to protect financial information from manipulation, corruption, or loss.

The SAO is responsible for the effective operation of TeamWorks Financials and related control activities, including segregation of duties.

Criteria:

The SAO is responsible for maintaining an effective information system, which includes information technology (IT) general controls that ensure logical access is assigned based on job roles and responsibilities along with enforcing segregation of incompatible duties. It also includes policies and procedures, which are important in establishing processes for managing and monitoring user access, changes made to user access roles, and defining segregation of duties rules that govern the assignment of access rights to specific roles.

Pursuant to the *Official Code of Georgia Annotated* (OCGA) §50-25-4(a)(20), the Georgia Technology Authority (GTA) is to establish technology security policies, standards, and services to be used by all agencies. The SAO is responsible for adhering to the technology security policies and standards which include:

- Access Control Policy (PS-08-009) Access to State information assets is to be controlled and monitored to protect from unauthorized access and disclosure.
- Authorization and Access Management Standard (SS-08-010) Requires periodic reviews of access control lists and logs to validate the appropriateness of user accounts and use of access privileges. Access control measures are critical to ensuring users only have access to the information for which they are authorized and need to perform their official duties.
- Separation of Production and Development Environments (SS-08-031) Production systems require a stable and controlled environment to operate properly. Separating development and test activities from and restricting developer access to operational environments reduces the risks of inadvertent or unauthorized modifications to the operational system that could compromise the system's integrity or availability.

Condition:

Our review of TeamWorks Financials IT general controls revealed the following deficiencies in logical access:

- We reviewed the 15 users who had access to promote system changes to the production environment. We found the access was inappropriate for five users based on their job roles and responsibilities. This inappropriate access is due to additional access provided to these users for a TeamWorks Financials upgrade not being removed after the upgrade was implemented.
- We found 111 users, within two agencies, had a misconfigured role that allowed them to have inappropriate access to the workflow administrator functionality within the system. This functionality gave the users the ability to change the workflow configurations for agencies other than their own, despite not having the business need. We also noted that SAO did not perform reviews of access privileges assigned to roles within the system to determine whether the roles were correctly configured to provide proper segregation of duties.
- We found three users who had inappropriate access to view and change all state agencies data, limited by the privileges associated to their roles, that were not commensurate with their job responsibilities.

In addition, our review disclosed certain general security settings for the databases supporting the system could be strengthened to reduce the risk of potential exploitation based on known security vulnerabilities.

The deficiencies in logical access represent noncompliance with the GTA technology security policies and standards. In addition, SAO did not follow its change management policies and procedures designed to restrict access to the operational environment.

When the logical access user deficiencies were brought to SAO's attention, they removed the inappropriate access from the users and role. Additionally, SAO provided evidence showing no inappropriate activity or changes to TeamWorks Financials had occurred during the audit period.

The details related to these deficiencies have been provided to SAO management and shall not be considered a public record in accordance with OCGA §50-6-9(b).

Cause:

The SAO's user access review process did not operate effectively to flag all inappropriate user access for removal. The user access review process also does not include any procedures for reviewing the access privileges assigned to roles within the system.

The SAO did not change certain default general security settings to address known security vulnerabilities for the databases supporting the system.

Effect:

There is an increased risk of unauthorized access to TeamWorks Financials data and possible manipulation or loss of data.

Recommendation:

The SAO should adhere to its established policies and procedures and strengthen its logical access controls by:

- Incorporating additional oversight and training of staff responsible for the user access review process to ensure timely detection and correction of inappropriate access;
- Ensuring proper segregation of duties is maintained in the change management production environment;
- Developing a matrix that establishes appropriate segregation of duties for roles assigned to TeamWorks Financials users and privileges within the roles;
- Establishing procedures for reviewing users access and privileges assigned to application roles to determine whether proper segregation of duties exist and are enforced within the TeamWorks Financials information system;
- Correcting the configuration of the role that allowed access to the workflow administrator functionality within the system; and
- Configuring the general security settings for the databases supporting the system to reduce the risk of unauthorized access and inappropriate activity.

Views of Responsible Officials:

We concur with the finding.

STATE ENTITY: DEPARTMENT OF PUBLIC HEALTH

2019-003 Improve Financial Reporting Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Repeat of Prior Year Finding:	2018-003

The Department of Public Health (DPH) needs to strengthen controls over its financial reporting processes.

Background Information:

As part of our fiscal year 2019 audit, we followed up on DPH's efforts to implement corrective action plans in response to the prior year finding in which we reported that DPH did not have adequate controls over its financial reporting processes. Due to high turnover of management and staff, DPH was not able to address the deficiency in controls during the year.

Criteria:

State organizations are required to provide information to the State Accounting Office (SAO) to permit the proper accounting and reporting of financial information in the State's *Comprehensive Annual Financial Report* (CAFR) and *Schedule of Expenditures of Federal Awards* (SEFA).

The DPH management is responsible for establishing and maintaining a system of internal controls designed to provide reasonable assurance of accurate financial reporting and compliance with applicable statutes and regulations. Effective internal controls over financial reporting should include policies and procedures to ensure the accuracy of statements, reports, and other information that are required to be submitted to SAO and compliance with statewide rules, regulations, policies and procedures as required by *Title 50, Chapter 5B, Article 1 of the Official Code of Georgia Annotated* (OCGA) §50-5B-4. An effective system of internal controls should also include adequately trained personnel with the knowledge, skills and experience to ensure the accuracy of financial reporting and compliance with applicable statutes and regulations.

Condition:

The DPH's controls over its financial reporting processes did not prevent or detect errors in its accounting records and year-end financial submissions to SAO. Our audit procedures disclosed the following significant errors that were corrected by agency post-closing adjustments:

- Clearing account balance of \$21.8 million, which should equal zero at year-end;
- Understatement of federal revenue and expenditures by \$81.8 million and \$44.3 million, respectively.

The DPH submitted 67 post-closing adjustments (PCAs), containing 4,671 lines of data, to adjust its account balances and to correct book errors. The number of PCAs is more than triple the number submitted in the prior year.

In addition, an adjustment was proposed and approved by management to correct DPH's SEFA submission for the omission of \$51.5 million from the *Amount Provided to Subrecipients* for a federal program.

We also noted DPH continues to carryforward an unreconciled difference from the prior year in the Operating Bank Account reconciliation of \$27.4 million.

Cause:

The DPH experienced high turnover of personnel during the end of the fiscal year, which directly impacted the operation of its controls over financial reporting and year-end close processes. In addition, DPH did not perform an adequate pre-closing review to analyze its accounting records and to make accounting corrections and other adjustments prior to the fiscal year close.

Effect:

Prior to DPH's adjustments, DPH's financial information submitted to SAO contained significant errors which resulted in numerous adjusting entries. Ineffective controls over financial reporting increases the risk of misstatements in the State's financial statements, including the disclosures to the financial statements as reflected in the CAFR and SEFA. The need for numerous adjusting entries after year-end close also affects the timeliness of statewide reporting by SAO.

Recommendation:

The DPH should improve controls over its financial reporting processes by incorporating additional oversight, conducting thorough reviews of financial information, including monthly reconciliations of federal revenue and expenditures, and providing training to staff that will aid in the prevention or timely detection and correction of errors in its accounting records.

In addition, DPH should improve its pre-closing review processes by incorporating procedures to address any balances in general clearing accounts. We also recommend that DPH commit resources to research and resolve the old outstanding unreconciled differences on the June 30th operating bank reconciliation and identify related adjusting entries.

Strong internal controls over financial reporting should diminish the need for numerous PCAs to correct accounting records at year-end and help ensure DPH's financial submissions are correct and accurately represent its operations to meet the State's financial reporting needs.

Views of Responsible Officials:

We concur with the finding.

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH

2019-004 Continue to Improve Internal Controls Over Claim Processing

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Repeat of Prior Year Finding:	2018-004

The Department of Community Health (DCH) should continue to improve internal controls over claims processing for the State Health Benefit Plan.

Background Information:

The State Health Benefit Plan (Plan) is made up of various health plans, most of which are self-funded. A self-funded health benefit plan is a plan in which the employer is taking on the risk and responsibility of paying all of its covered health claims, rather than paying an insurance company to accept the risk. The benefit of self-funded plans is that there could be lower costs. While processing large volumes of transactions, the risk of overpayment is significantly increased if there is a lack of monitoring of claims payments.

The Plan hires third-party administrators (TPAs) to process claims payments. Annually, the TPAs perform edit checks of their system to ensure the claims are being processed accurately; this information is passed along to the Plan for review. Additionally, the Plan is responsible for ensuring complementary user entity controls are placed in operation and working effectively to mitigate the risk of material misstatement.

While TPAs process payments and ensure accuracy of their software through the use of edits, it is the responsibility of the Plan, especially since they are self-funded, to ensure the claims are processed accurately for eligible members of the Plan during the time of service according to the agreed upon rates. The claims payments for fiscal year 2019 total approximately \$2.9 billion, of which \$795 million related to pharmacy claims.

As part of our fiscal year 2019 audit, we followed up on DCH's efforts to implement corrective action plans in response to the prior year finding in which we reported that DCH did not have adequate controls in place over claims processing. Although DCH has not fully implemented all of its corrective action plans, ongoing efforts are being made. We noted DCH has begun a three-year claims audit for medical claims payments including a review of eligibility.

Criteria:

The DCH management is responsible for establishing and maintaining a system of internal controls designed to reduce the risk of material misstatement related to benefit claims being processed accurately based on established rates for eligible members during the service period, and to ensure the rebates associated, if any, are in line with established rates. Furthermore, DCH is required to comply with the rules, regulations, policies, and procedures prescribed by the State Accounting Office, pursuant to Title 50, Chapter 5B of the *Official Code of Georgia Annotated* (OCGA) §50-5B-4, including the statewide Internal Control Guidance. The guidance identifies requirements for performing risk assessments and implementing controls designed to address risks which are critical to establishing and maintaining an effective system of internal controls.

Condition:

The DCH does not have adequate internal controls over pharmacy benefit claims that are processed by TPAs to ensure the claims payments are accurate based on established rates, for eligible employees during the service period, and where applicable, that the agreed upon rebates are provided.

Cause:

The DCH management did not have adequate policies and procedures in place to monitor the accuracy and eligibility of pharmacy claims.

Effect:

Without effective controls over claims processing, the Plan is at risk for overpaying healthcare claims and cannot ensure compliance with OCGA §50-5B-4. The deficiencies in internal control could prevent the Plan from identifying and collecting a potentially significant amount of overpayments.

Recommendation:

The DCH should continue to improve controls over claims processing by establishing policies and procedures for monitoring pharmacy claims to ensure overpaid claims are identified, claims are for eligible employees during the service period and being processed timely, and that all rebates have been processed according to established contractual rates.

Views of Responsible Officials:

Although the Department of Community Health ("DCH") officially concurs with the finding, it would like to provide the following clarifications. First, the Department of Audits and Accounts ("DOAA") notes that this is a follow up of the previous year's finding (FS-419-18-01). The previous year's finding was based on an assessment that DCH lacked adequate controls over claims payments as processed by Third Party Administrators ("TPA"), and where applicable, the proper rebates were provided. However, pharmacy claims were referenced for the first time in the current finding. Additionally, although DOAA's auditors use the term TPA in both findings, and reference "pharmacy claims that are processed by TPAs" in this year's finding, the Plan's TPAs administer medical benefit claims, while the Pharmacy Benefits Manager ("PBM") administers pharmacy claims.

Second, it should be noted that each PBM undergoes a pre-implementation audit prior to their go-live date. This involves testing their claims processing system. Additionally, SHBP performs a sampling of test claims for any annual benefit change before it is implemented.

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH (continued)

2019-005 Continue to Strengthen Financial Reporting Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Repeat of Prior Year Finding:	2018-005

The Department of Community Health (DCH) should continue to strengthen controls over financial reporting to ensure the accuracy of the information it prepares for the State's financial statements and note disclosures.

Background Information:

As part of our fiscal year 2019 audit, we followed up on DCH's efforts to implement corrective action plans in response to the prior year finding in which we reported that DCH did not have adequate controls over financial reporting. Although DCH has not fully implemented all of its corrective action plans, we noted that DCH has provided additional training and guidance to staff and hired additional staff to oversee the preparation of financial information.

Criteria:

According to Title 50, Chapter 5B, Article 1 of the *Official Code of Georgia Annotated* (OCGA) §50-5B-4 along with the State Accounting Office's (SAO) Statewide Accounting Policy and Procedure, section Management's Responsibilities, DCH management is responsible for providing information to SAO to permit the proper accounting and reporting for the State's financial statements in accordance with generally accepted accounting principles (GAAP).

The DCH is required to maintain a system of controls over financial reporting in accordance with GAAP. The DCH's internal controls over GAAP financial reporting should include adequately trained personnel with the knowledge, skills, and experience to prepare GAAP based financial statements and include all disclosures as required by the Governmental Accounting and Standards Board.

Condition:

Our review of the financial information prepared by DCH revealed several errors. Some of the more significant items found were as follows:

- A proposed audit adjustment was made to correct an overstatement of federal accounts receivable in the amount of \$266,958,801, an understatement of other accounts receivable in the amount of \$133,479,401, and an overstatement in benefits payable in the amount of \$133,479,401 on the General Fund balance sheet related to an error in recording the Medicaid drug rebate.
- A proposed audit adjustment was made to correct a misclassification in the amount of \$24,531,893 between benefits payable and accounts payable as reported on the General Fund balance sheet due to an error in recording the Upper Payment Limit transactions.
- A misclassification in the amount of \$16,646,310 between due from other funds and accounts receivable as reported on the State Health Benefit Plan Statement of Net Position due to an error in reconciling other agencies within the state reporting entity per SAO's guidance.

- A proposed audit adjustment was made to correct a misclassification in the amount of \$78,224,434 between pooled investments with State Treasury and due to brokers for securities purchased as reported on the Combining Statement of Fiduciary Net Position of State Other Post-Employment Benefits (OPEB) Fund.
- A proposed audit adjustment was made to correct a misclassification in the amount of \$28,889,684 between pooled investments with State Treasury and due to brokers for securities purchased as reported on the Combining Statement of Fiduciary Net Position of School OPEB Fund.
- A proposed audit adjustment was made to correct an understatement of Covered payroll amount of the State OPEB Fund by \$176,915,049 which is a part of the Required Supplementary Information to the Financial Statements as reflected in the State's *Comprehensive Annual Financial Report* (CAFR).

Cause:

The DCH management did not have adequate internal controls to prevent or detect errors as they prepared information for SAO to include in the State's CAFR.

Effect:

Errors in the financial information prepared by DCH resulted in misstatements in the CAFR. Without effective controls over the reporting process, DCH cannot ensure the accuracy of the financial information reported and compliance with OCGA §50-5B-4. This increases the risk of misstatements in the State's Financial Statements, including the Notes and Required Supplementary Information to the Financial Statements as reflected in the CAFR.

Recommendation:

We recommend the DCH perform a detailed review of the current closing and reporting processes and continue to strengthen the processes by incorporating additional analyses and thorough reviews of information and continuing to provide training and guidance to staff that will aid in the prevention or timely detection and correction of errors in the year-end information used to prepare and issue the State's CAFR.

Views of Responsible Officials:

The Department (DCH) concurs with this finding and will continue to strengthen financial reporting controls.

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH (continued)

2019-006 Continue to Strengthen Application Risk Management Program

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Repeat of Prior Year Finding:	2018-006

The Department of Community Health (DCH) should continue to strengthen controls over its application risk management program.

Background Information: See Federal Award Finding 2019-024.

Criteria: See Federal Award Finding 2019-024.

Condition: See Federal Award Finding 2019-024.

Cause: See Federal Award Finding 2019-024.

Effect: See Federal Award Finding 2019-024.

Recommendation: See Federal Award Finding 2019-024.

Views of Responsible Officials: *The Department (DCH) concurs with this finding.*

STATE ENTITY: DEPARTMENT OF HUMAN SERVICES

2019-007 Strengthen Logical Access Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance

Strengthen logical access controls over the child support tracking and payment system.

Background Information:

The Department of Human Services (DHS) relies extensively on its child support tracking and payment system to collect and process child support payments for the State. Controls over this system are essential for the reliability and integrity of child support data and to protect data from manipulation, corruption, or loss.

The DHS is responsible for the effective operation of the child support tracking and payment system and related control activities, including segregation of duties.

Criteria:

The DHS is responsible for maintaining an effective information system, which includes information technology (IT) general controls that ensure logical access is assigned based on job roles and responsibilities along with enforcing segregation of incompatible duties. It also includes policies and procedures, which are important in establishing processes for managing and monitoring user access, changes made to user access roles, and defining segregation of duties rules that govern the assignment of access rights to specific roles.

Pursuant to the *Official Code of Georgia Annotated* (OCGA) §50-25-4(a)(20), the Georgia Technology Authority (GTA) is to establish technology security policies, standards, and services to be used by all agencies. The DHS is responsible for adhering to the technology security policies and standards which include:

- Access Control Policy (PS-08-009) Access to State information assets is to be controlled and monitored to protect from unauthorized access and disclosure.
- Authorization and Access Management Standard (SS-08-010) Requires periodic reviews of access control lists and logs to validate the appropriateness of user accounts and use of access privileges. Access control measures are critical to ensuring users only have access to the information for which they are authorized and need to perform their official duties.
- Separation of Production and Development Environments (SS-08-031) Production systems require a stable and controlled environment to operate properly. Separating development and test activities from and restricting developer access to operational environments reduces the risks of inadvertent or unauthorized modifications to the operational system that could compromise the system's integrity or availability.

Further, the Uniform Guidance (Title 2 *Code of Federal Regulations* (CFR) 200.303 Subpart D) prescribes requirements for recipients of federal awards to establish and maintain an effective system of internal control over federal awards that provides reasonable assurance that the federal awards are managed in compliance with federal statutes, regulations, and the terms and conditions of the federal awards.

Condition:

Our review of DHS' child support tracking and payment system IT general controls revealed deficiencies in logical access. Specifically, we found 17 out of 100 users with access to the database supporting the system had the ability to make changes to data within the database, which was inappropriate based on their job roles and responsibilities.

The details related to the deficiencies have been provided to DHS management and shall not be considered a public record in accordance with OCGA §50-6-9(b).

Cause:

The DHS has not established a formal user access review process for the database supporting the child support tracking and payment system to determine whether user access continues to be appropriate based on job responsibilities to provide proper segregation of duties.

Effect:

The deficiencies in logical access result in noncompliance with the GTA technology security policy and standards and Title 2 CFR 200.303 and increase the risk of unauthorized access to the child support information and possible manipulation or loss of data.

Recommendation:

The DHS should strengthen its logical access controls over the child support tracking and payment system by establishing and implementing procedures for reviewing user access to the database supporting the system to determine whether the access privileges assigned to users are appropriate based on their current job roles and responsibilities.

Views of Responsible Officials:

DHS concurs with this finding.

STATE ENTITY: DEPARTMENT OF HUMAN SERVICES (continued)

2019-008 Strengthen Logical Access Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance

Strengthen logical access controls over the Georgia Gateway system.

Background Information:

The Department of Human Services (DHS) operates the Georgia Gateway system, which is the State's integrated system for determining eligibility across multiple benefits programs. Controls over this system are essential for the reliability and integrity of eligibility data and to protect eligibility information from manipulation, corruption, or loss.

The DHS is responsible for the effective operation of the Georgia Gateway system and related control activities, including segregation of duties.

Criteria:

The DHS is responsible for maintaining an effective information system, which includes information technology (IT) general controls that ensure logical access is assigned based on job roles and responsibilities along with enforcing segregation of incompatible duties. It also includes policies and procedures, which are important in establishing processes for managing and monitoring user access, changes made to user access roles, and defining segregation of duties rules that govern the assignment of access rights to specific roles.

Pursuant to the *Official Code of Georgia Annotated* (OCGA) §50-25-4(a)(20), the Georgia Technology Authority (GTA) is to establish technology security policies, standards, and services to be used by all agencies. The DHS is responsible for adhering to the technology security policies and standards which include:

- Access Control Policy (PS-08-009) Access to State information assets is to be controlled and monitored to protect from unauthorized access and disclosure.
- Authorization and Access Management Standard (SS-08-010) Requires periodic reviews of access control lists and logs to validate the appropriateness of user accounts and use of access privileges. Access control measures are critical to ensuring users only have access to the information for which they are authorized and need to perform their official duties.
- Separation of Production and Development Environments (SS-08-031) Production systems require a stable and controlled environment to operate properly. Separating development and test activities from and restricting developer access to operational environments reduces the risks of inadvertent or unauthorized modifications to the operational system that could compromise the system's integrity or availability.

Further, the Uniform Guidance (Title 2 *Code of Federal Regulations* (CFR) 200.303 Subpart D) prescribes requirements for recipients of federal awards to establish and maintain an effective system of internal control over federal awards that provides reasonable assurance that the federal awards are managed in compliance with federal statutes, regulations, and the terms and conditions of the federal awards.

Condition:

Our review of DHS' Georgia Gateway system IT general controls revealed deficiencies in logical access. Specifically, we found five out of 109 users with access to the databases supporting the system had the ability to make changes to data within the databases, which was inappropriate based on their job roles and responsibilities.

In addition, we found certain general security settings for the databases supporting the system are not configured to provide reasonable assurance that the databases are not susceptible to potential exploitation based on known security vulnerabilities.

The details related to these deficiencies have been provided to DHS management and shall not be considered a public record in accordance with OCGA §50-6-9(b).

Cause:

The DHS has not established a formal user access review process for the databases supporting the Georgia Gateway system to determine whether user access continues to be appropriate based on job responsibilities to provide proper segregation of duties. In addition, DHS did not change certain default general security settings to address known security vulnerabilities for the databases supporting the system.

Effect:

The deficiencies in logical access result in noncompliance with the GTA technology security policy and standards and Title 2 CFR 200.303 and increase the risk of unauthorized access to the eligibility information and possible manipulation or loss of data.

Recommendation:

The DHS should strengthen its logical access controls over the Georgia Gateway system by:

- Establishing and implementing procedures for reviewing user access to the databases supporting the system to determine whether the access privileges assigned to users are appropriate based on their current job roles and responsibilities; and
- Configuring the general security settings for the databases supporting the system to reduce the risk of unauthorized access and inappropriate activity.

Views of Responsible Officials:

DHS concurs with this finding.

STATE ENTITY: DEPARTMENT OF REVENUE

2019-009 Strengthen Logical Access Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance

Strengthen controls over logical access within the tax return collection and processing information system.

Background Information:

The Department of Revenue (DOR) relies extensively on its tax return collection and processing information system to perform complex calculations and collect and process large volumes of tax returns, payments, and refunds for the State. Controls over the system are essential for the reliability and integrity of DOR's financial data and to protect financial information from manipulation, corruption, or loss.

The DOR is responsible for the effective operation of the tax return collection and processing information system and related control activities, including segregation of duties.

Criteria:

The DOR is responsible for maintaining an effective information system, which includes information technology (IT) general controls that ensure logical access is assigned based on job roles and responsibilities along with enforcing segregation of incompatible duties. It also includes policies and procedures, which are important in establishing processes for managing and monitoring user access, changes made to user access roles, and defining segregation of duties rules that govern the assignment of access rights to specific roles.

Pursuant to the *Official Code of Georgia Annotated* (OCGA) §50-25-4(a)(20), the Georgia Technology Authority (GTA) is to establish technology security policies, standards, and services to be used by all agencies. The DOR is responsible for adhering to the technology security policies and standards which include:

- Access Control Policy (PS-08-009) Access to State information assets is to be controlled and monitored to protect from unauthorized access and disclosure.
- Authorization and Access Management Standard (SS-08-010) Requires periodic reviews of access control lists and logs to validate the appropriateness of user accounts and use of access privileges. Access control measures are critical to ensuring users only have access to the information for which they are authorized and need to perform their official duties.
- Separation of Production and Development Environments (SS-08-031) Production systems require a stable and controlled environment to operate properly. Separating development and test activities from and restricting developer access to operational environments reduces the risks of inadvertent or unauthorized modifications to the operational system that could compromise the system's integrity or availability.

Condition:

Our review of DOR's tax return collection and processing information system's IT general controls revealed the following deficiencies in logical access:

- We found 54 users had inappropriate access to the server production environment that was not commensurate with their job responsibilities. This access allowed users to promote system changes to the production environment or delete critical files needed for the operation of the information system.
- We reviewed the 1,071 users with access to the information system. We found the access was inappropriate for 49 users based on their job roles and responsibilities.
- We found one out of nine users had inappropriate access to the database supporting the information system.

In addition, our review disclosed certain general security settings for the databases supporting the system were not configured to provide reasonable assurance that the databases are not susceptible to potential exploitation based on known security vulnerabilities.

The details related to these deficiencies have been provided to DOR management and shall not be considered a public record in accordance with the OCGA §50-6-9(b).

Cause:

The DOR has not established a formal user access review process to determine whether user access continues to be appropriate based on job responsibilities to provide proper segregation of duties. In addition, DOR did not change certain default general security settings to address known security vulnerabilities for the databases supporting the system.

Effect:

The deficiencies in logical access result in noncompliance with the GTA technology security policies and standards and increase the risk of unauthorized access to the information system data and possible manipulation or loss of data.

Recommendation:

The DOR should strengthen its logical access controls by:

- Addressing the inappropriate access identified within the information system;
- Ensuring proper segregation of duties is maintained in the change management production environment;
- Establishing and implementing procedures for reviewing user access to determine whether the roles assigned to users of the system are appropriate based on their current job roles and responsibilities; and
- Configuring the general security settings for the databases supporting the financial application to reduce the risk of unauthorized access and inappropriate activity.

Views of Responsible Officials:

As officials of the Georgia Department of Revenue, we concur with your findings and have taken steps to remediate the issues found and mitigate any future risks to our data and/or systems.

STATE ENTITY: GEORGIA WORLD CONGRESS CENTER AUTHORITY

2019-010 Continue to Strengthen Logical Access Controls

Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Repeat of Prior Year Finding:	2018-012, 2017-018, 2016-024

Continue to strengthen controls over logical access within the payroll application.

Background Information:

The Georgia World Congress Center Authority (GWCCA) implemented a Human Resource Information System (HRIS) in May 2015 to process its human resource (HR) and payroll transactions. During our follow up to the prior year findings, we noted that certain improvements to logical access were made during fiscal year 2019. The GWCCA removed the inappropriate access to the system administration function within the payroll application for two users identified in the prior year finding. The GWCCA also designed formal client user and role permission review processes for the payroll application.

Although considerable progress has been made, GWCCA's user access review processes were not fully designed and implemented within the audit period under review.

Criteria:

The GWCCA is responsible for designing and operating an effective information system and related control activities. In addition, GWCCA is responsible for managing and monitoring an effective information system to ensure that HR and payroll transactions are authorized, complete, valid, and accurately recorded and reported.

An effective information system related to the HRIS includes information technology (IT) general controls that address logical access to ensure access is assigned based on job roles and responsibilities. Sound logical access controls also ensure segregation of incompatible duties is enforced. Such controls contribute to the design, implementation, and operating effectiveness of GWCCA's information systems and related control activities and are critical to reduce the risk of error, misuse, or fraud.

Furthermore, all organizations of the State government are required to conform to and comply with the technology security standards established by the Georgia Technology Authority (Official Code of Georgia Annotated (OCGA) §50-25-4(a)(20)), including the Authorization and Access Management standard (SS-08-010), which requires periodic reviews of access control lists and logs to validate the appropriateness of user accounts and use of access privileges. Access control measures are critical to ensuring users only have access to the information for which they are authorized and need to perform their official duties.

An effective information system also includes policies and procedures, which are important in establishing processes for managing and monitoring user access, changes made to user access roles, and defining segregation of duties rules.

Condition:

Our review of GWCCA's HRIS general controls revealed prior year issues that were not fully resolved related to logical access. Specifically, five employees continue to have inappropriate access to the system administration function within the payroll application. This is due to the ineffective design of advanced user permissions within the application.

The design of advanced user permissions allows the ability to provision new users or modify user access (add/modify/delete) to the application, in addition to the other permissions needed to perform certain job responsibilities where the user's other assigned application role does not allow the access. The HRIS system does not allow changing the configuration of the advanced user permissions unless modification to the application code is made by the vendor. The GWCCA designed user access and role permission review processes to mitigate this issue but was not able to fully implement them during the year.

In addition, GWCCA did not complete the design of its access reviews for base level users and the implementation of its client user access review processes for all departments during the year. These processes are necessary to determine whether user access continues to be appropriate based on job responsibilities and privileges assigned to application roles continue to provide proper segregation of duties.

Cause:

The GWCCA did not complete the design and implementation of its user access and role permission review processes during fiscal year 2019.

Effect:

The weaknesses in IT general controls related to logical access exposes GWCCA to unnecessary risk of fraud, noncompliance with OCGA §50-25-4(a)(20) and could impact the integrity and reliability of data. These weaknesses also increase the need for GWCCA to ensure mitigating controls are operating effectively to reduce the chance of errors that could significantly affect the financial statements.

Recommendation:

We recommend GWCCA continue to strengthen logical access controls by completing the design and implementation of its user access and role permission review processes within the HRIS application. Having a good system of internal controls is essential to ensure the reliability and integrity of HR and payroll data.

Views of Responsible Officials:

FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

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¹*The entity number represents the control number that was assigned to each State entity.*

FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

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2019-030 Improve Controls over Cost of Attendance Budgets

2019-031 Improve Controls over the Return of Title IV Funds Process

¹*The entity number represents the control number that was assigned to each State entity.*

FEDERAL AGENCY: U.S. DEPARTMENT OF EDUCATION

STATE ENTITY: CLAYTON STATE UNIVERSITY

2019-011 Improve Controls over the Return of Title IV Funds Process

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplement Educational Opportunity Grants
	84.033 – Federal Work-Study Program
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	84.268 – Federal Direct Student Loans Program
Federal Award Number:	P007A180982 (Year: 2019), P033A180982(Year: 2019),
	P063P183136 (Year: 2019), P268K193136 (Year: 2019)
Questioned Costs:	\$1,704.97

The Institution did not properly perform the refund process to ensure that unearned Title IV funds were returned in a timely manner.

Criteria:

Provisions included in 34 CFR 668.22 provide requirements over the treatment of Title IV funds when a student withdraws. The Institution is required to determine the amount of Title IV funds that the student earned as of the student's withdrawal date when a recipient of Title IV funds withdraws from an institution during a payment period or period of enrollment in which the recipient began attendance. A refund must be returned to Title IV programs when the total amount of the Title IV grant or loan assistance, or both, that the student earned is less than the amount of the Title IV grant or loan assistance that was disbursed to the student as of the withdrawal date.

Condition:

A sample of 25 students who received student financial assistance (SFA) for the Fall 2018 and Spring 2019 semesters and withdrew from the Institution was randomly selected for testing using a non-statistical sampling method. The students' Return of Title IV calculations were reviewed to ensure that the refunds were calculated and returned in the correct amount to the proper funding agency and/or student in a timely manner. The following deficiencies were noted:

- The refund calculation for ten students who withdrew during the Fall 2018 semester and one student who withdrew during the Spring 2019 semester was calculated incorrectly due to the use of improper scheduled break days and withdrawal dates. One student was requested to return \$1,704.97 less than the required amount to various SFA programs, and ten students were requested to return \$806.52 more than the required amount to various SFA programs.
- The proration between the school and student portion of the refund was incorrect for eight students who withdrew during the Fall 2018 semester and one student who withdrew during the Spring 2019 semester.
- Funds were not returned to the appropriate grantor programs within the required time frame for one of the withdrawn students tested.

Questioned Costs:

Questioned costs of \$1,704.97, with likely questioned costs of \$49,335.54, were identified for refunds calculated incorrectly. The following CFDA numbers are affected by the known and likely questioned costs: 84.063 and 84.268.

Cause:

In discussing these deficiencies with management, they stated that the variances associated with the Fall 2018 Return of Title IV calculations were related to an omission and lack of administrative oversight and the variance associated with the Spring 2019 Return of Title IV calculation was the result of a data entry error.

Effect:

This deficiency may expose the Institution to unnecessary financial strains and shortages. The school's portion of the refunds that were not calculated correctly must be returned to the U.S. Department of Education. Though the Institution may attempt to collect the funds from individual students affected by the error, these collection efforts could be unsuccessful as the students may no longer attend the Institution and/or fail to repay the funds. Additionally, the Institution was not in compliance with Federal regulations concerning performing Return of Title IV calculations for withdrawn students.

Recommendation:

The Institution should revise and implement procedures to ensure that student financial aid refunds are properly calculated and that unearned funds are correctly returned to the appropriate accounts in a timely manner in accordance with the Higher Education Amendments 1998, Public Law 105-244. The Institution should also contact the U.S. Department of Education regarding resolution of the finding.

Views of Responsible Officials:

STATE ENTITY: FORT VALLEY STATE UNIVERSITY

2019-012 Improve Controls over the Verification Process

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplement Educational Opportunity Grant
	Program
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
	84.268 – Federal Direct Student Loans Program
	84.379 – Teacher Education Assistance for College and Higher
	Education (TEACH) Grant Program
Federal Award Number:	P007A180999 (Year: 2019), P033A180999 (Year: 2019),
	P063P180082 (Year: 2019), P268K190082 (Year: 2019),
	P379T190082 (Year: 2019)
Questioned Costs:	\$11,089.00

The Institution's Student Financial Assistance Office did not meet student verification requirements.

Criteria:

Provisions included in 34 CFR 668 provide the compliance requirements for the verification process that the Institution should follow for students who receive financial aid and identify what documentation is acceptable.

Condition:

A sample of 40 students who were selected for verification by the U.S. Department of Education was randomly selected for testing using a non-statistical sampling method. Verification records were reviewed to ensure that the Institution obtained acceptable verification documentation, matched documentation obtained to the student aid application, submitted appropriate corrections when necessary, and reported the correct verification status to the Common Origination and Disbursement (COD) system. Testing revealed that verification procedures were not completed for one student.

Questioned Cost:

Questioned costs of \$11,089.00, with likely questioned cost of \$270,508.67, were identified for the student for whom verification procedures were not completed appropriately but received student financial assistance. The following CFDA numbers were affected by the known and likely questioned costs: 84.007, 84.063, and 84.268.

Cause:

In discussing these deficiencies with management, they stated that the student's verification documentation was misplaced or lost.

Effect:

This deficiency may expose the Institution to unnecessary financial strains and shortages. The funds disbursed to students for whom necessary verification procedures have not been completed must be returned to the U.S. Department of Education. Though the Institution may attempt to collect the funds from individual students affected by the error, these collection efforts could be unsuccessful as the students may no longer attend the Institution and/or fail to repay the funds. Additionally, the Institution was not in compliance with Federal regulations concerning performing verification procedures and awarding of SFA funds to students.

Recommendation:

The Institution should develop and implement procedures to ensure that verification requirements are met and appropriate documentation is maintained on file. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

STATE ENTITY: GEORGIA SOUTHWESTERN STATE UNIVERSITY

2019-013 Improve Controls over Cost of Attendance Budgets

Compliance Requirement:	Eligibility
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplemental Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
	84.268 – Federal Direct Student Loans Program
Federal Award Number:	P007A181005 (Year: 2019), P033A181005 (Year: 2019),
	P063P181307 (Year: 2019), P268K191307 (Year: 2019)
Questioned Cost:	None Identified

The Institution's Student Financial Aid Office did not appropriately document and award students based upon final amended Cost of Attendance (COA) budgets.

Criteria:

Provisions included in 34 CFR 668 provide general provisions for administering Student Financial Aid (SFA) programs. In addition, Section 472 of the Higher Education Act of 1965 specifies the components that can be included in COA budgets.

Condition:

A review of the Institution's COA budgets was performed to determine if the budgets were reasonable, included allowable components, and were calculated based upon appropriate supporting documentation. The following deficiencies were noted:

- Institution personnel could not provide supporting documentation or explanations for the Childcare component of one COA budget.
- The Tuition component reflected in one COA budget did not agree to the supporting documentation provided.
- Two COA budgets were increased after the Fall 2018 semester had begun. Students who submitted a Free Application for Federal Student Aid (FAFSA) after the date of the adjustment were awarded based upon the new COA budget amount. However, students who submitted a FAFSA before the date of the adjustment were awarded based upon the original, lower COA budget, and a reevaluation of their award was not performed to ensure that the students received the appropriate amount of aid and types of aid.

Cause:

In discussing these deficiencies with management, they stated that a change in administrative leadership prompted a review of the Institution's COA budgets and the new administration requested that the COA budgets be adjusted after the award year had begun.

Effect:

The Institution was not in compliance with Federal regulations concerning the COA budgets used as the basis for determining SFA eligibility. The COA is the cornerstone of establishing a student's financial need and sets a limit on the total aid a student may receive. If the estimated costs used for components in the COA budget are unreasonable and do not represent average costs for students at the Institution, a majority of the student population could have been over or under awarded.

Recommendation:

The Institution should reevaluate the components used in the COA budgets and document that these costs represent average costs for students enrolled at the Institution. The Institution should modify its procedures to ensure that any future changes to the COA budgets are reasonable and based on documented average costs for students. In addition, the Institution should ensure that COA budgets are finalized and appropriately supported prior to awarding any students. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

STATE ENTITY: GEORGIA SOUTHWESTERN STATE UNIVERSITY (continued)

2019-014 Improve Controls over Unofficial Withdrawals

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplemental Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
	84.268 – Federal Direct Student Loans Program
Federal Award Number:	P007A181005 (Year: 2019), P033A181005 (Year: 2019),
	P063P181307 (Year: 2019), P268K191307 (Year: 2019)
Questioned Costs:	\$7,125.20

Unearned Title IV funds were not identified and returned for students who unofficially withdrew from the Institution.

Criteria:

The provisions in 34 CFR 668.22 provides requirements over the treatment of Title IV funds when a student withdraws. The Institution is required to determine the amount of Title IV grant that the student earned as of the student's withdrawal date when a recipient of a Title IV grant withdraws from an institution during a payment period or period of enrollment in which the recipient began attendance. A refund must be returned to Title IV programs when the total amount of Title IV grant or loan assistance, or both, that the student earned is less than the amount of the Title IV grant or loan assistance that was disbursed to the student as of the withdrawal date.

Condition:

Eight students who received Federal financial assistance for the Fall 2018 and Spring 2019 semesters and withdrew from the Institution but for whom no Return of Title IV calculation was performed were selected to determine if a refund should have been calculated. Our examination revealed that refund calculations were not performed appropriately for one of these students who unofficially withdrew during the Spring 2019 semester.

Questioned Costs:

Questioned costs of \$7,125.20, with likely questioned costs of \$43,851.26, were identified for omitted Return of Title IV calculations. The following CFDA numbers are affected by the known and likely questioned costs: 84.063 and 84.268.

Cause:

In discussing these deficiencies with management, they stated that the unofficial withdrawal was identified, and it was determined that a Return of Title IV calculation was necessary for the student. However, the documentation was misfiled, and the calculation was never entered into the student information system.

Effect:

Unearned Title IV funds were not returned to the U.S Department of Education appropriately. Improperly identifying withdrawn students, not performing Return of Title IV calculations, and/or not returning unearned Title IV funds to the U.S Department of Education in a timely manner may result in adverse actions and impact the Institution's participation in Title IV programs.

Recommendation:

The Institution should implement policies and procedures to ensure that students who unofficially withdrew and received Title IV funds are identified and the required refund calculation is performed. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

STATE ENTITY: ALBANY TECHNICAL COLLEGE

2019-015 <u>Strengthen Controls over Enrollment Reporting</u>

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplemental Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
	84.268 – Federal Direct Student Loans
Federal Award Number:	P007A180951 (Year: 2019), P033A180951 (Year: 2019),
	P063P182748 (Year: 2019), P268K192748 (Year: 2019)
Questioned Costs:	None Identified

Changes in student enrollment statuses were not reported to required organizations in a timely and accurate manner.

Criteria:

Regarding the enrollment reporting process, provisions included in 34 CFR 685.309(b) state in part "(1) Upon receipt of an enrollment report from the Secretary, a school must update all information included in the report and return the report to the Secretary – (i) In the manner and format prescribed by the Secretary; and (ii) Within the timeframe prescribed by the Secretary. (2) Unless it expects to submit its next updated enrollment report to the Secretary within the next 60 days, a school must notify the Secretary within 30 days after the date the school discovers that – (i) … the student has ceased to be enrolled on at least a half-time basis for the period."

Condition:

A sample of 40 students who withdrew from the Institution during the Fall 2018 and Spring 2019 semesters and for whom a Return of Title IV funds calculation was completed was randomly selected for testing using a non-statistical sampling method. The National Student Loan Data System (NSLDS) Enrollment Detail was reviewed for each student to ensure that the correct enrollment status was reflected, and the enrollment status was updated within the appropriate timeframe. In six instances, the student's withdrawn enrollment status was never reported to NSLDS. Additionally, in 14 instances, the student's withdrawn enrollment status was reported to NSLDS in an untimely manner.

Cause:

In discussing these deficiencies with management, they stated that for students who had failing or incomplete grades reported but had ceased attendance, the overall enrollment status was being updated; however, the enrollment status for each course was not being updated. This error caused the omissions and untimely updates in NSLDS enrollment reporting performed.

Effect:

If enrollment statuses are not submitted appropriately to NSLDS by the Institution, loan interest subsidies may be negatively affected, deferments of Federal Direct Loans may be continued in error, loan repayment dates could be recorded incorrectly, and the compilation of data associated with other Title IV aid programs can be adversely affected. Additionally, the Institution was not in compliance with Federal regulations concerning enrollment reporting requirements.

Recommendation:

The Institution should implement policies and procedures to ensure that all changes in student enrollment statuses are reported in a timely manner. Additionally, management should develop and implement a monitoring process to ensure that controls are operating properly.

Views of Responsible Officials:

STATE ENTITY: GEORGIA PIEDMONT TECHNICAL COLLEGE

2019-016 Strengthen Controls over the Awarding Process

Compliance Requirement: Internal Control Impact:	Eligibility Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	 84.007 – Federal Supplemental Educational Opportunity Grants 84.033 – Federal Work-Study Program 84.063 – Federal Pell Grant Program
Federal Award Number:	P007A180991 (Year: 2019), P033A180991 (Year: 2019), P063P182762 (Year: 2019)
Questioned Costs: Repeat of Prior Year Finding:	\$2,286.00 2017-032

The Institution's Student Financial Assistance Office improperly determined the Student Financial Assistance award amounts for eligible students.

Criteria:

Provisions included in 34 CFR 668 provide general provisions for administering Student Financial Assistance (SFA) programs and 34 CFR 675, 676, and 685 provide eligibility and other related program requirements that are specific to the Federal Work-Study Program, Federal Supplemental Educational Opportunity Grant (FSEOG) Program, and Federal Pell Grant Program, respectively.

Specifically, 34 CFR 668.32 states in part that "a student is eligible to receive Title IV, HEA program assistance if the student... (f) maintains satisfactory academic progress in his or her course of study according to the institution's published standards of satisfactory academic progress."

Condition:

A sample of 60 students who received student financial assistance funds was randomly selected for testing using a non-statistical sampling method. Student financial assistance files were reviewed to ensure that financial assistance was properly calculated and disbursed to eligible students. The following deficiency was noted:

• One student in the sample was not in compliance with the Institution's published satisfactory academic progress (SAP) policies. This student should have been placed on financial aid suspension as they did not meet the qualitative requirement of SAP, which resulted in SFA over disbursements totaling \$2,286.00.

Questioned Cost:

Questioned costs of \$2,286.00, with likely questioned costs of \$88,428.80, were identified for the student who received student financial assistance in excess of their eligibility. The following CFDA number was affected by the known and questioned costs: 84.063.

Cause:

In discussing this deficiency with management, they stated the SAP error occurred as a result of the significant amount of turnover within the Financial Aid Office. SAP is calculated over the course of each student's academic career, and errors in the SAP calculation from previous award years may carry forward to the current award year.

Effect:

This deficiency may expose the Institution to unnecessary financial strains and shortages. The funds disbursed to students who were not meeting SAP standards and should have been on financial aid suspension must be returned to the U.S. Department of Education. Though the Institution may attempt to collect the funds from individual students affected by the error, these collection efforts could be unsuccessful as they students may no longer attend the Institution and/or fail to repay the funds. Additionally, the Institution was not in compliance with Federal regulations concerning the awarding of SFA to students.

Recommendation:

The Institution should review its processes and procedures for determining each student's financial aid eligibility, including the current configurations within the student information system. Where vulnerable the Institution should develop and/or modify its policies and procedures to ensure that correct amounts will be awarded to students in conformity with financial need requirements. Additionally, the Institution should develop and implement a monitoring process to ensure that controls are properly implemented. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

STATE ENTITY: GEORGIA PIEDMONT TECHNICAL COLLEGE (continued)

2019-017 Improve Controls over Federal Work-Study Earmarking Requirements

Compliance Requirement:	Matching, Level of Effort, Earmarking
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.033 – Federal Work-Study Program
Federal Award Number:	P033A180991 (Year: 2019)
Questioned Costs:	\$11,710.71

The Institution did not meet earmarking requirements associated with the Federal Work-Study (FWS) Program.

Criteria:

Provisions included in 34 CFR 675.18 provide requirements for the use of the FWS Program funds. Specifically, 34 CFR 675.18(g) states in part that "for the 2000-2001 award year and subsequent award years, an institution must use at least seven percent of the sum of its initial and supplemental FWS allocations for an award year to compensate students employed in community service activities."

Condition:

Our review of expenditures related to the FWS Program revealed that the proper amount was not expended for community service activities. The FWS amount authorized for the Institution was \$183,978.00. Seven percent of the authorization is \$12,878.46. The Institution expended \$1,167.75 for community service activities. Therefore, the Institution should have expended an additional \$11,710.71 for community services activities.

Questioned Cost:

Questioned costs of \$11,710.71 were identified for the additional amounts that should have been expended for community service activities.

Cause:

In discussing this deficiency with management, they stated that there was a lack of monitoring over the community service expenditures as a result of the significant amount of turnover within the Financial Aid Office.

Effect:

This deficiency may expose the Institution to unnecessary financial strains and shortages. Funds that were to be spent on community service activities and were paid to students working in activities not associated with community service must be returned to the U.S. Department of Education. Additionally, the Institution was not in compliance with Federal regulations concerning the use of FWS funds.

Recommendation:

The Institution should strengthen procedures to ensure that the proper amount of FWS Program funds is expended for community service activities. Additionally, the Institution should develop and implement a monitoring process to ensure that controls are operating properly. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

STATE ENTITY: GEORGIA PIEDMONT TECHNICAL COLLEGE (continued)

2019-018 Improve Controls over Special Reporting

Compliance Requirement:	Reporting
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplemental Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
Federal Award Number:	P007A180991 (Year: 2019), P033A180991 (Year: 2019),
	P063P182762 (Year: 2019)
Questioned Costs:	None Identified

Amounts reported on the Fiscal Operations and Application to Participate (FISAP) report were not properly supported by or reconciled to appropriate documentation.

Criteria:

Provisions included in 34 CFR 675.19(b)(3) state, "Each year an institution shall submit a Fiscal Operations Report plus other information the Secretary requires. The institution shall insure that the information reported is accurate and shall submit it on the form and at the time specified by the Secretary." Additionally, provisions included in 34 CFR 668.24(e)(1) state in part that "an institution shall keep – (i) The Fiscal Operations Report and Application to Participate in the Federal Perkins Loan, FSEOG, and FWS Programs (FISAP), and any records necessary to support the data contained in the FISAP, including "income grid information," for three years after the end of the award year in which the FISAP is submitted."

Condition:

All amounts reflected on the Award Year July 1, 2017 through June 30, 2018 FISAP report were not accurately completed and supported by the accounting records or other appropriate documentation. Amounts reported by the Institution within the following categories did not agree to or could not be supported by institutional records and reports: Information on Enrollment, Tuition and Fees for Undergraduate Students, Federal Pell Grants, State Grants and Scholarships, Federal Supplemental Educational Opportunity Grant (FSEOG) Program, Federal Work-Study (FWS) Program, and Distribution of Program Recipients and Expenditures by Type of Student.

Cause:

In discussing this deficiency with management, they stated that the errors occurred as a result of the significant amount of turnover within the Financial Aid Office and the numerous FISAP revisions required.

Effect:

If incorrect amounts are reported on the FISAP report for the FSEOG and FWS programs, authorizations in subsequent award years may be reduced and result in less funding received by the Institution. Furthermore, students may not have access to an adequate level of student financial assistance. Additionally, the Institution was not in compliance with Federal regulations concerning special reporting requirements.

Recommendation:

The Institution should implement policies and procedures to ensure that all reports submitted to the U.S. Department of Education are accurately completed and supported by the accounting records. Additionally, management should develop and implement a monitoring process to ensure that controls are operating properly. The Institution should also contact the U.S. Department of Education regarding the resolution of this finding.

Views of Responsible Officials:

STATE ENTITY: GEORGIA PIEDMONT TECHNICAL COLLEGE (continued)

2019-019 Strengthen Controls over Enrollment Reporting

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplemental Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
Federal Award Number:	P007A180991 (Year: 2019), P033A180991 (Year: 2019),
	P063P182762 (Year: 2019)
Questioned Costs:	None Identified

Changes in student enrollment statuses were not reported to required organizations in a timely and accurate manner.

Criteria:

Regarding the enrollment reporting process, provisions included in 34 CFR 685.309(b) state in part "(1) Upon receipt of an enrollment report from the Secretary, a school must update all information included in the report and return the report to the Secretary – (i) In the manner and format prescribed by the Secretary; and (ii) Within the timeframe prescribed by the Secretary. (2) Unless it expects to submit its next updated enrollment report to the Secretary within the next 60 days, a school must notify the Secretary within 30 days after the date the school discovers that – (i) … the student has ceased to be enrolled on at least a half-time basis for the period." Per the National Student Loan Data System (NSLDS) Enrollment Reporting Guide issued by the U.S. Department of Education, students who have received Federal Pell Grant funds will be included on the NSLDS roster file received by each institution and are subject to the same enrollment reporting requirements as those students who have received a loan under the William D. Ford Federal Direct Loan Program.

Condition:

A sample of 60 students who withdrew from the Institution during the Fall 2018 and Spring 2019 semesters and for whom a Return of Title IV funds calculation was completed was randomly selected for testing using a non-statistical sampling method. The NSLDS Enrollment Detail was reviewed for each student to ensure that the correct enrollment status was reflected, and the enrollment status was updated within the appropriate timeframe. In 37 instances, the student's withdrawn enrollment status was never reported to NSLDS.

Cause:

In discussing this deficiency with management, they stated that the errors occurred as a result of miscommunication between the Financial Aid Office and the Registrar's Office.

Effect:

If enrollment statuses are not submitted appropriately to NSLDS by the Institution, loan interest subsidies may be negatively affected, deferments of Federal Direct Loans may be continued in error, loan repayment dates could be recorded incorrectly, and the compilation of data associated with other Title IV aid programs can be adversely affected. Additionally, the Institution was not in compliance with Federal regulations concerning enrollment reporting requirements.

Recommendation:

The Institution should implement policies and procedures to ensure that all changes in student enrollment statuses are reported in a timely manner. Additionally, management should develop and implement a monitoring process to ensure that controls are operating properly.

Views of Responsible Officials:

STATE ENTITY: WIREGRASS GEORGIA TECHNICAL COLLEGE

2019-020 Improve Controls over Unofficial Withdrawals

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplemental Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
Federal Award Number:	P007A181054 (Year: 2019), P033A181054 (Year: 2019),
	P063P182614 (Year: 2019)
Questioned Costs:	\$4,808.10

Unearned Title IV funds were not identified and returned for students who unofficially withdrew from the Institution.

Criteria:

The provisions in 34 CFR 668.22 provides requirements over the treatment of Title IV funds when a student withdraws. The Institution is required to determine the amount of Title IV grant that the student earned as of the student's withdrawal date when a recipient of a Title IV grant withdraws from an institution during a payment period or period of enrollment in which the recipient began attendance. A refund must be returned to Title IV programs when the total amount of Title IV grant or loan assistance, or both, that the student earned is less than the amount of the Title IV grant or loan assistance that was disbursed to the student as of the withdrawal date.

Condition:

Thirty students who received Federal financial assistance for the Fall 2018 and Spring 2019 semesters and withdrew from the Institution but for whom no Return of Title IV calculation was performed were selected to determine if a refund should have been calculated. Our examination revealed that refund calculations were not performed appropriately for five of these students who unofficially withdrew during the Fall 2018 and Spring 2019 semesters.

Questioned Costs:

Questioned costs of \$4,808.10, with likely questioned costs of \$30,358.62, were identified for omitted Return of Title IV calculations. The following CFDA number is affected by the known and likely questioned costs: 84.063.

Cause:

In discussing these deficiencies with management, they stated that when faculty members did not respond in a timely manner to the failing grade report transmitted by the Financial Aid Office at the end of each semester, the Financial Aid Office considered these students to have earned their final failing grade(s). However, many of these students did not have earn the failing grade(s) and had unofficially withdrawn from the Institution.

Effect:

Unearned Title IV funds were not returned to the U.S Department of Education appropriately. Improperly identifying withdrawn students, not performing Return of Title IV calculations, and/or not returning unearned Title IV funds to the U.S Department of Education in a timely manner may result in adverse actions and impact the Institution's participation in Title IV programs.

Recommendation:

The Institution should implement policies and procedures to ensure that students who unofficially withdrew and received Title IV funds are identified and the required refund calculation is performed. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH

2019-021 Improve Controls over Medicaid Capitation Payments

Compliance Requirement:	Activities Allowed or Unallowed
	Allowable Costs/Cost Principles
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	1805GA5MAP (Year: 2018), 1905GA5MAP (Year: 2019)
Questioned Costs:	\$18,485

The Department of Community Health (DCH) made improper duplicate payments for Medicaid managed-care recipients.

Background Information:

The DCH administers the State's Medicaid program that provides payments for medical assistance to lowincome individuals. Medicaid is Georgia's largest public assistance program with expenditures totaling \$10.8 billion for fiscal year 2019. The program accounts for more than one-third of the State's total federal award expenditures.

The DCH, the State's Medicaid agency, administers Georgia's managed-care program. The program is a partnership between DCH and private care management organizations (CMOs). The State pays a monthly fixed rate per person (capitation rate) without regard to the actual medical services utilized to cover the costs of Medicaid claims. Managed care is a prepaid, comprehensive system of medical and health care delivery, including preventive, primary, specialty and ancillary health care services. The program is designed to reduce the cost of providing health benefits, improve the quality of care and deliver health care to clients. Capitation payments for the year totaled \$4.5 billion (federal and state).

Criteria:

As a recipient of federal awards, the DCH is required to establish and maintain effective internal controls over federal awards that provides reasonable assurance of managing the federal awards in compliance with federal statutes, regulations, and the terms and conditions of the federal awards pursuant to Title 2 CFR 200.303, Subpart D of the Uniform Guidance.

Title 2 CFR 200.53, Subpart A of the Uniform Guidance, defines *improper payment* as any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements. An *improper payment* includes any payment to an ineligible party, any payment for an ineligible good or service, any duplicate payment, any payment for a good or service not received (except for such payments where authorized by law), any payment that does not account for credit for applicable discounts, and any payment where insufficient or lack of documentation prevents a reviewer from discerning whether a payment was proper.

Condition:

Our audit of the Medicaid program revealed deficiencies in the capitation payments paid to CMOs for Manage-Care members. Using computer assisted auditing techniques we identified a population of 903 potential duplicate payments for Manage-Care members that appear to have more than one Medicaid identification (ID) number. From this population, we tested a random sample of 60 payments. We found that DCH made duplicate payments to CMOs for 25 of 60 Manage-Care members.

Questioned Costs:

Known questioned costs of \$18,485 was identified for benefit payments to the 25 Manage-Care members whose capitation payments to CMOs were duplicate payments. The Federal and State share of known questioned cost is approximately \$12,565 and \$5,921, respectively.

Using the total population amount of \$680,169, we project the likely questioned cost to be approximately \$66,001. The Federal and State share of likely questioned cost is approximately \$44,850 and \$21,151, respectively. The projected likely questioned cost is based on the testing of the sample of 60 Manage-Care members.

Cause:

The duplicate payments are made when a member has more than one Medicaid ID number. A member can end up with more than one Medicaid ID number for various reasons, such as a variation in the information entered for the member. The DCH has procedures in place for identifying and reviewing members with more than one Medicaid ID number; however, the operation of those procedures did not ensure that the duplicate capitation payments were recovered from CMOs.

Effect:

The duplicate capitation payments resulted in noncompliance with federal regulations and questioned costs. In addition, grant provisions allow the grantor to penalize DCH for noncompliance by suspending or terminating the award or withholding future awards. This may prevent eligible individuals from receiving benefits.

Recommendation:

The DCH management should strengthen internal controls over capitation payments to CMOs for Manage-Care members to ensure duplicate capitation payments are not made to CMOs for Managed-Care members. Specifically, the DCH should consider improving procedures for identifying members with multiple Medicaid ID numbers and training staff to research further when exceptions occur. Additionally, we recommend the DCH consult with the grantor to discuss whether the questioned costs identified in the audit should be repaid.

Views of Responsible Officials:

The Department (DCH) concurs with this finding.

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (continued)

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH (continued)

2019-022 Improve Controls over Medicaid Payments

Compliance Requirement:	Activities Allowed or Unallowed
	Allowable Costs/Cost Principles
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	1805GA5MAP (Year: 2018), 1905GA5MAP (Year: 2019)
Questioned Costs:	\$74,966

The Department of Community Health (DCH) made improper payments to Medicaid providers after beneficiaries' deaths.

Background Information:

The DCH administers the State's Medicaid program that provides payments for medical assistance to lowincome individuals. Medicaid is Georgia's largest public assistance program with expenditures of federal and state funds totaling \$10.8 billion for fiscal year 2019. The program accounts for more than one-third of the State's total federal award expenditures.

The Social Security Administration (SSA) maintains the national record of death information called the Death Master File (DMF). The DMF is provided to States via a data exchange agreement. The DMF interfaces with the Georgia Medicaid Management Information System (GAMMIS) to update the beneficiary profiles. Additionally, the State Office of Vital Records submits an electronic file updated with the date of death that also interfaces with GAMMIS. The DCH has a process in place to identify when a beneficiary's profile is updated with the date of death and to reverse payments to managed-care organizations for claims made after the beneficiary's death.

Criteria:

As a recipient of federal awards, DCH is required to establish and maintain effective internal control over federal awards that provides reasonable assurance of managing the federal awards in compliance with federal statutes, regulations, and the terms and conditions of the federal awards pursuant to Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), Section 200.303 – Internal Controls.

Additionally, the Uniform Guidance, Section 200.53 - Improper payments states: *Improper payment* means any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements. An *improper payment* includes any payment to an ineligible party, any payment for an ineligible good or service, any duplicate payment, any payment for a good or service not received (except for such payments where authorized by law), any payment that does not account for credit for applicable discounts, and any payment where insufficient or lack of documentation prevents a reviewer from discerning whether a payment was proper.

Pursuant to Title 42 CFR Part 433, *State Fiscal Administration, Subpart F – Refunding of Federal Share of Medicaid Overpayments to Providers* Section 433.304, an overpayment means the amount paid by a Medicaid agency to a provider which is in excess of the amount that is allowable for services furnished. Because medically necessary services cannot be provided after a beneficiaries' death, no medical services are allowable after a beneficiaries' death and any payment to a provider would result in an overpayment.

Condition:

Our audit of the Medicaid program revealed improper payments to Medicaid providers after beneficiaries' deaths. Using computer-assisted auditing techniques we compared the DMF to claims made after the date of death during the fiscal year. We identified a total of 1,295 claims that were paid to providers for 426 members after the date of death. We used a nonstatistical sampling method to select a random sample of 60 claims from this population and tested the sample along with 5 individually significant items to determine if the claims were for services provided before the date of death. We found that DCH made payments to providers for 50 Medicaid claims with service dates after the date of death resulting in overpayments.

Questioned Costs:

Known questioned costs of \$74,966 was identified for benefit payments to providers for the 50 Medicaid claims with service dates after beneficiaries' deaths. The Federal and State share of known questioned costs is approximately \$50,837 and \$24,129, respectively. Using the total population amount of \$121,313, we project the likely questioned costs to be approximately \$112,835. The Federal and State share of likely questioned costs is approximately \$76,462 and \$36,373, respectively. The projected likely questioned cost is based on the testing of the sample of 60 Medicaid benefit claims.

Cause:

Although DCH has a process in place for identifying when GAMMIS is updated for a beneficiary's date of death and adjusting or voiding payments to managed-care organizations, the process does not address fee-for-service payments to providers for all claims made after the date of death to ensure that all overpayments were recovered.

Effect:

The improper Medicaid payments resulted in noncompliance with federal regulations and questioned costs. Weaknesses in controls over Medicaid payments also increase the risk of improper payments due to error or fraud that may need further investigation. In addition, grant provisions allow the grantor to penalize DCH for noncompliance by suspending or terminating the award or withholding future awards.

Recommendation:

The DCH management should strengthen internal controls over Medicaid benefit payments to providers to ensure improper Medicaid benefit payments are not made after beneficiaries' deaths. The DCH should incorporate procedures in its current process that address fee-for-service payments to providers for claims made after the date of death. Additionally, DCH should investigate and recover funds for all overpayments and if necessary, refer to the Georgia Medicaid Fraud Control Unit for further investigation into any potential provider fraud or abuse.

The DCH should also consult with the grantor to discuss whether questioned costs identified in the audit should be repaid.

Views of Responsible Officials:

The Department (DCH) concurs with this finding.

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (continued)

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH (continued)

2019-023 Improve Controls over Medicaid Capitation Payments

Compliance Requirement:	Activities Allowed or Unallowed
	Allowable Costs/Cost Principles
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	1805GA5MAP (Year: 2018), 1905GA5MAP (Year: 2019)
Questioned Costs:	\$27,439

The Department of Community Health (DCH) made improper capitation payments for Medicaid Managed Care members with Medicare insurance coverage.

Background Information:

The DCH administers the State's Medicaid program that provides payments for medical assistance to lowincome individuals. Medicaid is Georgia's largest public assistance program with expenditures of federal and state funds totaling \$10.8 billion for fiscal year 2019. The program accounts for more than one-third of the State's total federal award expenditures.

The DCH, the State's Medicaid agency, administers Georgia's managed-care program. The program is a partnership between DCH and private care management organizations (CMOs). The State pays a monthly fixed rate per person (capitation rate) without regard to the actual medical services utilized to cover the costs of Medicaid claims. Managed care is a prepaid, comprehensive system of medical and health care delivery, including preventive, primary, specialty and ancillary health care services. The program is designed to reduce the cost of providing health benefits, improve the quality of care and deliver health care to clients. Capitation payments for the year totaled \$4.5 billion (federal and state).

According to DCH's state plan, Medicare recipients should not be enrolled in managed care, and any monthly premium payments made for Medicare recipients are unallowable.

Criteria:

As a recipient of federal awards, DCH is required to establish and maintain effective internal control over federal awards that provides reasonable assurance of managing the federal awards in compliance with federal statutes, regulations, and the terms and conditions of the federal awards pursuant to Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) Section 200.303 – Internal Controls.

Additionally, the Uniform Guidance, Section 200.53 - Improper payments states: *Improper payment* means any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements; and *improper payments* includes any payment to an ineligible party, any payment for an ineligible good or service, any duplicate payment, any payment for a good or service not received (except for such payments where authorized by law), any payment that does not account for credit for applicable discounts, and any payment where insufficient or lack of documentation prevents a reviewer from discerning whether a payment was proper.

Title 42 CFR Chapter 7, Social Security, Subchapter XIX – Grants to States for Medical Assistance *Program, 1396u-2* – *Provisions relating to managed care*, states in part: a state may not require under paragraph (1) the enrollment in a managed care entity of an individual who is a qualified Medicare beneficiary (as defined in section 1396d(p)(1) of this title) or an individual otherwise eligible for benefits under subchapter XVIII.

Condition:

Our audit of the Medicaid program revealed deficiencies in the capitation payments paid to CMOs for Managed Care members with Medicare insurance coverage. We obtained Medicare coverage information from the DCH for all Medicaid-eligible members.

Using computer-assisted auditing techniques, we identified at total of 4,730 potential capitation payments made on behalf of 1,065 members who had Medicare coverage during the same month as their monthly managed care capitation payment. From this population, we tested a random sample of 60 capitation payments to determine if the DCH made monthly managed-care premium payments for the members during the same time period the member's Medicare coverage was effective.

We found that DCH made improper payments to CMOs for 6 of 60 capitation payments tested. Additionally, for the remaining 54 payments, a retroactive Medicare effective date was issued, which was during the time period that managed care payments were made; however, none of these were paid after the date in which Medicare notified the DCH of the retroactive effective date.

Questioned Costs:

Known questioned costs of \$27,439 was identified for the 6 capitation payments to CMOs that were during the same time the Managed Care member was enrolled in Medicare. The Federal and State share of known questioned cost is approximately \$18,624 and \$8,815, respectively. Using the total population amount of \$2,259,112, we project the likely questioned cost to be approximately \$368,903. The Federal and State share of likely questioned cost is approximately \$251,905 and \$116,998, respectively. The projected likely questioned cost is based on the testing of the sample of 60 capitation payments that were selected using a nonstatistical sampling method.

Cause:

While the DCH has automated processes in place in the Georgia Medicaid Management Information System to prevent payments to managed-care organizations for members with Medicare coverage, the processes did not detect all members who are retroactively enrolled in Medicare and thus no recoupment of payments was performed.

The DCH management was also unaware of the eligibility requirements regarding one of the State's CMO's and did not set system exceptions to run for further investigation.

Effect:

The improper capitation payments resulted in noncompliance with federal regulations and questioned costs. Duplicate payments could occur for an ineligible recipient that are unallowable and cannot be claimed for federal reimbursement. In addition, grant provisions allow the grantor to penalize DCH for noncompliance by suspending or terminating the award or withholding future awards.

Recommendation:

The DCH management should strengthen internal controls over capitation payments to CMOs for Managed Care members to ensure improper capitation payments are not made to CMOs for members with Medicare insurance coverage. In addition, DCH management should review the eligibility criteria for each CMO to ensure the guidelines are understood and used in setting system exception reports.

The DCH should also consult with the U.S. Department of Health and Human Services regarding whether recoupment of overpayments made to managed-care organizations for members who are retroactively enrolled in Medicare is required and whether the questioned costs identified in the audit should be repaid.

Views of Responsible Officials:

We concur with the finding

This corrective action plan addresses the findings regarding the six (6) capitation payments reviewed. As it relates to the remaining findings regarding retroactive eligibility for Medicare beneficiaries, the Department ("DCH") has not received a response from CMS addressing the potential recovery of CMO capitation payments for individuals deemed eligible for Medicare retroactively. Accordingly, the issue regarding retroactive eligibility for Medicare beneficiaries will not be addressed in this corrective action plan.

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (continued)

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH (continued)

2019-024 Continue to Strengthen Application Risk Management Program

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	1905GA5MAP (Year: 2019), 1905GA5ADM (Year: 2019),
	1805GA5MAP (Year: 2018), 1805GA5ADM (Year: 2018)
Questioned Costs:	None Identified
Repeat of Prior Year Finding:	2018-026, 2017-037, 2016-044

The Department of Community Health (DCH) should continue to strengthen controls over its application risk management program.

Background Information:

The DCH relies extensively on automated data processing controls contained within computer systems and business processes of various third-party vendors to process payment claims for the Medicaid program. Internal controls over services provided by vendors and their related computer systems and business processes are essential for ensuring the security, confidentiality, availability, reliability and integrity of Medicaid payment data.

As part of our fiscal year 2019 audit, we followed up on DCH's efforts to implement corrective action plans in response to the prior year findings in which we reported that DCH did not have adequate controls in place over its application risk management program related to the claims and payment processing of Medicaid benefits. Although DCH has not fully implemented all its corrective action plans, we noted that ongoing efforts are being made.

Criteria:

Pursuant to the *Official Code of Georgia Annotated* (OCGA) §50-25-4(a)(20), the Georgia Technology Authority (GTA) is to establish technology security policies, standards, and services to be used by all agencies. The DCH is responsible for establishing and maintaining an IT risk management program as required by the following GTA policies and standards related to assessing and managing IT risks:

- Information Security Risk Management Policy (PS-08-031) Each agency shall institute an organization-wide risk management approach to information security that assesses the risks (including the magnitude of harm that could result from the unauthorized access, use, disclosure, disruption, modification, or destruction) to information and systems.
- Risk Management Framework Standard (SS-08-041) To adopt and implement a risk based approach to information security and shall use the National Institute of Standards and Technology (NIST) risk management framework.
- Security Controls Reviews and Assessments Policy (PS-08.029.01) To establish requirements for agencies to assess security controls for IT systems.

- Outsourced IT Services and Third-Party Interconnections Standard (SS-08-044.01) To establish requirements for agencies to ensure adherence to established security requirements by third-party IT service providers and/or interconnections.
- Information Security Control Policy (PS-17-001) To improve how security controls are managed within the State's shared-service environment and third-party service providers.
- Information Security Control Standard (SS-17-001) Agencies, Third-Party Service Providers, and Service Integrators operating in a shared-service environment are responsible for ensuring that applicable NIST 800-53 (rev. 4) security controls are implemented and operated effectively.

Further, DCH is required to conduct periodic risk analyses to ensure that appropriate, cost effective safeguards are incorporated into new and existing systems when significant system changes occur. The DCH is also responsible for establishing and maintaining a system security plan and performing biennial system reviews involved in the administration of U.S. Department of Health and Human Services programs (Title 45 *Code of Federal Regulations* (CFR) section 95.621).

An effective risk management program should also include elements listed below in order to reduce the risk of error, misuse, or fraud:

- 1. Policies and procedures designed to address security of the physical location of resources, equipment, software and data, telecommunications, and personnel;
- 2. Disaster recovery and business contingency plans;
- 3. Emergency preparedness; and
- 4. Review and monitor complimentary user entity controls as defined by service organizations.

Additionally, the Uniform Guidance (Title 2 CFR 200.303 Subpart D) prescribes requirements for recipients of federal awards to establish and maintain an effective system of internal control over federal awards that provides reasonable assurance that the federal awards are managed in compliance with federal statutes, regulations, and the terms and conditions of the federal awards.

Condition:

Our review of DCH's risk management program related to automated data processing systems revealed the deficiencies described below.

Risk Analysis:

We noted risk was assessed for the Medicaid Management Information System (MMIS); however, a formal risk analysis process has not been established and does not include all data processing systems for the Medicaid program.

System Security Reviews:

On an annual basis, DCH obtains System and Organizational Controls Type II reports to review the operating effectiveness of the controls in place at various service organizations. Based on work performed, we noted DCH has not completed an assessment of controls in place at the service organization and the complimentary user entity controls expected to be established at DCH. This assessment is designed to determine whether controls are in place, operating effectively, and successfully mitigating DCH's risks.

In addition, DCH has completed an annual independent security controls assessment of MMIS and has also performed direct audits of its vendors and business associates to ensure their compliance with contractual obligations. However, these initiatives are centered only on MMIS and should be expanded to include all relevant data processing applications for the Medicaid program.

Systems Security Plans:

The DCH does not have a formal documented system security plan for the automated data processing systems used to process claims and payments of Medicaid benefits.

Policies and Procedures:

Formal information security policies and standard operating procedures have not been developed to protect the entity's information assets and computing infrastructure.

Cause:

The DCH has previously identified the need to develop and implement comprehensive organization-wide policies and procedures, formally document its risk analysis program, and develop and document formal Information System Security Plans for all major information systems in accordance with the Federal Information Security Management Act and based on guidelines and standards published by NIST. The DCH did not have sufficient security budget funding and resources needed in order to address these deficiencies in a timely manner.

Effect:

The lack of a formal IT risk management program results in noncompliance with the applicable State and federal requirements and exposes DCH to unnecessary risk of error, misuse, fraud, or loss of data from both internal and external forces which could impact the integrity and reliability of data used for the claims and payment processing of Medicaid benefits.

Recommendation:

The DCH should continue to allocate necessary resources and processes to implement a formal risk management program to allow management to gain reasonable assurance DCH will achieve its objectives in complying with operational, financial reporting, and compliance requirements. An effective risk management program should, at a minimum, address Risk Analysis, System Security Reviews, System Security Plans, and Information Security Policies and Procedures.

Views of Responsible Officials:

The Department (DCH) concurs with this finding.

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (continued)

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH (continued)

2019-025 Improve Controls over Inpatient Medicaid Payments

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiencies
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	1805GA5MAP (Year: 2018), 1905GA5MAP (Year: 2019)
Questioned Costs:	None Identified

The Department of Community Health (DCH) does not have adequate controls in place to ensure the required inpatient hospital field audits and desk reviews are performed in accordance with the State Plan.

Background Information:

The DCH is responsible for administering the Medicaid program under the State Plan approved by the federal Centers for Medicare & Medicaid Services (CMS). The State Plan is a comprehensive written statement describing the nature, scope, and basic requirements for the Medicaid program. At any time, DCH can propose changes to the State Plan by submitting a State Plan Amendment to CMS.

As part of the State Plan, DCH is responsible for establishing standards and methodologies for reimbursing inpatient hospital providers based on payment rates that represent the cost to efficiently and economically operate such facilities and provide services to Medicaid beneficiaries. The DCH requires all inpatient hospital providers to submit an annual cost report summarizing cost and patient day information for the reporting year. These cost reports may be used to establish payment rates. A total of 154 cost reports were submitted by the inpatient hospital providers during the year.

For fiscal year 2019, inpatient Medicaid payments totaled approximately \$1.2 billion of the \$10.8 billion total Medicaid expenditures.

Criteria:

As a recipient of Federal awards, DCH is required to establish and maintain effective internal control over federal awards that provides responsible assurance that it is managing federal awards in compliance with federal statues, regulations, and the terms and conditions of the federal awards pursuant to Title 2 CFR 200.303, Subpart D of the Uniform Guidance.

Pursuant to 42 CFR section 447.253(g), DCH is required to perform periodic audits of financial and statistical records of participating inpatient hospitals in accordance with the audit requirements specified in the State Plan. These audits are crucial to ensuring the established payment rates are proper.

The Georgia Medicaid State Plan, Section 1C, Attachment 4.19A-*Methods and Standards for Establishing Payment Rates Inpatient Services* requires DCH to contract annually for the performance of desk reviews and field audits.

Condition:

Field audits of participating inpatient hospital providers were not performed as required by the State Plan. While the DCH does have a multi-year contract with a third-party vendor to perform desk reviews on the cost reports submitted, the contract states that a field audit is only completed if determined necessary by the desk review and approved by DCH. This does not comply with the State Plan requirement for the annual performance of field audits in accordance with generally accepted auditing standards.

Additionally, the annual desk reviews required by the State Plan were not performed timely. The reviews of eight of the 154 cost reports that were submitted by inpatient hospital providers were not completed by the end of fiscal year 2019.

Cause:

The DCH had turnover in management personnel and does not have procedures in place to ensure that field audits are performed in accordance with the State Plan and desk reviews are conducted timely.

Effect:

Since unaudited cost reports may be used as the basis to establish reimbursement rates, the rates used may contain errors which could result in improper payments. In addition, grant provisions allow the grantor to penalize the DCH for noncompliance by suspending or terminating the award or withholding future awards. This may prevent inpatient hospital providers from receiving benefit payments.

Recommendation:

The DCH management should improve controls over inpatient Medicaid payments by establishing procedures to ensure the required fields audits are performed in accordance with the current State Plan and the desk reviews are performed timely.

Views of Responsible Officials:

Although the Department of Community Health ("DCH") officially concurs with the finding, it would like to provide the following clarification. The state plan requires DCH to perform desk reviews and field audits in accordance with generally accepted auditing standards of the AICPA. DCH contracts with a third-party vendor to perform desk reviews and field audits of hospital cost reports. Based upon the results of the desk reviews, the third-party vendor will conduct additional audit work to include focus reviews and/or field audits. Although the Department concurs with this finding, the results of this year's desk reviews did not warrant any field audits for the state fiscal year reviewed.

In reference to timeliness, DCH Leadership granted an extension for completion of desk reviews by the third-party vendor. While the state plan does not address a deadline for a completion of the desk reviews, DCH Leadership does have leeway to grant extensions if needed.

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (continued)

STATE ENTITY: DEPARTMENT OF HUMAN SERVICES

2019-026 Strengthen Logical Access Controls

Compliance Requirement:	Eligibility
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.575 - Child Care and Development Block Grant
	93.596 - Child Care Mandatory and Matching Funds of the Child
	Care and Development Fund
	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	G996005 (Year: 2018), G999004 (Year: 2019), G999005 (Year:
	2019), 1805GA5MAP (Year: 2018), 1905GA5MAP (Year: 2019)
Questioned Costs:	None Identified

Strengthen logical access controls over the Georgia Gateway system.

Background Information:

See Financial Statement Finding 2019-008.

Criteria: See Financial Statement Finding 2019-008.

Condition:

See Financial Statement Finding 2019-008.

Cause:

See Financial Statement Finding 2019-008.

Effect: See Financial Statement Finding 2019-008.

Recommendation:

See Financial Statement Finding 2019-008.

Views of Responsible Officials:

DHS concurs with this finding.

FEDERAL AGENCY: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (continued)

STATE ENTITY: DEPARTMENT OF COMMUNITY HEALTH & STATE ENTITY: DEPARTMENT OF HUMAN SERVICES

2019-027 Improve Controls over Medicaid Eligibility Determinations

Compliance Requirement:	Eligibility
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Number and Title:	93.778 - Medical Assistance Program (Medicaid: Title XIX)
Federal Award Number:	1805GA5MAP (Year: 2018), 1905GA5MAP (Year: 2019)
Questioned Costs:	\$4,524,068
Repeat of Prior Year Finding:	2018-029

The Medicaid eligibility process for Supplemental Security Income (SSI) Ex Parte members does not have adequate controls in place to ensure the required continuing eligibility determinations are performed.

Background Information:

The Department of Community Health (DCH) administers the State's Medicaid program that provides payments for medical assistance to low-income individuals. Medicaid is Georgia's largest public assistance program with federal expenditures totaling \$7.8 billion for fiscal year 2019. The program accounts for more than one-third of the State's total federal award expenditures.

Eligibility for the Medicaid program is determined by the Division of Family and Children Services (DFCS), a division within the Department of Human Services (DHS), which has offices in each of the 159 counties in the State of Georgia. During fiscal year 2019, DCH paid Medicaid benefits totaling \$66,446,724 for approximately 21,000 SSI Ex Parte members. Individuals who are eligible for SSI are also eligible for the Medicaid benefits, and those whose SSI benefits are terminated or denied by the Social Security Administration are SSI Ex Parte members for the Medicaid program. For those members, DCH makes temporary determinations of continued eligibility under a new Ex Parte Medicaid Class of Assistance in the Georgia Medicaid Management Information System (GAMMIS).

The DFCS is responsible for performing a Continuing Medicaid Determination (CMD) for each new SSI Ex Parte member. The DFCS uses the daily Ex Parte Determination Reports generated by GAMMIS to identify the new SSI Ex Parte members that require a CMD. GAMMIS also generates monthly Ex Parte Non-Confirmation Reports, which identify all entries from the Ex Parte Determination Reports that are over 30-days old and have not yet been acted upon.

When a CMD is complete, DFCS enters the individual in the Georgia Gateway eligibility system and an approval or denial notice is generated. GAMMIS is updated through the Georgia Gateway interface when eligibility for a member is approved. When eligibility is denied, DFCS sends the denial notice to DCH which triggers the removal of the denied member from GAMMIS.

Criteria:

As recipients of federal awards, both DCH and DHS are required to establish and maintain effective internal control over federal awards that provides reasonable assurance of managing the federal awards in compliance with federal statutes, regulations, and the terms and conditions of the federal awards pursuant

to Title 2 CFR 200.303, Subpart D of the Uniform Guidance. The eligibility determination requirements for SSI Ex Parte members are addressed in Chapter 2700, Section 50 - DCH Reports - Ex Parte Lists of the DHS Medicaid Manual. In accordance with Section 50 of the Medicaid Manual, DFCS is required to perform eligibility determinations of those members whose SSI benefits are terminated or denied.

Condition:

Our audit of the Medicaid program revealed deficiencies in the performance of eligibility determinations for SSI Ex Parte members. We found that DFCS did not perform eligibility determinations for 42 of 60 SSI Ex Parte members tested.

In addition, we noted that DCH did not monitor the status of the eligibility determinations for SSI Ex Parte members in GAMMIS.

Questioned Costs:

Known questioned costs of \$4,524,068 was identified for benefit payments to the 42 SSI Ex Parte members whose eligibility was not adequately redetermined. The Federal and State share of known questioned costs is approximately \$3,068,991 and \$1,455,077, respectively.

Using the total SSI Ex Parte population amount of \$66,446,724, we project the likely questioned cost to be approximately \$52,377,717. The projected likely questioned cost is based on the testing of the sample of 60 SSI Ex Parte members. The Federal and State share of likely questioned costs is approximately \$35,560,414 and \$16,817,303, respectively.

Cause:

The DFCS offices have procedures in place for reviewing eligibility documentation; however, the operation of those procedures did not ensure the required eligibility determinations were made on all SSI Ex Parte members. Additionally, the DCH did not have a process in place to monitor and follow-up on the status of eligibility determinations for the SSI Ex Parte members.

Effect:

The deficiencies in eligibility resulted in noncompliance with federal regulations and questioned costs. In addition, grant provisions allow the grantor to penalize DCH for noncompliance by suspending or terminating the award or withholding future awards. This may prevent eligible individuals from receiving benefits.

Recommendation:

The DHS management should strengthen internal controls over eligibility determinations for SSI Ex Parte members to ensure its policies and procedures are consistently enforced and operating effectively. Specifically, management should incorporate additional oversight and perform thorough reviews of the DFCS eligibility determinations for SSI Ex Parte members to ensure they are being performed as required.

In addition, DCH management should develop and implement policies and procedures to monitor and follow-up on the status of eligibility determinations for SSI Ex Parte members in GAMMIS. Management should also formally document these policies and procedures.

Improved controls will help ensure DCH and DHS achieve their objectives in complying with the Eligibility requirements for the Medicaid program.

Views of Responsible Officials:

We concur with the finding.

The Department ("DCH") presented its Corrective Action Plan addressing this matter in 2018. Since this time DCH has made progress towards addressing this deficiency. In accordance with the previously submitted corrective action plan, DCH's employees have consistently participated in regularly scheduled monthly meetings with the DFCS Medicaid Unit in order to monitor the status of the Ex-Parte eligibility determinations. Policies and procedures were developed for training purposes and provided to staff.

The Division of Family and Children Services (DFCS) has successfully trained over 1000 employees on the *Ex-Parte process and is diligently working to complete the training of its remaining staff. Training of all identified staff is scheduled to be completed on or before April 30, 2020.*

Additionally, DCH, through its fiscal agent, has begun making modifications to the Georgia Medicaid Management Information System (GAMMIS) in order to automate the Ex-Parte Continuing Medicaid Eligibility Determination process.

FEDERAL AGENCY: U.S. DEPARTMENT OF THE INTERIOR

STATE ENTITY: DEPARTMENT OF NATURAL RESOUCES

2019-028 Follow Established Controls over Real Property and Equipment

Compliance Requirement:	Real Property and Equipment
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of the Interior
Pass-Through Entity:	None
CFDA Number and Title:	15.605 Sport Fish Restoration
	15.611 Wildlife Restoration and Basic Hunter Education
	15.626 Enhanced Hunter Education and Safety
Federal Award Number:	F17AF00658 (Year: 2017), F17AF00659 (Year: 2017), F17AF00750
	(Year: 2017), F17AF00754 (Year: 2017), F17AF00688 (Year:
	2017), F18AF00657 (Year: 2018), F18AF00658 (Year: 2018),
	F18AF00663 (Year: 2018), F18AF00704 (Year: 2018), F18AF00789
	(Year: 2018), F18AF00796 (Year: 2018), F18AF00760 (Year:
	2018), F18AF00794 (Year: 2018), F18AF00798 (Year: 2018),
	F18AF00863 (Year: 2018), F17AF00779 (Year: 2017), F17AF00862
	(Year: 2017), F18AF00801 (Year: 2018), F18AF00807 (Year: 2018)
Questioned Costs:	None Identified

The Department of Natural Resources (DNR) should follow established controls over Real Property and Equipment.

Background Information:

The DNR administers the Sport Fish Restoration, Wildlife Restoration and Basic Hunter Education, and Enhanced Hunter Education and Safety programs which comprise the Fish and Wildlife Cluster. The federal award expenditures for these programs totaled \$28.3 million for fiscal year 2019.

Criteria:

As a recipient of federal awards, DNR is required to establish and maintain effective internal control over federal awards that provides reasonable assurance that it is managing the federal awards in compliance with federal statutes, regulations, and the terms and conditions of the federal awards pursuant to Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), Section 200.303 – Internal Controls. In addition, the Uniform Guidance, Section 200.313, requires states to manage and dispose of equipment acquired under a Federal award in accordance with state laws and procedures.

Pursuant to Title 50, Chapter 5B, Article 1 of the *Official Code of Georgia Annotated* (OCGA) § 50-5B-4, State organizations are required to comply with statewide policies, procedures, rules and regulations and to provide information to the state accounting office (SAO) necessary to properly account for and report real property and personal property. Furthermore, the *Capital Asset - General* policy in the Statewide Accounting Policy manual requires State organizations to establish controls to ensure capital assets are properly identified, valued and recorded in asset management records in compliance with State of Georgia policies and laws.

The DNR has established controls over Real Property and Equipment that require the performance of monthly reconciliations between its asset management records and general ledger with a review and approval by the asset manager. For fiscal year 2019, DNR reported a net book value of Real Property and Equipment of \$980.9 million.

Condition:

Our audit of the Fish and Wildlife Cluster revealed deficiencies in the operation of controls over Real Property and Equipment. For the months of March through June 2019, DNR's control for performing capital asset reconciliations as well as having them reviewed and approved monthly did not occur. After a request by the auditor, the reconciliations were prepared and provided in January 2020.

Cause:

The DNR incurred an unexpected turnover in the position that performs the reconciliations which impacted the operation of the monthly capital asset reconciliation and review and approval process.

Effect:

The deficiency in the performance of controls resulted in noncompliance with federal regulations and State statutes and policies. It also increased the risk of errors in the asset management records and the information DNR provides to the grantor and SAO.

Recommendation:

The DNR management should ensure that its established controls for Real Property and Equipment are performed to ensure assets are safeguarded and accurately recorded and reported in accordance with State statutes and policies. In addition, DNR should develop a plan to address the performance of controls when an unexpected turnover occurs.

Views of Responsible Officials:

We concur that as a result of inadequate staffing, operational controls over Real Property and Equipment for the months of March through June 2019 regarding asset reconciliations as well as having them reviewed and approved did not occur.

VARIOUS FEDERAL AGENCIES

STATE ENTITY: UNIVERSITY OF WEST GEORGIA

2019-029 Strengthen Controls over the Awarding Process

Compliance Requirement: Internal Control Impact: Compliance Impact:	Eligibility Significant Deficiency Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Numbers and Titles:	 84.007 – Federal Supplement Educational Opportunity Grants 84.033 – Federal Work-Study Program 84.063 – Federal Pell Grant Program 84.268 – Federal Direct Student Loans Program 93.264 – Nurse Faculty Loan Program
Federal Award Number:	P007A181059 (Year: 2019), P033A181059 (Year: 2019), P063P180095 (Year: 2019), P268K190095 (Year: 2019), E01HP28790-05-00 (Year: 2019)
Questioned Costs:	\$1,524.00

The Institution's Student Financial Assistance Office improperly determined the Student Financial Assistance award amounts for eligible students.

Criteria:

Provisions included in 34 CFR 668 provide general provisions for administering Student Financial Assistance (SFA) programs and 34 CFR 675, 676, 685, and 690 provide eligibility and other related program requirements that are specific to the Federal Work-Study Program, Federal Supplemental Educational Opportunity Grant (FSEOG) Program, Federal Direct Student Loans Program, and Federal Pell Grant Program, respectively. In addition, provisions included in 42 CFR 57 provide eligibility and other related program requirements that are specific to the Nursing Student Loans Program.

Condition:

A sample of 40 students who received student financial assistance funds was randomly selected for testing using a non-statistical sampling method. Student financial assistance files were reviewed to ensure that financial assistance was properly calculated and disbursed to eligible students. Testing revealed that one student received \$1,524.00 more in Federal Pell Grant funds than they were eligible to receive based upon their enrollment status and Expected Family Contribution (EFC).

Questioned Costs:

Questioned costs of \$1,524.00, with likely questioned costs of \$518,915.92, were identified for the student who received student financial assistance in excess of their eligibility. The following CFDA number is affected by the known and likely questioned costs: 84.063.

Cause:

In discussing this deficiency with management, they stated that the student was awarded aid for the 1819 award year prior to the change of status during the Spring 2019 semester. The student dropped classes at the beginning of the Spring 2019 semester and their Federal Pell Grant award for the 1819 award year was not revised to reflect the effect of the change.

Effect:

This deficiency may expose the Institution to unnecessary financial strains and shortages. The funds disbursed to students in excess of their eligibility must be returned to the U.S. Department of Education. Though the Institution may attempt to collect the funds from individual students affected by the error, these collection efforts could be unsuccessful as the students may no longer attend the Institution and/or fail to repay the funds. Additionally, the Institution was not in compliance with Federal regulations concerning awarding of SFA funds to students.

Recommendation:

The Institution should review its processes and procedures for determining each student's financial aid eligibility. Where vulnerable, the Institution should develop and/or modify its policies and procedures to ensure that correct amounts will be awarded to students in conformity with Federal requirements. Additionally, the Institution should develop and implement a monitoring process to ensure that controls are functioning properly. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

We concur with this finding.

VARIOUS FEDERAL AGENCIES (continued)

STATE ENTITY: UNIVERSITY OF WEST GEORGIA (continued)

2019-030 Improve Controls over Cost of Attendance Budgets

Compliance Requirement: Internal Control Impact: Compliance Impact: Endevol Amonding Agency	Eligibility Significant Deficiency Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Numbers and Titles:	 84.007 – Federal Supplement Educational Opportunity Grants 84.033 – Federal Work-Study Program 84.063 – Federal Pell Grant Program 84.268 – Federal Direct Student Loans Program 93.264 – Nurse Faculty Loan Program
Federal Award Number:	P007A181059 (Year: 2019), P033A181059 (Year: 2019), P063P180095 (Year: 2019), P268K190095 (Year: 2019), E01HP28790-05-00 (Year: 2019)
Questioned Cost:	None Identified

The Institution's Student Financial Aid Office did not document the procedures used to establish Cost of Attendance (COA) budgets.

Criteria:

Provisions included in 34 CFR 668 provide general provisions for administering Student Financial Aid (SFA) programs. In addition, Section 472 of the Higher Education Act of 1965 specifies the components that can be included in COA budgets.

Condition:

Upon review of the Institution's COA budgets, it was noted that Institution personnel could not provide supporting documentation or explanations for the calculation of the components of the COA budgets, including Books and Supplies, Personal Expenses, Room and Board, Tuition and Fees, Transportation, and Loan Fees.

Cause:

In discussing these deficiencies with management, they stated that supporting documentation for the COA budgets could not be located for review due to turnover within the SFA Office.

Effect:

The Institution was not in compliance with Federal regulations concerning the COA budgets used as the basis for determining SFA eligibility. The COA is the cornerstone of establishing a student's financial need and sets a limit on the total aid a student may receive. If the estimated costs used for components in the COA budget are unreasonable and do not represent average costs for students at the Institution, a majority of the student population may have been over or under awarded.

Recommendation:

The Institution should reevaluate the components used in the COA budgets and document that these costs represent average costs for students enrolled at the Institution. The Institution should modify its procedures to ensure that any future changes to the COA budgets are reasonable and based on documented average costs for students. The Institution should also contact the U.S. Department of Education regarding resolution of this finding.

Views of Responsible Officials:

We concur with this finding.

VARIOUS FEDERAL AGENCIES (continued)

STATE ENTITY: UNIVERSITY OF WEST GEORGIA (continued)

2019-031 Improve Controls over the Return of Title IV Funds Process

Compliance Requirement:	Special Tests and Provisions
Internal Control Impact:	Significant Deficiency
Compliance Impact:	Nonmaterial Noncompliance
Federal Awarding Agency:	U.S. Department of Education
	U.S. Department of Health and Human Services
Pass-Through Entity:	None
CFDA Numbers and Titles:	84.007 – Federal Supplement Educational Opportunity Grants
	84.033 – Federal Work-Study Program
	84.063 – Federal Pell Grant Program
	84.268 – Federal Direct Student Loans Program
	93.264 – Nurse Faculty Loan Program
Federal Award Number:	P007A181059 (Year: 2019), P033A181059 (Year: 2019),
	P063P180095 (Year: 2019), P268K190095 (Year: 2019),
	E01HP28790-05-00 (Year: 2019)
Questioned Costs:	\$879.83

The Institution did not properly perform the refund process to ensure that unearned Title IV funds were returned in a timely manner.

Criteria:

Provisions included in 34 CFR 668.22 provide requirements over the treatment of Title IV funds when a student withdraws. The Institution is required to determine the amount of Title IV funds that the student earned as of the student's withdrawal date when a recipient of Title IV funds withdraws from an institution during a payment period or period of enrollment in which the recipient began attendance. A refund must be returned to Title IV programs when the total amount of the Title IV grant or loan assistance, or both, that the student earned is less than the amount of the Title IV grant or loan assistance that was disbursed to the student as of the withdrawal date.

Condition:

A sample of 40 students who received student financial assistance (SFA) for the Fall 2018 and Spring 2019 semesters and withdrew from the Institution was randomly selected for testing using a non-statistical sampling method. The students' Return of Title IV calculations were reviewed to ensure that the refunds were calculated and returned in the correct amount to the proper funding agency and/or student in a timely manner. The following deficiencies were noted:

- The refund calculation for one student who withdrew during the Fall 2018 semester and four students who withdrew during the Spring 2019 semester was calculated incorrectly due to the use of improper scheduled break days, withdrawal dates, and/or institutional charges. Three students were requested to return \$879.83 less than the required amount to various SFA programs, and two students were requested to return \$5,174.49 more than the required amount to various SFA programs.
- The proration between the school and student portion of the refund was incorrect for two students who withdrew during the Fall 2018 semester and eight students who withdrew during the Spring 2019 semester.

Questioned Costs:

Questioned costs of \$879.83, with likely questioned costs of \$6,433.70, were identified for refunds calculated incorrectly. The following CFDA numbers are affected by the known and likely questioned costs: 84.063 and 84.268.

Cause:

In discussing these deficiencies with management, they stated that they misunderstood the process of prorating the institutional charges when students withdraw. In addition, human errors occurred when entering data into the manual calculations.

Effect:

This deficiency may expose the Institution to unnecessary financial strains and shortages. The school's portion of the refunds that were not calculated correctly must be returned to the U.S. Department of Education. Though the Institution may attempt to collect the funds from individual students affected by the error, these collection efforts could be unsuccessful as the students may no longer attend the Institution and/or fail to repay the funds. Additionally, the Institution was not in compliance with Federal regulations concerning performing Return of Title IV calculations for withdrawn students.

Recommendation:

The Institution should revise and implement procedures to ensure that student financial aid refunds are properly calculated and that unearned funds are correctly returned to the appropriate accounts in a timely manner in accordance with the Higher Education Amendments 1998, Public Law 105-244. The Institution should also contact the U.S. Department of Education regarding resolution of the finding.

Views of Responsible Officials:

We concur with this finding.

Schedule of Expenditures of Federal Awards

The *Schedule of Expenditures of Federal Awards* (Schedule) is presented for purposes of additional analysis as required by the Uniform Guidance. The Schedule provides a summary of the State's federal program expenditures for the fiscal year ended June 30, 2019.

The Schedule presents total federal awards expended for each individual federal program, cluster, and federal awarding agency. The Notes to the Schedule, which are presented on pages C-98 through C-100, describe the significant accounting policies used in preparing the Schedule and other related information.

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
AFRICAN DEVELOPMENT FOUNDATION	Number	(Optional)	Linky
DOD/AEOP UNITE PROGRAM	01.U01	543005- 19A29A	ARMY EDUCATIONAL OUTREACH PROGRAM
AEOP BATTELLE ECYBERMISSION	01.U02	US001000071 8154	
TOTAL AFRICAN DEVELOPMENT FOUNDATION	01.002	6154	ARMY EDUCATIONAL OUTREACH PROGRAM
DEPARTMENT OF AGRICULTURE			
AGRICULTURAL RESEARCH BASIC AND APPLIED RESEARCH	10.001		PURDUE UNIVERSITY
AGRICULTURAL RESEARCH BASIC AND APPLIED RESEARCH	10.001		UNIVERSITY OF KENTUCKY
AGRICULTURAL RESEARCH BASIC AND APPLIED RESEARCH	10.001		
PLANT AND ANIMAL DISEASE, PEST CONTROL, AND ANIMAL CARE	10.025		
PLANT AND ANIMAL DISEASE, PEST CONTROL, AND ANIMAL CARE	10.025		STATE OF WASHINGTON
PLANT AND ANIMAL DISEASE, PEST CONTROL, AND ANIMAL CARE	10.025		
WILDLIFE SERVICES	10.028		TUSKEGEE UNIVERSITY
WILDLIFE SERVICES	10.028		MISSISSIPPI STATE UNIVERSITY
WILDLIFE SERVICES	10.028		
WETLANDS RESERVE PROGRAM	10.072		
VOLUNTARY PUBLIC ACCESS AND HABITAT INCENTIVE PROGRAM	10.093		
MARKET NEWS	10.153		
MARKET PROTECTION AND PROMOTION	10.163		
WHOLESALE FARMERS AND ALTERNATIVE MARKET DEVELOPMENT	10.164		
SPECIALTY CROP BLOCK GRANT PROGRAM - FARM BILL SPECIALTY CROP BLOCK GRANT PROGRAM - FARM BILL	10.170 <i>10.170</i>		CLEMSON UNIVERSITY
SPECIALTY CROP BLOCK GRANT PROGRAM - FARM BILL	10.170		GEORGIA PEACH COUNCIL
			KENNESAW STATE UNIVERSITY RESEARCH AND
SPECIALTY CROP BLOCK GRANT PROGRAM - FARM BILL SPECIALTY CROP BLOCK GRANT PROGRAM - FARM BILL	10.170 10.170		SERVICE FOUNDATION NORTH CAROLINA STATE UNIVERSITY
TRADE MITIGATION PROGRAM ELIGIBLE RECIPIENT AGENCY OPERATIONAL FUNDS	10.170		NORTH CAROLINA STATE UNIVERSITY
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.178		SOUTH CAROLINA SEA GRANT CONSORTIUM, INC.
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF FLORIDA
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF FLORIDA
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF FLORIDA
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF FLORIDA
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF FLORIDA
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF FLORIDA
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY OF HAWAI'I VIRGINIA POLYTECHNIC INSTITUTE AND STATE
GRANTS FOR AGRICULTURAL RESEARCH, SPECIAL RESEARCH GRANTS	10.200		UNIVERSITY
COOPERATIVE FORESTRY RESEARCH	10.202		
PAYMENTS TO AGRICULTURAL EXPERIMENT STATIONS UNDER THE HATCH ACT	10.203		
PAYMENTS TO 1890 LAND-GRANT COLLEGES AND TUSKEGEE UNIVERSITY	10.205		
ANIMAL HEALTH AND DISEASE RESEARCH	10.207		
HIGHER EDUCATION GRADUATE FELLOWSHIPS GRANT PROGRAM SMALL BUSINESS INNOVATION RESEARCH	10.210		
SMALL BUSINESS INNOVATION RESEARCH SMALL BUSINESS INNOVATION RESEARCH	10.212 10.212		AMERICA'S SMALL BUSINESS DEVELOPMENT CENTERS CANDIDUS, INC.
SUSTAINABLE AGRICHTTURE DESEADCH AND EDUCATION	10.215		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION	10.215		SERVICE FOUNDATION, INC.
1890 INSTITUTION CAPACITY BUILDING GRANTS	10.215		
BIOTECHNOLOGY RISK ASSESSMENT RESEARCH	10.210		TEXAS A&M AGRILIFE EXTENSION SERVICE
BIOTECHNOLOGY RISK ASSESSMENT RESEARCH	10.219		UNIVERSITY OF MINNESOTA
BIOTECHNOLOGY RISK ASSESSMENT RESEARCH	10.219		
COMMUNITY FOOD PROJECTS	10.225		FOOD BANK OF NORTHEAST GEORGIA
AGRICULTURAL AND RURAL ECONOMIC RESEARCH, COOPERATIVE AGREEMENTS AND COLLABORATIONS	10.250		CORNELL UNIVERSITY
AGRICULTURAL AND RURAL ECONOMIC RESEARCH, COOPERATIVE AGREEMENTS AND			
COLLABORATIONS	10.250		
CONSUMER DATA AND NUTRITION RESEARCH	10.253		TUFTS UNIVERSITY
CONSUMER DATA AND NUTRITION RESEARCH	10.253		
AGRICULTURAL MARKET AND ECONOMIC RESEARCH	10.290		
INTEGRATED PROGRAMS	10.303		CLEMSON UNIVERSITY

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
543005-19A29A 2085-48		\$631	\$631	N/A	
US0010000718154		\$20,733	\$20,733	N/A	
		\$21,364	, , -,	,	
		<i>\\</i>			
F9001994502008		\$60,831	\$2,131,112	RESEARCH AND DEVELOPMENT	\$1,033,282
304811160019217		\$38,729	\$2,131,112	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$2,031,552	\$2,131,112	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$921,076	\$1,500,328	N/A	, ,, -
BARGERON		\$7,621	\$1,500,328	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$571,631	\$1,500,328	RESEARCH AND DEVELOPMENT	\$1,033,28
39-32650-071-76190		\$24,182	\$462,261	N/A	
08030033066201		\$6,479	\$462,261	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$431,600	\$462,261	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$59,817 \$292,862	\$59,817 \$292,862	N/A N/A	
		\$292,802	\$292,802	N/A N/A	
		\$35,401	\$35,401	N/A	
	\$53,304	\$67,183	\$67,183	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$258,334	\$875,948	\$941,129	N/A	
19432052011936		\$19,283	\$941,129	RESEARCH AND DEVELOPMENT	\$1,033,282
5742901		\$19,958	\$941,129	RESEARCH AND DEVELOPMENT	\$1,033,282
AM170100XXXXG018		\$18,530	\$941,129	RESEARCH AND DEVELOPMENT	\$1,033,282
5724101		\$7,410	\$941,129	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$295,476	\$18,726,145	\$18,726,145	N/A	
20143850022308		\$30,349	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282
1800574474		\$3,632	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282
1800574484		\$518	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282
1800597518 AWD00009119		\$939 \$7,751	\$135,741 \$135,741	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282
PO 1800575090		\$1,326	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282
PO1800632826		\$2,281	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282
MA1328		\$13,442	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282
42255919105		\$75,503	\$135,741	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$1,168,476	\$1,168,476	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$5,645,259	\$5,645,259	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$7,296	\$3,395,883	\$3,395,883	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$70,014	\$70,014	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$123,742	\$123,742	RESEARCH AND DEVELOPMENT	\$1,033,28
AGMT EXEC 12/15/17		\$21,960	\$96,367		¢1,022,20
HAIDEKKER		\$74,407	\$96,367	RESEARCH AND DEVELOPMENT	\$1,033,282
63828383-1		\$12,307	\$4,671,633	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$2,932,645	\$4,659,326	\$4,671,633	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$2,634	\$199,066	\$199,066	RESEARCH AND DEVELOPMENT	\$1,033,28
M1800644		\$17,125	\$320,665	RESEARCH AND DEVELOPMENT	\$1,033,282
H005031601		\$158,153	\$320,665	RESEARCH AND DEVELOPMENT	\$1,033,282
2014001	\$15,732	\$145,387 <i>\$11,701</i>	\$320,665 <i>\$11,701</i>	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,283 <i>\$1,033,282</i>
7786710657		\$4,040	\$26,758	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$2,453	\$22,718	\$26,758	RESEARCH AND DEVELOPMENT	\$1,033,28
0138300001-POEP0163046		\$11,047	\$60,053		\$1,033,282
		\$49,006	\$60,053	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$63,415	\$63,415	RESEARCH AND DEVELOPMENT	\$1,033,282

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
INTEGRATED PROGRAMS	10.303	(optional)	
HOMELAND SECURITY AGRICULTURAL	10.303		UNIVERSITY OF FLORIDA
HOMELAND SECURITY AGRICULTURAL	10.304		
ORGANIC AGRICULTURE RESEARCH AND EXTENSION INITIATIVE	10.307		CLEMSON UNIVERSITY
ORGANIC AGRICULTURE RESEARCH AND EXTENSION INITIATIVE	10.307		UNIVERSITY OF FLORIDA
ORGANIC AGRICULTURE RESEARCH AND EXTENSION INITIATIVE	10.307		
SPECIALTY CROP RESEARCH INITIATIVE	10.309		CORNELL UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		KANSAS STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		MICHIGAN STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		MICHIGAN STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		NEW MEXICO STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		NORTH CAROLINA STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		NORTH CAROLINA STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		TEXAS A&M AGRILIFE EXTENSION SERVICE
SPECIALTY CROP RESEARCH INITIATIVE	10.309		TEXAS A&M UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		TEXAS A&M UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		UNIVERSITY OF FLORIDA
SPECIALTY CROP RESEARCH INITIATIVE	10.309		UNIVERSITY OF FLORIDA
SPECIALTY CROP RESEARCH INITIATIVE	10.309		WASHINGTON STATE UNIVERSITY
SPECIALTY CROP RESEARCH INITIATIVE	10.309		
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		AUBURN UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		ILLINOIS INSTITUTE OF TECHNOLOGY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		LOUISIANA STATE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		MICHIGAN STATE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		NORTH CAROLINA STATE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		OHIO STATE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		PENNSYLVANIA STATE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		PURDUE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES, INC.
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF CALIFORNIA, DAVIS
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF FLORIDA
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF FLORIDA
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF FLORIDA
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF FLORIDA
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF FLORIDA
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF ILLINOIS
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF MARYLAND
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF MICHIGAN
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF MINNESOTA
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF NEBRASKA-LINCOLN
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF RHODE ISLAND
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF TENNESSEE
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UNIVERSITY OF TENNESSEE
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		UTAH STATE UNIVERSITY
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)	10.310		VIRGINIA POLYTECHNIC INSTITUTE AND STATE
BEGINNING FARMER AND RANCHER DEVELOPMENT PROGRAM	10.311		UNIVERSITY
SUN GRANT PROGRAM	10.320		UNIVERSITY OF TENNESSEE
SUN GRANT PROGRAM	10.320		UNIVERSITY OF TENNESSEE
CAPACITY BUILDING FOR NON-LAND GRANT COLLEGES OF AGRICULTURE (NLGCA)	10.326		MISSOURI STATE UNIVERSITY
NATIONAL FOOD SAFETY TRAINING, EDUCATION, EXTENSION, OUTREACH, AND TECHNICAL ASSISTANCE COMPETITIVE GRANTS PROGRAM	10.328		ALABAMA A&M UNIVERSITY
NATIONAL FOOD SAFETY TRAINING, EDUCATION, EXTENSION, OUTREACH, AND			
TECHNICAL ASSISTANCE COMPETITIVE GRANTS PROGRAM	10.328		UNIVERSITY OF FLORIDA
NATIONAL FOOD SAFETY TRAINING, EDUCATION, EXTENSION, OUTREACH, AND TECHNICAL ASSISTANCE COMPETITIVE GRANTS PROGRAM	10.328		UNIVERSITY OF FLORIDA
NATIONAL FOOD SAFETY TRAINING, EDUCATION, EXTENSION, OUTREACH, AND	10.320		VIRGINIA POLYTECHNIC INSTITUTE AND STATE
TECHNICAL FOOD SAFETT TRAINING, EDUCATION, EATENSION, OUTREACH, AND TECHNICAL ASSISTANCE COMPETITIVE GRANTS PROGRAM NATIONAL FOOD SAFETY TRAINING, EDUCATION, EXTENSION, OUTREACH, AND TECHNICAL	10.328		UNIVERSITY
ASSISTANCE COMPETITIVE GRANTS PROGRAM	10.328		
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.328		NORTH CAROLINA STATE UNIVERSITY
CHOF FHOTECTION AND FEST MANAGEMENT CONTENTIVE GRAINTS PROGRAM	10.329		NUM IN CANOLINA STATE UNIVERSITY

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

ldentifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
	\$31,990	\$135,870	\$157,040	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00011545		\$18,971	\$304,115	RESEARCH AND DEVELOPMENT	\$1,033,282,52.
		\$285,144	\$304,115	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2051-207-2012799		\$16,211	\$600,863	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00012045		\$67,434	\$600,863	RESEARCH AND DEVELOPMENT	\$1,033,282,52
7050010702	\$320,428	\$517,218	\$600,863	RESEARCH AND DEVELOPMENT	\$1,033,282,52
7959810783		\$3,848	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
S19016		\$38,917	\$1,502,394	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
RC105573UGARF RC107752B		\$30,237 \$45,599	\$1,502,394 \$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
Q01893		\$46,248	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2016022803		\$44,337	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2017039805		\$27,294	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
07\$170716		\$18,744	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
06M1703439		\$3,945	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
M1900020		\$59,848	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00010607		\$11,050	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00011194		\$269,037	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
133336-G003924		\$2,696	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$211,562	\$900,594	\$1,502,394	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2014-67001-2185		\$500	\$7,148,049	N/A	\$
17AGR373027UGARF		\$22,712	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
SA60501169843		\$34,039	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
PO-0000037155		\$17,418	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
RC104967UGA		\$28,399	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2018053002		\$59,818	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
60045862		\$72,695	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
5198-UG-USDA-3179		\$34,302	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
8000080954AG		\$14,204	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
E18-16		6117 574	67 1 49 0 40	RESEARCH AND DEVELOPMENT	ć1 022 202 F1
20122309004		\$117,574 \$16,556	\$7,148,049 \$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
PEND 7/1* UFDSP00012187		\$10,550	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00011707		\$28,903	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00011796		\$220,194	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00011873		\$244,935	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00012103		\$81,734	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
092155-17048		\$41,883	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
304811097714066		\$1,450	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
54843Z5001201		\$14,047	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
3004829728		\$42,209	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
A005124701		\$75,802	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2562390235314		\$123,620	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
BAWARD NO: 0006258/050218		\$4,000	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
8500047012		\$349	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
9500073193		\$444	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
200984420		\$27,678	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$1,068,351	\$5,792,873	\$7,148,049	RESEARCH AND DEVELOPMENT	\$1,033,282,52
54594319864		\$3,670	\$3,670	RESEARCH AND DEVELOPMENT	\$1,033,282,52
9500069679	\$45,821	\$116,159	\$145,963	RESEARCH AND DEVELOPMENT	\$1,033,282,52
9500070415		\$29,804	\$145,963	RESEARCH AND DEVELOPMENT	\$1,033,282,52
16042-001		\$17,802	\$17,802	N/A	Ş
		4-1-	4470 640		
		\$715	\$173,618	N/A	\$
2017-70020-27253-FVSU			\$173,618	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		ć0 C 40			51.033.282.52
2017-70020-27253-FVSU UFDSP00011144		\$8,640	\$175,010		+ _///
UFDSP00011144					
		\$8,640 \$964	\$173,618	RESEARCH AND DEVELOPMENT	
UFDSP00011144 UFDSP00012353		\$964	\$173,618	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UFDSP00011144					
UFDSP00011144 UFDSP00012353	\$54,144	\$964	\$173,618	RESEARCH AND DEVELOPMENT	\$1,033,282,52

		Additional	
	Federal	Award	Name of Funder
	CFDA	Identification	Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		NORTH CAROLINA STATE UNIVERSITY
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		NORTH CAROLINA STATE UNIVERSITY
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		NORTH CAROLINA STATE UNIVERSITY
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		TEXAS A&M UNIVERSITY
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		TEXAS A&M UNIVERSITY
CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM	10.329		
ALFALFA AND FORAGE RESEARCH PROGRAM	10.330		MISSISSIPPI STATE UNIVERSITY
ALFALFA AND FORAGE RESEARCH PROGRAM	10.330		MISSISSIPPI STATE UNIVERSITY
ALFALFA AND FORAGE RESEARCH PROGRAM	10.330		
VETERINARY SERVICES GRANT PROGRAM	10.336		
RURAL BUSINESS DEVELOPMENT GRANT	10.351		
FARM OWNERSHIP LOANS	10.407		
OUTREACH AND ASSISTANCE FOR SOCIALLY DISADVANTAGED AND VETERAN FARMERS			
AND RANCHERS	10.443		
RURAL COMMUNITY DEVELOPMENT INITIATIVE	10.446		
COOPERATIVE AGREEMENTS WITH STATES FOR INTRASTATE MEAT AND POULTRY			
INSPECTION	10.475		
COOPERATIVE EXTENSION SERVICE	10.500		AUBURN UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		
COOPERATIVE EXTENSION SERVICE	10.500		AUBURN UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		COLORADO STATE UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		KANSAS STATE UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		KANSAS STATE UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		KANSAS STATE UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		PURDUE UNIVERSITY
COOPERATIVE EXTENSION SERVICE	10.500		UNIVERSITY OF ARKANSAS
COOPERATIVE EXTENSION SERVICE	10.500		UNIVERSITY OF MISSOURI
COOPERATIVE EXTENSION SERVICE	10.500		
SMITH-LEVER FUNDING (VARIOUS PROGRAMS)	10.511		
RENEWABLE RESOURCES EXTENSION ACT AND NATIONAL FOCUS FUND PROJECTS	10.515		
CACFP TRAINING GRANTS	10.536		
SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) EMPLOYMENT AND TRAINING			
(E&T) DATA AND TECHNICAL ASSISTANCE GRANTS	10.537		
SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM	10.551		
SCHOOL BREAKFAST PROGRAM	10.553		
	10.555		
SPECIAL MILK PROGRAM FOR CHILDREN	10.556		
WIC SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND	40 557		
CHILDREN	10.557		
CHILD AND ADULT CARE FOOD PROGRAM SUMMER FOOD SERVICE PROGRAM FOR CHILDREN	10.558		
	10.559		
STATE ADMINISTRATIVE EXPENSES FOR CHILD NUTRITION	10.560		
STATE ADMINISTRATIVE MATCHING GRANTS FOR THE SUPPLEMENTAL NUTRITION	10 5 6 1		
ASSISTANCE PROGRAM COMMODITY SUPPLEMENTAL FOOD PROGRAM	10.561		
	10.565		
EMERGENCY FOOD ASSISTANCE PROGRAM (ADMINISTRATIVE COSTS) EMERGENCY FOOD ASSISTANCE PROGRAM (FOOD COMMODITIES)	10.568 <i>10.569</i>		STEP UP SAVANNAH
	10.569		STEP OF SAVANNAH
EMERGENCY FOOD ASSISTANCE PROGRAM (FOOD COMMODITIES)	10.509		
WIC FARMERS' MARKET NUTRITION PROGRAM (FMNP) FARM TO SCHOOL GRANT PROGRAM	10.572		
SENIOR FARMERS MARKET NUTRITION PROGRAM	10.575		
WIC GRANTS TO STATES (WGS)	10.578		
CHILD NUTRITION DISCRETIONARY GRANTS LIMITED AVAILABILITY	10.578		
FRESH FRUIT AND VEGETABLE PROGRAM	10.579		
PILOT PROJECTS TO REDUCE DEPENDENCY AND INCREASE WORK REQUIREMENTS AND	10.302		
WORK EFFORT UNDER SNAP	10.596		
USDA LOCAL AND REGIONAL FOOD AID PROCUREMENT PROGRAM	10.596		
FORESTRY RESEARCH	10.612		
FORESTRY RESEARCH	10.652		CRADLE OF FORESTRY
	10.052		U.S. ENDOWMENT FOR FORESTRY AND
FORESTRY RESEARCH	10.652		COMMUNITIES, INC.
	10.002		U.S. ENDOWMENT FOR FORESTRY AND
FORESTRY RESEARCH	10.652		COMMUNITIES, INC.
, oneo minecentori	10.052		conniconnico, nic.

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

Assigned By Funder Pass-Through Entity	Total Amount Provided to	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
2015008538	Sub-Recipients	\$7,434	\$543,487	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2018320001		\$7,434 \$981	, ,	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2018320001		\$16,044	\$543,487	RESEARCH AND DEVELOPMENT	
0763		\$16,044 \$5,062	\$543,487	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0763		. ,	\$543,487	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$11,941	\$543,487		\$1,033,282,522
M1900309	¢ 42,202	\$9,999	\$543,487	RESEARCH AND DEVELOPMENT	\$1,033,282,522
01110032266002	\$42,203	\$381,777	\$543,487	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$386	\$139,869	RESEARCH AND DEVELOPMENT	\$1,033,282,522
01110032273501	¢c0.470	\$49,945	\$139,869	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$69,176	\$89,538	\$139,869	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$35,581	\$35,581	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$430,949	\$430,949	N/A	\$0
		-\$39	-\$39	N/A	\$0
		\$122,111	\$122,111	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$19,199	\$19,199	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$15,155	\$19,199	RESEARCH AND DEVELOPMENT	Ş1,033,202,322
		\$3,149,793	\$3,149,793	N/A	\$0
18-CHS-205205-VSU		\$216,557	\$14,189,737	N/A	\$0
		\$3,259,638	\$14,189,737	N/A	\$0
17HDFS205198UGRF		\$88,423	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
G3833701		\$12,041	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AWD00010214		\$862	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S18053		\$103,582	\$14.189.737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S18139		\$21,175	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
F9000837602045		\$156,472	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
31000-04		\$14,718	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
C000593817		\$15,008	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$84,117	\$10,301,261	\$14,189,737	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	<i>\$</i> 01,111	\$1,378,564	\$1,378,564	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$8,234	\$8,234	N/A	\$0
		\$1,939	\$1,939	N/A	\$0
		. ,	.,	· · · · · · · · · · · · · · · · · · ·	·
		\$6,981	\$6,981	N/A	\$0
		\$2,175,442,881	\$2,175,442,881	SNAP CLUSTER	\$2,269,397,912
	\$197,676,017	\$198,829,543	\$198,829,543	CHILD NUTRITION CLUSTER	\$915,632,147
	\$661,949,264	\$715,826,217	\$715,826,217	CHILD NUTRITION CLUSTER	\$915,632,147
	\$16,193	\$16,193	\$16,193	CHILD NUTRITION CLUSTER	\$915,632,147
	\$51,461,061	\$170,698,547	\$170,698,547	N/A	\$0
	\$7,958,850	\$8,306,465	\$8,306,465	N/A	\$0
	\$733,166	\$960,194	\$960,194	CHILD NUTRITION CLUSTER	\$915,632,147
	\$503,814	\$11,693,098	\$11,693,098	N/A	\$0
	Ć0 4 50 405	¢02.055.024	602.0FF 024		¢2 200 207 012
	\$8,159,485	\$93,955,031	\$93,955,031	SNAP CLUSTER	\$2,269,397,912
	\$345,962	\$1,710,588	\$1,710,588	FOOD DISTRIBUTION CLUSTER	\$27,315,789
00010303	\$2,656,523	\$2,656,523	\$2,656,523	FOOD DISTRIBUTION CLUSTER	\$27,315,789
00010283	624 542	\$10,175	\$22,948,678	FOOD DISTRIBUTION CLUSTER	\$27,315,789
	\$31,513	\$22,938,503	\$22,948,678	FOOD DISTRIBUTION CLUSTER	\$27,315,789
		\$1,787,309	\$1,787,309	N/A	\$0
		\$18,391	\$18,391	N/A	\$0
		\$246,892	\$246,892	N/A	\$0
	4740.000	\$532,541	\$532,541	N/A	\$0
	\$718,329	\$803,664	\$803,664	N/A	\$0
	\$4,281,775	\$4,281,775	\$4,281,775	N/A	\$0
		\$4,943,517	\$4,943,517	N/A	\$0
	\$790	\$4,943,517 \$790	\$4,943,517 \$790	RESEARCH AND DEVELOPMENT	\$0 \$1,033,282,522
	Ç750	\$672,344	\$1,177,987	N/A	
			\$1,177,987 \$1,177,987	N/A RESEARCH AND DEVELOPMENT	\$0 <i>\$1,033,282,522</i>
5660601					
5660601		\$62,517	\$1,177,387	RESERVENT AND DEVELOT MENT	\$1,055,282,522
5660601 E1663		-\$1,191	\$1,177,987	RESEARCH AND DEVELOPMENT	\$1,033,282,522

		Additional	
	Federal	Award	Name of Funder
	CFDA	Identification	Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
reactar Awarang Ageney/ Hoghan The	Humber	(optional)	•
FORESTRY RESEARCH	10.652		U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES, INC.
FORESTRY RESEARCH	10.652		U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES, INC.
FORESTRY RESEARCH	10.652		
COOPERATIVE FORESTRY ASSISTANCE	10.664		
COOPERATIVE FORESTRY ASSISTANCE	10.664		CLARKE COUNTY SCHOOL DISTRICT
COOPERATIVE FORESTRY ASSISTANCE	10.664		STATE OF TENNESSEE
COOPERATIVE FORESTRY ASSISTANCE	10.664		
SCHOOLS AND ROADS - GRANTS TO STATES	10.665		
RURAL DEVELOPMENT, FORESTRY, AND COMMUNITIES	10.672		
WOOD UTILIZATION ASSISTANCE	10.674		U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES, INC.
WOOD UTILIZATION ASSISTANCE	10.674		
URBAN AND COMMUNITY FORESTRY PROGRAM	10.675		
			U.S. ENDOWMENT FOR FORESTRY AND
FOREST LEGACY PROGRAM	10.676		COMMUNITIES, INC.
FOREST LEGACY PROGRAM	10.676		
FOREST STEWARDSHIP PROGRAM	10.678		
FOREST STEWARDSHIP PROGRAM	10.678		
FOREST HEALTH PROTECTION	10.680		
FOREST HEALTH PROTECTION	10.680		CALIFORNIA INVASIVE PLANT COUNCIL
FOREST HEALTH PROTECTION	10.680		
NATIONAL FISH AND WILDLIFE FOUNDATION	10.683		
GOOD NEIGHBOR AUTHORITY	10.691		
WATERSHED RESTORATION AND ENHANCEMENT AGREEMENT AUTHORITY	10.693		
PARTNERSHIP AGREEMENTS	10.699		
	10.055		
COMMUNITY FACILITIES LOANS AND GRANTS	10.766		
COMMUNITY FACILITIES LOANS AND GRANTS	10.766		
NORMAN E. BORLAUG INTERNATIONAL AGRICULTURAL SCIENCE AND TECHNOLOGY			
FELLOWSHIP	10.777		
DISTANCE LEARNING AND TELEMEDICINE LOANS AND GRANTS	10.855		
RURAL ENERGY FOR AMERICA PROGRAM	10.868		
SOIL AND WATER CONSERVATION	10.902		
SOIL AND WATER CONSERVATION	10.902		JOHNS HOPKINS UNIVERSITY
SOIL AND WATER CONSERVATION	10.902		LONGLEAF ALLIANCE
SOIL AND WATER CONSERVATION	10.902		
SOIL SURVEY	10.903		
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		CLEMSON UNIVERSITY
			FLINT RIVER SOIL AND WATER CONSERVATION
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		DISTRICT
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		NORTH CAROLINA STATE UNIVERSITY
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		NORTH CAROLINA STATE UNIVERSITY
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		PHEASANTS FOREVER, INC.
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		PHEASANTS FOREVER, INC.
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		UNIVERSITY OF WISCONSIN - MADISON
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM	10.912		
WILDLIFE HABITAT INCENTIVE PROGRAM	10.914		
WATERSHED REHABILITATION PROGRAM	10.916		
SCIENTIFIC COOPERATION AND RESEARCH	10.961		
		123456818C0	
EFETAC WEBSITE/SOFTWARE SERVICES 2018/2019	10.RD	016	
	10.00	1243ZP18P00	
SOUTHERN PINE HEALTH RESEARCH COOPERATIVE - US FOR	10.RD	36	
		18-CS-	
		11083601-	
STEWARDSHIP OF RARE SPECIES ON THE SAVANNAH RIVER	10.RD	002	
GROW IT, KNOW IT TRAINING PROGRAM	10.RD	5789601	
ACQUISITION OF GOODS AND SERVICES	10.RD	5860408021	
			FOUNDATION FOR FOOD AND AGRICULTURE
WALLACE - HARNESSING ENDOPHYTES TO IMPROVE CROP EF	10.RD	593608	RESEARCH

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

Identifying Number Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
E17-22		\$91,987	\$1,177,987	RESEARCH AND DEVELOPMENT	\$1,033,282,52
F1 70F		625.014	ć1 177 007		61 022 202 52
E1795		\$25,914	\$1,177,987		\$1,033,282,52
		\$308,974	\$1,177,987	RESEARCH AND DEVELOPMENT	\$1,033,282,5
110 4001		\$3,578,089	\$3,698,196		\$1,033,282,52
UGA001 3251016018		\$8,768 \$19,935	\$3,698,196 \$3,698,196	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
5251010018		\$91,404	\$3,698,196	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$91,404	\$3,090,190	FOREST SERVICE SCHOOLS AND ROADS	ş1,055,262,5
	\$1,239,800	\$1,239,800	\$1,239,800	CLUSTER	\$1,239,8
	\$1,233,000	\$7,635	\$7,635	RESEARCH AND DEVELOPMENT	\$1,033,282,5
E19-08		\$9,836	\$71,421	RESEARCH AND DEVELOPMENT	\$1,033,282,5
210 00		\$61,585	\$71,421	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$50,569	\$50,569	RESEARCH AND DEVELOPMENT	\$1,033,282,5
14-PA-11080105-004		\$13,741	\$6,086,863	N/A	
14.77 11000103-004		\$6,073,122	\$6,086,863	N/A N/A	
		\$428,641	\$504,246	N/A	
		\$75,605	\$504,246	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$238,996	\$474,215	N/A	<i>¥1,033,202,3</i>
CALIPC20170815		\$3,874	\$474,215	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0/12// 02/01/0010		\$231,345	\$474,215	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$9,746	\$9,746	N/A	<i>_</i> ,000,202,0
		\$8,153	\$8,153	N/A	
		\$104,479	\$104,479	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$20,537	\$410,484	\$410,484	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$25,436	\$40,525,436	COMMUNITY FACILITIES LOANS AND GRANTS CLUSTER	\$40,525,4
		<i>723,</i> 4 30	Ş 4 0,525,450	COMMUNITY FACILITIES LOANS AND GRANTS	Ş 4 0,323,4
		\$40,500,000	\$40,525,436	CLUSTER	\$40,525,43
		\$61,840	\$61,840	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$418,639	\$418,639	N/A	<i>\ 2\000\202\0</i>
		\$67,582	\$67,582	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$128,225	\$266,652	N/A	
520595110		\$20,625	\$266,652	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
32.2019.01.00		\$1,140	\$266,652	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$116,662	\$266,652	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$5,006	\$5,006	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$231,413	\$735,510	N/A	
19802072022261		\$32,412	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
5699501		\$97,326	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
2014207201		\$27,144	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
2015272901		\$50,081	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
WLFW 2018-08		\$4,994	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
WLFW 2018-10		\$17,579	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
0000001127		\$43,971	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$230,590	\$735,510	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$75,364	\$75,364	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$27,500	\$27,500	N/A	
		\$19,237	\$19,237	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$15,236	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$3,580	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		Å	4000 of -		64 000 000 -
		\$5,751	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$23,207	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$12,963	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,5
593608		\$58,410	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,52

	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
STUDY OF POPULATION RESPONSE OF BOBWHITE TO THE CO	10.RD	9500068554	UNIVERSITY OF TENNESSEE
	101112	500000000	U.S. ENDOWMENT FOR FORESTRY AND
TECHNO-ECONOMIC ASSESSMENT AND LIFE CYCLE ANALYSIS	10.RD	E1746	COMMUNITIES, INC.
INTEGRATING GOPHER TORTOISE RECOVERY	10.RD	LLA201803	LONGLEAF ALLIANCE
CLEAN WATER3 - REDUCE, REMEDIATE, RECYCLE ENHANC	10.RD	SUB00001399	UNIVERSITY OF FLORIDA
TOTAL DEPARTMENT OF AGRICULTURE	20110	5020001355	
DEPARTMENT OF COMMERCE			
	11.011		MOTE MARINE LABORATORY
DCEAN EXPLORATION	11.011		
INTEGRATED OCEAN OBSERVING SYSTEM (IOOS)	11.012		THE SOUTHEAST COASTAL OCEAN OBSERVING REGIONAL ASSOCIATION
INTEGRATED OCEAN OBSERVING SYSTEM (IOOS)	11.012		THE SOUTHEAST COASTAL OCEAN OBSERVING REGIONAL ASSOCIATION
			THE SOUTHEAST COASTAL OCEAN OBSERVING
INTEGRATED OCEAN OBSERVING SYSTEM (IOOS)	11.012		REGIONAL ASSOCIATION
			THE SOUTHEAST COASTAL OCEAN OBSERVING
INTEGRATED OCEAN OBSERVING SYSTEM (IOOS)	11.012		REGIONAL ASSOCIATION
			THE SOUTHEAST COASTAL OCEAN OBSERVING
INTEGRATED OCEAN OBSERVING SYSTEM (IOOS)	11.012		REGIONAL ASSOCIATION
	44.042		THE SOUTHEAST COASTAL OCEAN OBSERVING
	11.012		REGIONAL ASSOCIATION
CLUSTER GRANTS	11.020		
BIPARTISAN BUDGET ACT OF 2018	11.022		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
	11.303		SERVICE FOUNDATION, INC.
CONOMIC DEVELOPMENT TECHNICAL ASSISTANCE	11.303		
RADE ADJUSTMENT ASSISTANCE FOR FIRMS	11.313		
NTERJURISDICTIONAL FISHERIES ACT OF 1986	11.407		
SEA GRANT SUPPORT	11.417		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
	11.417		NORTH CAROLINA STATE UNIVERSITY
	11.417		SOUTH CAROLINA SEA GRANT CONSORTIUM, INC.
	11.417		UNIVERSITY OF FLORIDA
	11.417		UNIVERSITY OF MISSISSIPPI
SEA GRANT SUPPORT	11.417		
COASTAL ZONE MANAGEMENT ADMINISTRATION AWARDS	11.419		
	11.115		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
COASTAL ZONE MANAGEMENT ADMINISTRATION AWARDS	11.419		SERVICE FOUNDATION, INC.
	11/110		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
COASTAL ZONE MANAGEMENT ADMINISTRATION AWARDS	11.419		SERVICE FOUNDATION, INC.
	11.419		UNIVERSITY OF MICHIGAN
COASTAL ZONE MANAGEMENT ESTUARINE RESEARCH RESERVES	11.420		
FISHERIES DEVELOPMENT AND UTILIZATION RESEARCH AND DEVELOPMENT GRANTS			
AND COOPERATIVE AGREEMENTS PROGRAM	11.427		SERVICE FOUNDATION, INC. GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
MARINE SANCTUARY PROGRAM	11.429		SERVICE FOUNDATION, INC.
VARINE SANCTOANT PROGRAM	11.429		SERVICE FOONDATION, INC.
CLIMATE AND ATMOSPHERIC RESEARCH	11.429		
	11.451		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
MARINE FISHERIES INITIATIVE	11.433		SERVICE FOUNDATION, INC.
COOPERATIVE FISHERY STATISTICS	11.434		
OUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM	11.434		
	11.439		
AARINE MAMMAL DATA PROGRAM	11.433		SOUTH ATLANTIC FISHERY MANAGEMENT COUNCI
	11.459		
REGIONAL FISHERY MANAGEMENT COUNCILS VEATHER AND AIR QUALITY RESEARCH	11.459 11.468		ELORIDA STATE LINIVERSITY
REGIONAL FISHERY MANAGEMENT COUNCILS VEATHER AND AIR QUALITY RESEARCH APPLIED METEOROLOGICAL RESEARCH	11.468		FLORIDA STATE UNIVERSITY
REGIONAL FISHERY MANAGEMENT COUNCILS NEATHER AND AIR QUALITY RESEARCH APPLIED METEOROLOGICAL RESEARCH CONGRESSIONALLY IDENTIFIED AWARDS AND PROJECTS	11.468 11.469		FLORIDA STATE UNIVERSITY CONSORTIUM FOR OCEAN LEADERSHIP
REGIONAL FISHERY MANAGEMENT COUNCILS VEATHER AND AIR QUALITY RESEARCH APPLIED METEOROLOGICAL RESEARCH CONGRESSIONALLY IDENTIFIED AWARDS AND PROJECTS JNALLIED SCIENCE PROGRAM	11.468 11.469 11.472		CONSORTIUM FOR OCEAN LEADERSHIP
REGIONAL FISHERY MANAGEMENT COUNCILS VEATHER AND AIR QUALITY RESEARCH APPLIED METEOROLOGICAL RESEARCH CONGRESSIONALLY IDENTIFIED AWARDS AND PROJECTS JNALLIED SCIENCE PROGRAM UNALLIED SCIENCE PROGRAM	11.468 11.469 11.472 11.472		
REGIONAL FISHERY MANAGEMENT COUNCILS NEATHER AND AIR QUALITY RESEARCH APPLIED METEOROLOGICAL RESEARCH CONGRESSIONALLY IDENTIFIED AWARDS AND PROJECTS JNALLIED SCIENCE PROGRAM	11.468 11.469 11.472		CONSORTIUM FOR OCEAN LEADERSHIP

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
9500068554		\$74,674	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,522
E1746		\$67,673	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,522
LLA201803		\$36,048	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB00001399		\$10,774	\$308,316	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$943,248,745	\$3,542,298,772			
MML 105-320		\$10,862	\$852,434	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$24,987	\$841,572	\$852,434	RESEARCH AND DEVELOPMENT	\$1,033,282,52
NA16NOS0120028		\$25,938	\$304,116	N/A	\$0
005.16(028)GATECH.FZ.GLD.1		\$45,223	\$304,116	RESEARCH AND DEVELOPMENT	\$1,033,282,522
IOOS.16(028)UGA/SKIO.P#3		\$155,655	\$304,116	RESEARCH AND DEVELOPMENT	\$1,033,282,522
IOOS16028UGASKIOCE		\$45,827	\$304,116	RESEARCH AND DEVELOPMENT	\$1,033,282,522
IOOS16028UGASKIODS		\$27,573	\$304,116	RESEARCH AND DEVELOPMENT	\$1,033,282,522
IOOS16028UGASNOA		\$3,900	\$304,116	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$115,192	\$115,192	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$579,614	\$579,614	N/A	\$(
63828383-2		\$104,823	\$222,796	N/A	\$0
		\$117,973	\$222,796	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$434,303	\$1,196,734	\$1,196,734	N/A	\$0
		\$150,003	\$150,003	N/A	\$0
63828383-3		\$132,057	\$1,903,047	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2016-1997-02		\$20,106	\$1,903,047	RESEARCH AND DEVELOPMENT	\$1,033,282,522
ASE1B		\$3,549	\$1,903,047	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON009495 1808010		\$34,149 \$18,333	\$1,903,047 \$1,903,047	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
1808010	\$104,861	\$1,694,853	\$1,903,047	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	Ş10 4 ,801	\$2,450,389	\$2,554,951	N/A	\$1,033,202,322
39G8490		\$16,088	\$2,554,951	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-4		\$50,810	\$2,554,951	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBK00011125	\$25,000	\$37,664	\$2,554,951	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$620,945	\$620,945	N/A	\$(
63828383-5		\$313	\$313	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-6		\$8,484	\$44,003	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$35,519	\$44,003	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$400,950	\$400,950	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-7		\$16,528	\$16,528	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$19,978	\$19,978	N/A	\$(
		\$61,482	\$61,482	N/A	\$(
SA-16-02-CA & SA 17 02 CA		\$26,708	\$26,708 \$69,047	N/A	\$(\$0
SA-16-02-GA & SA-17-02-GA		<i>\$69,047</i> \$52,329	<i>\$69,047</i> \$52,329	N/A RESEARCH AND DEVELOPMENT	\$1,033,282,522
R01856		\$26,774	\$52,329 \$26,774	RESEARCH AND DEVELOPMENT	\$1,033,282,522
NA07SEC4690001		\$20,774	\$20,774 \$5,962	N/A	\$1,033,282,322 \$0
		\$931,539	\$939,378	N/A	\$(
MML175343B	\$7,839	\$7,839	\$939,378	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$131,525	\$131,525	N/A	\$0
		\$728,078	\$728,078	N/A	\$0
NA11SEC4810002		\$207,114	\$207,114	RESEARCH AND DEVELOPMENT	\$1,033,282,522

	Federal CFDA	Additional Award Identification	Name of Funder Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
TATE AND LOCAL IMPLEMENTATION GRANT PROGRAM	11.549		CENEDCE
MEASUREMENT AND ENGINEERING RESEARCH AND STANDARDS	11.609		GENEDGE
	11 000		CALIFORNIA MANUFACTURING TECHNOLOGY
MEASUREMENT AND ENGINEERING RESEARCH AND STANDARDS MEASUREMENT AND ENGINEERING RESEARCH AND STANDARDS	11.609 11.609		CONSULTING LEHIGH UNIVERSITY
EASUREMENT AND ENGINEERING RESEARCH AND STANDARDS	11.609		LEHIGH UNIVERSITY
ANUFACTURING EXTENSION PARTNERSHIP	11.609		
	11.011		NATIONAL INSTITUTE FOR INNOVATION IN
ARRANGEMENTS FOR INTERDISCIPLINARY RESEARCH INFRASTRUCTURE	11.619		MANUFACTURING BIOPHARMACEUTICALS
ARRANGEMENTS FOR INTERDISCIPLINARY RESEARCH INFRASTRUCTURE	11.619		UNIVERSITY OF DELAWARE
IENCE, TECHNOLOGY, BUSINESS AND/OR EDUCATION OUTREACH	11.620		
INORITY BUSINESS RESOURCE DEVELOPMENT	11.802		
BDA BUSINESS CENTER	11.805		
ARINE DEBRIS PROGRAM	11.999		
ITAL DEPARTMENT OF COMMERCE			
EPARTMENT OF DEFENSE			
QUATIC PLANT CONTROL	12.100		
QUATIC PLANT CONTROL	12.100		
ACH EROSION CONTROL PROJECTS	12.101		
AYMENTS TO STATES IN LIEU OF REAL ESTATE TAXES	12.112		
ATE MEMORANDUM OF AGREEMENT PROGRAM FOR THE REIMBURSEMENT OF	42.442		
CHNICAL SERVICES	12.113		
COLLABORATIVE RESEARCH AND DEVELOPMENT	12.114		UNIVERSITY OF MICHIGAN
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		AMEWAS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300 12.300		BAE SYSTEMS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		J.F. TAYLOR, INC. JACOBS TECHNOLOGY, INC.
DASIC AND APPLIED SCIENTIFIC RESEARCH	12.500		KENNESAW STATE UNIVERSITY RESEARCH AND
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		SERVICE FOUNDATION
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		PHYSICAL OPTICS CORPORATION
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		SOAR TECHNOLOGY, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		ADVANCED CONDUCTOR TECHNOLOGIES, LLC
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		AMERICAN SYSTEMS
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		AMEWAS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		BOSTON CHILDREN'S HOSPITAL
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		CINTEL, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		COGNITIVE ENGINEERING RESEARCH INSTITUT
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		COLUMBIA UNIVERSITY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		CONTINUUM DYNAMICS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		CONTINUUM DYNAMICS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		CRAFT TECH
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		DYNETICS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		DYNETICS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		DYNETICS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		DYNETICS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		ENGILITY CORPORATION
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		ENGILITY CORPORATION
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		ENGILITY CORPORATION
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		FLORIDA STATE UNIVERSITY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		GIRD SYSTEMS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		INNOVEERING, LLC
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		JACOBS TECHNOLOGY, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300 12.300		JACOBS TECHNOLOGY, INC. LEIDOS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		LEIDOS, INC. LEIDOS, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		LEIDOS, INC. LUNA INNOVATIONS INCORPORATED
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		LUNA INNOVATIONS INCORPORATED
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		NORTHROP GRUMMAN CORPORATED
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		PENDAR TECHNOLOGIES, LLC
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		PHYSICAL OPTICS CORPORATION
	12.300		PRINCETON UNIVERSITY
BASIC AND APPLIED SCIENTIFIC RESEARCH			

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
		\$96,938	\$96,938	N/A	
138138		\$40,960	\$1,180,287	N/A	
70NANB16H313		\$52,607	\$1,180,287	RESEARCH AND DEVELOPMENT	\$1,033,282,5
543580-78002		\$45,793	\$1,180,287	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$118,125	\$1,040,927	\$1,180,287	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	. ,	\$3,032,905	\$3,032,905	N/A	
PC1.0-26-01		\$105,840	\$146,011	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PC1.0-26		\$40,171	\$146,011	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	¢65.000	\$98,801	\$98,801	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$65,000	\$319,410 \$266,094	\$319,410 \$266,094	N/A N/A	
		\$2,053	\$2,053	RESEARCH AND DEVELOPMENT	\$1,033,282,
		<i>\$2,000</i>	<i>\$2,000</i>		<i><i><i>q</i>1,033,202,</i></i>
	\$780,115	\$16,372,500			
		\$340,377	\$380,269	N/A	
		\$39,892	\$380,269	RESEARCH AND DEVELOPMENT	\$1,033,282,
		\$28,979	\$28,979	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$2,128,610	\$2,128,610	\$2,128,610	N/A	
		\$541,543	\$541,543	N/A	
3003179759		\$113,015	\$113,015	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PO17-00842		\$9,626	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
975057		\$16,145	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
205576		\$103	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
NTP 9/8/17		\$95,263	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
326020115H		\$74	\$87,704,305	N/A	<i>61</i> 000 000
10003-GTRI AGR DTD 05/26/17		-\$1,082 \$38,738	\$87,704,305 \$87,704,305	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
N6833518C0151		\$25,000	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
S19025_1		\$138,649	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
PO18-01655		\$333,042	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON008608		\$0	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGT DTD OCT 16, 2017		\$15	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
CERI GTRC 2017-2382		-\$6,629	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGT DTD AUGUST 2, 2017		\$33,603	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGT DTD MAY 27, 2017		\$16,731	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGT DTD OCT 10, 2017		\$60,606	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
N68335-18-C-0850 DI-SC-17-22-NTP		\$38,393 -\$275	\$87,704,305 \$87,704,305	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
DI-SC-17-22-NTF DI-SC-18-64		\$619,985	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
DI-SC-19-40/TO 0001		\$675,771	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
HHM402-15-D-0004		\$195,901	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
PO-0016726		\$1,483	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PO-0017110		-\$12,823	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
PO-0017302		\$225,365	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
R02079		\$22,997	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
M67854-18-P-6537		\$6,337	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGT DTD NOV 1, 2017		\$10,061	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
1172-384-15-03		\$319,570	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CES-III-13-043 P010217707		\$915,949 \$22,950	\$87,704,305 \$87,704,305	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5
P010217707 P010217722		\$22,950 \$78,593	\$87,704,305 \$87,704,305	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
AGR DTD 12/19/16		\$78,595	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
N68335-18-C-0402		\$44,423	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
7500159934		\$1,406,177	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGR DTD 09/01/2017		\$610	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$980,673	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
POC#10201-GTRI		2200,075	<i>çci</i>) <i>i</i> c i) <i>c</i> co		<i>\(\)</i>

	Federal CFDA	Additional Award Identification	Name of Funder Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		RAYTHEON COMPANY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		RAYTHEON COMPANY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		RICE UNIVERSITY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		SAIC, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		SAIC, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300 12.300		SOAR TECHNOLOGY, INC. SOAR TECHNOLOGY, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		TEKLA RESEARCH, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		THE BOEING COMPANY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		TUFTS UNIVERSITY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF CALIFORNIA, SAN DIEGO
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF CALIFORNIA, SAN DIEGO
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF CENTRAL FLORIDA
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF CONNECTICUT
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF CONNECTICUT
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF MARYLAND
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF NORTH TEXAS
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF PITTSBURGH
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF SOUTHERN CALIFORNIA
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF VIRGINIA
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		UNIVERSITY OF WASHINGTON
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		WAKE FOREST UNIVERSITY
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		ZETA ASSOCIATES, INC.
BASIC AND APPLIED SCIENTIFIC RESEARCH	12.300		,
SCIENTIFIC RESEARCH - COMBATING WEAPONS OF MASS DESTRUCTION	12.351		EMORY UNIVERSITY
SCIENTIFIC RESEARCH - COMBATING WEAPONS OF MASS DESTRUCTION	12.351		MONTEREY INSTITUTE OF INTERNATIONAL STUDIES
SCIENTIFIC RESEARCH - COMBATING WEAPONS OF MASS DESTRUCTION	12.351		
ROTC LANGUAGE AND CULTURE TRAINING GRANTS	12.357		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
ROTC LANGUAGE AND CULTURE TRAINING GRANTS	12.357		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
ROTC LANGUAGE AND CULTURE TRAINING GRANTS	12.357		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
RESEARCH ON CHEMICAL AND BIOLOGICAL DEFENSE	12.360		
MILITARY CONSTRUCTION, NATIONAL GUARD	12.400		
NATIONAL GUARD MILITARY OPERATIONS AND MAINTENANCE (O&M) PROJECTS	12.401		
NATIONAL GUARD CHALLENGE PROGRAM	12.404		
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		ALBERT EINSTEIN COLLEGE OF MEDICINE
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		AUGUSTA BIOMEDICAL RESEARCH CORPORATION
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		DREXEL UNIVERSITY
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		EMORY UNIVERSITY
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		EMORY UNIVERSITY
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		GENEVA FOUNDATION
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		MISSISSIPPI STATE UNIVERSITY
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		ROCKEFELLER UNIVERSITY
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		SHEPHERD CENTER
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		UNIVERSITY OF ARIZONA
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		UNIVERSITY OF ARKANSAS
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		WAKE FOREST UNIVERSITY
MILITARY MEDICAL RESEARCH AND DEVELOPMENT	12.420		
BASIC SCIENTIFIC RESEARCH	12.431		DYNETICS, INC.
BASIC SCIENTIFIC RESEARCH	12.431		JACOBS TECHNOLOGY, INC.
BASIC SCIENTIFIC RESEARCH	12.431		LEIDOS, INC.
BASIC SCIENTIFIC RESEARCH	12.431		METOVA FEDERAL, LLC
BASIC SCIENTIFIC RESEARCH	12.431		NATIONAL ADVANCED MOBILITY CONSORTIUM
BASIC SCIENTIFIC RESEARCH	12.431		NORTH CAROLINA STATE UNIVERSITY
BASIC SCIENTIFIC RESEARCH	12.431		SAIC, INC.
BASIC SCIENTIFIC RESEARCH	12.431		SIGNATURE RESEARCH, INC.
BASIC SCIENTIFIC RESEARCH	12.431		SOUTH CAROLINA RESEARCH AUTHORITY
BASIC SCIENTIFIC RESEARCH	12.431		
BASIC SCIENTIFIC RESEARCH	12.431		ADVANCED SYSTEMS & TECHNOLOGIES, INC.
BASIC SCIENTIFIC RESEARCH	12.431		ADVANCED SYSTEMS & TECHNOLOGIES, INC.
BASIC SCIENTIFIC RESEARCH	12.431		ATA AEROSPACE, LLC
BASIC SCIENTIFIC RESEARCH	12.431		BLACK RIVER SYSTEMS COMPANY
BASIC SCIENTIFIC RESEARCH	12.431		CORNELL UNIVERSITY
BASIC SCIENTIFIC RESEARCH	12.431		DIGITAL ANALOG INTEGRATION, INC.

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

ldentifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
4201706984		\$2,860	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
4201913471		\$102,991	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
R18684		\$257,820	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
P010236291		\$388,325	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
P010238931		\$320,680	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SC-18-015		\$55,652	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SC-19-005		\$46,422	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
TRI-18-007		\$28,913	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,5
1451798		\$158,555	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
ONR029		\$155,790	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
#108547341		\$11,940	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
43019109		\$99,951	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON005059		\$281,957	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
176432		\$152,237	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
184733 43832-Z8995001		\$428,777 \$78,015	\$87,704,305	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,
43832-28995001 GF270701		\$14,714	\$87,704,305 \$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282, \$1,033,282,
18-3437		\$39,902	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
51110592		\$41,623	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
GG12136.159334		\$114,548	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
#UWSC9065		\$99,667	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
#330607		\$92,321	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
090051SC-GTARC-01		\$270,148	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$16,580,935	\$78,109,010	\$87,704,305	RESEARCH AND DEVELOPMENT	\$1,033,282
A008117	<i>\\</i> 20,000,000	\$176,844	\$3,073,015	RESEARCH AND DEVELOPMENT	\$1,033,282,
DTRA GTARC 1		\$19,225	\$3,073,015	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$1,069,861	\$2,876,946	\$3,073,015	RESEARCH AND DEVELOPMENT	\$1,033,282
PG01801-GT-03-PG0-051-P01		\$367,988	\$696,406	N/A	
PG01801-UNG-23		\$242,135	\$696,406	N/A	
2603-UNG-21-GO-051		\$86,283	\$696,406	RESEARCH AND DEVELOPMENT	\$1,033,282,
		-\$350	-\$350	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$1,636,016	\$1,636,016	N/A	
		\$40,532,569	\$40,532,569	N/A	
		\$16,183,771	\$16,183,771	N/A	
321171		\$107,696	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282
SUB 32372 W81XWH-16-1-0413		\$76,841	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUBAWARD NO. 840030_GU		\$34,735	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
A083981		\$39,311	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUBAWARD A089261		\$3,185	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
S1100002		\$6,416	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
183905.310605.01		\$9,579	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282
W81XW1710290		\$69,660	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282
CON007436		\$29,515	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUBAWARD NO. 488095		\$3,120	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282
SA1711151		\$67,032	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
084199-16474		\$33,753	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
WFUHS 441052 ER-02	652.424	\$70,643	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282,
60.600004	\$53,131	\$2,796,681	\$3,348,167	RESEARCH AND DEVELOPMENT	\$1,033,282
SB600004		\$24,072	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282
1153-01-00-02		\$40,360	\$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
4102781916 135954		\$2,703 \$2,539	\$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282, \$1,033,282,
70-201708 T01		\$2,539 \$1,109,922	\$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282
W900KK-16-R-0013		\$1,109,922 \$271,858	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
4600005751/6		-\$1,863	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGR DTD 04/11/17		\$155,490	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
017-311 PROJECT AGREEMENT 02		\$1,801,002	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
		\$1,801,002	\$83,047,851	N/A	<i>~</i> 1,033,282,
2017-311A PA 5		\$9,547,249	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282
PROJECT AGREEMENT NO.: 1		\$54,276	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGT DTD OCT 13, 2017		\$114,256	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGR DTD 10/17/2017		\$450	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
76091-10525		\$451,261	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,
AGMT DTD 18-NOV-2015		\$83,385	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,

Endoral Awarding Agonov/Orogram Title	Federal CFDA Number	Additional Award Identification	Name of Funder Pass-Through
Federal Awarding Agency/Program Title		(Optional)	Entity
BASIC SCIENTIFIC RESEARCH	12.431		GENERAL ATOMICS
BASIC SCIENTIFIC RESEARCH	12.431 12.431		GIRD SYSTEMS, INC.
BASIC SCIENTIFIC RESEARCH	12.431		GRAF RESEARCH, LLC KENNESAW STATE UNIVERSITY RESEARCH AND
BASIC SCIENTIFIC RESEARCH	12.431		SERVICE FOUNDATION
BASIC SCIENTIFIC RESEARCH BASIC SCIENTIFIC RESEARCH	12.431		METOVA FEDERAL, LLC
BASIC SCIENTIFIC RESEARCH BASIC SCIENTIFIC RESEARCH	12.431		MILLENNITEK. LLC
BASIC SCIENTIFIC RESEARCH	12.431		NEWTON CONSULTING & ENGINEERING, INC.
BASIC SCIENTIFIC RESEARCH	12.431		NORTHWESTERN UNIVERSITY
BASIC SCIENTIFIC RESEARCH	12.431		NORTHWESTERN UNIVERSITY
BASIC SCIENTIFIC RESEARCH	12.431		RADIANCE TECHNOLOGIES, INC.
BASIC SCIENTIFIC RESEARCH	12.431		SAIC, INC.
BASIC SCIENTIFIC RESEARCH	12.431		SCIENTIFIC RESEARCH CORPORATION
BASIC SCIENTIFIC RESEARCH	12.431		SCIENTIFIC RESEARCH CORPORATION
BASIC SCIENTIFIC RESEARCH	12.431		SCIENTIFIC RESEARCH CORPORATION
BASIC SCIENTIFIC RESEARCH	12.431		SCIENTIFIC RESEARCH CORPORATION
BASIC SCIENTIFIC RESEARCH	12.431		SCIENTIFIC RESEARCH CORPORATION
BASIC SCIENTIFIC RESEARCH	12.431		STANFORD UNIVERSITY
BASIC SCIENTIFIC RESEARCH	12.431		STEVENS INSTITUTE OF TECHNOLOGY
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF CALIFORNIA, LOS ANGELES
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF MARYLAND
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF MICHIGAN
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF PENNSYLVANIA
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF TEXAS AT AUSTIN
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF WASHINGTON
BASIC SCIENTIFIC RESEARCH	12.431		UNIVERSITY OF WASHINGTON
BASIC SCIENTIFIC RESEARCH	12.431		UT-BATTELLE, LLC
ASIC SCIENTIFIC RESEARCH	12.431		
THE LANGUAGE FLAGSHIP GRANTS TO INSTITUTIONS OF HIGHER EDUCATION	12.550		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
THE LANGUAGE FLAGSHIP GRANTS TO INSTITUTIONS OF HIGHER EDUCATION	12.550		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
THE LANGUAGE FLAGSHIP GRANTS TO INSTITUTIONS OF HIGHER EDUCATION	12.550		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
THE LANGUAGE FLAGSHIP GRANTS TO INSTITUTIONS OF HIGHER EDUCATION	12.550		INSTITUTE OF INTERNATIONAL EDUCATION, INC.
VVITATIONAL GRANTS FOR MILITARY-CONNECTED SCHOOLS	12.557		
COMMUNITY INVESTMENT	12.600		MIDDLE GEORGIA REGIONAL COMMISSION
OMMUNITY ECONOMIC ADJUSTMENT ASSISTANCE FOR REALIGNMENT OR CLOSURE OF A			
ILITARY INSTALLATION	12.607		
OMMUNITY ECONOMIC ADJUSTMENT ASSISTANCE FOR COMPATIBLE USE AND JOINT			
AND USE STUDIES	12.610		
OMMUNITY ECONOMIC ADJUSTMENT ASSISTANCE FOR REDUCTIONS IN DEFENSE NDUSTRY EMPLOYMENT	12.611		
COMMUNITY ECONOMIC ADJUSTMENT ASSISTANCE FOR REDUCTIONS IN DEFENSE			
INDUSTRY EMPLOYMENT	12.611		GOODWYN, MILLS AND CAWOOD
COMMUNITY ECONOMIC ADJUSTMENT ASSISTANCE FOR REDUCTIONS IN DEFENSE			
INDUSTRY EMPLOYMENT	12.611		MIDDLE GEORGIA REGIONAL COMMISSION
CONOMIC ADJUSTMENT ASSISTANCE FOR STATE GOVERNMENTS	12.617		
ROOPS TO TEACHERS GRANT PROGRAM	12.620		
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SERVICE FOUNDATION, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		LEIDOS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		PHOSPHORTECH CORPORATION
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		RAYTHEON COMPANY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		RAYTHEON COMPANY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SMARTRONIX, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SOUTH CAROLINA RESEARCH AUTHORITY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SYSTEM HIGH CORPORATION
ASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		
, , ,	12.630		ALION SCIENCE AND TECHNOLOGY CORPORATIO

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

Pass-Through Entity 4500076278 W15QKN-15-9-1004 W56KGU-18-C-0020 W911NF-15-2-0107 CBL-240 AGR DTD 09/25/2017 NCEGTRI0316R23G CON010459 CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 T0-004 SR20180865 SR20180986 #6189293-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078	Provided to Sub-Recipients	Federal Expenditures \$19,174 \$310,289 \$158,910 \$7,735 \$50,756 \$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$11,243 \$2 \$256,207 \$51,485 \$173,935	Program Total \$83,047,851 \$8	Cluster Name RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	Cluster Total \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
W15QKN-15-9-1004 W56KGU-18-C-0020 W911NF-15-2-0107 CBL-240 AGR DTD 09/25/2017 NCEGTRI0316R23G CON01050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180986 SR20180986 \$R20180986 \$GS20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$310,289 \$158,910 \$7,735 \$50,756 \$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
W56KGU-18-C-0020 W911NF-15-2-0107 CBL-240 AGR DTD 09/25/2017 NCEGTRI0316R23G CON010459 CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$158,910 \$7,735 \$50,756 \$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
W911NF-15-2-0107 CBL-240 AGR DTD 09/25/2017 NCEGTRI0316R23G CON010459 CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$7,735 \$50,756 \$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
CBL-240 AGR DTD 09/25/2017 NCEGTRI0316R23G CON010459 CON01050 185-1329 460005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180865 SR20180865 \$R20180986 #61892934-130810 2102929-02; WRT-1002 10006SA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$50,756 \$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
CBL-240 AGR DTD 09/25/2017 NCEGTRI0316R23G CON010459 CON01050 185-1329 460005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180865 SR20180865 \$R20180986 #61892934-130810 2102929-02; WRT-1002 10006SA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$50,756 \$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AGR DTD 09/25/2017 NCEGTRI0316R23G CON010459 CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$288,035 \$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
NCEGTRI0316R23G CON010459 CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180956 \$R20180986 #61892934-130810 2102929-02; WRT-1002 10006SA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$94 \$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
CON010459 CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$290,911 \$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
CON011050 185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$14,418 \$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
185-1329 4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$176,610 -\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
4600005751/5 AGR DATED 5/14/18 SR20160954 TO-004 SR20180211 (JP03) SR20180986 \$61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		-\$1,288 \$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
SR20160954 TO-004 SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$910,309 \$1,243 \$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522
SR20180211 (JP03) SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$2 \$256,207 \$51,485	\$83,047,851 \$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SR20180865 SR20180986 #61892934-130810 2102929-02; WRT-1002 10006SA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$256,207 \$51,485	\$83,047,851		
SR20180986 #61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$51,485			\$1 022 282 523
#61892934-130810 2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078			602 047 054	RESEARCH AND DEVELOPMENT	\$1,033,202,322
2102929-02; WRT-1002 1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$173 935	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1000GSA785 078122-17266 46331-28425103 3002805832 572622 UTA17-001078		<i>ç</i> 17 <i>3,333</i>	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
078122-17266 46331-28425103 3002805832 572622 UTA17-001078		\$8,181	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
46331-28425103 3002805832 572622 UTA17-001078		\$106,546	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
3002805832 572622 UTA17-001078		\$142,378	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
572622 UTA17-001078		\$31,362	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UTA17-001078		\$107,070	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$653,674	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$185	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
JWSC7915 P.O. # BPO 3109		\$92,089	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UWSC9283		\$90,788	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
US001-0000560752	¢10 715 402	\$14,086	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0054116414	\$10,715,403	\$65,414,520	\$83,047,851	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0054UGA11 0054-UGA-11-AM-280-P05		\$36,300	\$1,059,446	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
0054UGA11P	\$92,502	\$105,825 \$492,621	\$1,059,446 \$1,059,446	RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
0054-UNG-16-CHN-280	\$92,502	\$492,021	\$1,059,446	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0004 0110 0111 200		\$5,972	\$5,972	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AWD00009921		\$39,592	\$39,592	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$170,434	\$170,434	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		. ,	. ,		
		\$778,911	\$778,911	N/A	\$0
		\$198,803	\$240,480	N/A	\$0
CR-1440-17-02		\$5,000	\$240,480	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5555701		\$36,677	\$240,480	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5555701		\$163,497	\$163,497	N/A	\$1,055,282,522
	\$166,743	\$166,743	\$166,743	N/A	\$i
DI-SC-15-05 TO4	<i>Q</i> 200 <i>JJ</i> 10	\$930,967	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DI-SC-16-01 TASK ORDER 81		\$232,165	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DI-SC-16-01/TO 72		\$372	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DI-SC-16-01/TO 73		\$116,968	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DI-SC-16-01/TO 74		-\$1,722	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DI-SC-16-01/TO 76		\$5,407	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-43		\$28,270	\$140,501,732	N/A	\$0
P010192863		\$1,571,137	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AGR DTD 8/4/2017		\$188,255	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0010102015		\$726	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
4201579340		\$22	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
17R14S, TASK ORDER #01		\$2,855,341	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
ROJECT TASK ASSIGNMENT 1		\$0	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
O # HQ003417F0283, RT-181		-\$12	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DAR 621		\$57,298	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$755,734 <i>\$411,828</i>	\$140,501,732 <i>\$140,501,732</i>	N/A RESEARCH AND DEVELOPMENT	\$0 <i>\$1,033,282,522</i>

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through
		(Optional)	Entity
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		ATC-NY, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		BAE SYSTEMS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		BAE SYSTEMS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		BAE SYSTEMS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		BAE SYSTEMS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		CALIFORNIA INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		CAMBRIDGE SYSTEMATICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		CHARLES RIVER ANALYTICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		CHARLES RIVER ANALYTICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DNC PARKS & RESORTS AT KSC, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DUKE UNIVERSITY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
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BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DYNETICS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		DZYNE TECHNOLOGIES, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		EMORY UNIVERSITY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		ENGILITY CORPORATION
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		EXCET, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		FLORIDA A&M UNIVERSITY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		HONEYWELL INTERNATIONAL, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		HONEYWELL INTERNATIONAL, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		JACOBS TECHNOLOGY, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		LEIDOS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		LEIDOS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		LOCKHEED MARTIN CORPORATION
	12.630		
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING			MACAULAY-BROWN, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		MACAULAY-BROWN, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		MICHIGAN STATE UNIVERSITY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		MICROSEMI CORPORATION
			MIDDLEBURY INSTITUTE OF INTERNATIONAL STUE
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		AT MONTEREY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		MORSECORP, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		MORSECORP, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		NATIONAL SCIENCE TEACHERS ASSOCIATION
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		NORTHROP GRUMMAN CORPORATION
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		NOVATEUR RESEARCH SOLUTIONS, LLC
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		OCEUS NETWORKS, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		OHIO STATE UNIVERSITY
			OPTOXENSE, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		PHOSPHORTECH CORPORATION
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		POLY-ORTH INTERNATIONAL
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		QUANTITECH, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		RADIANCE TECHNOLOGIES, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SAIC, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SAIC, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SIEMENS CORPORATION
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SPACE DYNAMICS LABORATORY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SPACEWORKS ENTERPRISES, INC.
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		STEVENS INSTITUTE OF TECHNOLOGY SYRACUSE UNIVERSITY RESEARCH CORPORATION,
	12.630		(SRC)
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630 12.630		(SRC) SYSTEM HIGH CORPORATION

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal	Federal Program Total	Cluster Name	Cluster Total
W56LGU-16-C-0083	Sub-Recipients	Expenditures \$23,932	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,
957935		\$25,952 \$1,532	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,
992051		\$242,525	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,
DV PROJECT FORM 10/31/2018		\$639,060	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
AGR DTD 11/15/2018		\$39,983	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
\$404649		\$67,699	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
TBD TASK ORDER # 2		-\$1,180	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
140D0419C0048		\$60,646	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
IARPA-BAA-17-08		\$60,803	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
138132		\$17,622	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
313-0639		\$95,102	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
518		\$151,761	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
543		\$2,693	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DI-SC-15-05 TASK ORDER NO 06		\$87,567	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DI-SC-15-05 TASK ORDER NO 08		\$5,970	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DI-SC-15-05/TO7 DI-SC-16-01 TO 117		\$17,376	\$140,501,732	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282
DI-SC-16-01 TO 117		\$117,338 \$221,403	\$140,501,732 \$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DI-SC-16-01 TO 128		\$121,763	\$140,501,732	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282
DI-SC-16-01/TO 91		\$321,514	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DRP006-SUB GT001; PHASE 2		\$66,232	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
T803614		\$178,574	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
PO-0016317		\$722	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
PO 7607		\$39,999	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
C4987		\$17,850	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
3501700183E		\$276,060	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
3501701149E		\$3,407,803	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
1153-01-01-06		\$47,966	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
10170252-1		\$99	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
AGR DTD 09/21/2018		\$5,119	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
4103970772		\$77,919	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DSC 2124-01		-\$4,158	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
DSC2134-01		\$137,940	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
PB92205BV-02		\$596,987	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
PB92205BV-01		\$182,992	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
CWMD-GTARC 1		\$37,700	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
ICARUS-2-01		\$48,051	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
ICARUS-3-01		\$103,987	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
727325		\$19,500	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
8140000981		\$421,114	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
SUBK-NGA172-003		\$52,458	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
P100		\$1,694,917	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
0063184 (FORMERLY 60057838)		\$126,687	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
20180196		\$159,081	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
AGE DTD 03/10/16		\$225,517	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
AGRMT DTD 12/23/16		\$135,930	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
47QFSA18F0005 16S-3074		\$49,952 \$125,528	\$140,501,732 \$140,501,732	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282
4600005751/4		\$125,528	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
PO10105875		-\$406	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
GRP122-01		\$65,047	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
CP0053206		\$93,238	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
AGT DTD APR 9, 2018		\$25,269	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
2102748-03 RT 182		\$23,391	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
2102765-01		\$16,069	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$47,651	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
2102816-01		\$197,393	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
2102816-01 2102848-01		\$36,548	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
		<i>\$30,340</i>			
2102848-01		\$48,865	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282
2102848-01 2102876-02			\$140,501,732 \$140,501,732	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	
2102848-01 2102876-02 HQ003418F0089 RT 195		\$48,865			\$1,033,282 \$1,033,282 \$1,033,282

	Federal	Additional Award	Name of Funder
	CFDA	Identification	Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		THE BOEING COMPANY THE NATIONAL CENTER FOR MANUFACTURING
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		SCIENCES
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UI LABS
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UI LABS
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UNIVERSITY OF CALIFORNIA
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UNIVERSITY OF NOTRE DAME
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UNIVERSITY OF NOTRE DAME
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630 12.630		UNIVERSITY OF NOTRE DAME UNIVERSITY OF NOTRE DAME
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UNIVERSITY OF PENNSYLVANIA
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		UTAH STATE UNIVERSITY
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		WEST COAST SOLUTIONS
BASIC, APPLIED, AND ADVANCED RESEARCH IN SCIENCE AND ENGINEERING	12.630		
CIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) EDUCATIONAL			
PROGRAM: SCIENCE, MATHEMATICS AND RESEARCH FOR TRANSFORMATION (SMART)	12.631		
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		CLEAR CREEK APPLIED TECHNOLOGIES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		MATRIX RESEARCH, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		NORTHROP GRUMMAN CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		RELIANCE TEST & TECHNOLOGY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SCIENTIFIC RESEARCH CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SENTAR, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SOSSEC, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SOUTHWEST RESEARCH INSTITUTE
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		AGING AIRCRAFT CONSULTING, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		ALION SCIENCE AND TECHNOLOGY CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800 12.800		APPLIED RESEARCH SOLUTIONS ATA AEROSPACE, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		ATA AEROSPACE, LLC ATC MATERIALS
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		AURA TECHNOLOGIES, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		AURORA FLIGHT SCIENCES
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		AZIMUTH CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		AZIMUTH CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		BAE SYSTEMS, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		BERRIEHILL RESEARCH CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		BINGHAMTON UNIVERSITY, STATE UNIVERSITY OF NEW YORK
			BINGHAMTON UNIVERSITY, STATE UNIVERSITY OF
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		NEW YORK
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		BOOZ ALLEN HAMILTON, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		BOOZ ALLEN HAMILTON, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		CFD RESEARCH CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		CLARKSON AEROSPACE CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		CLEAR CREEK APPLIED TECHNOLOGIES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		COLUMBIA UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		CORVID TECHNOLOGIES, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		EXOANALYTIC SOLUTIONS
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		FLEXTECH ALLIANCE, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		FLORIDA INTERNATIONAL UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		FREEDOM PHOTONICS, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		HEWLETT PACKARD ENTERPRISE DEVELOPMENT LI
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		IMPACT TECHNOLOGIES, LLC INFOSCITEX CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800 12.800		INFOSCITEX CORPORATION INNOVATIVE ADVANCED MATERIALS, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		INNOVATIVE ADVANCED MATERIALS, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		IOWA STATE UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		JT4, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		KARAGOZIAN AND CASE, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		KARAGOZIAN AND CASE, INC. KBRWYLE
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		KBRWYLE
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		LOCKHEED MARTIN CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		LOCKHEED MARTIN CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		LUNA INNOVATIONS INCORPORATED

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
1542655		\$2,139	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
201726-130194		\$41,525	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0320170002		\$28,948	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0320170007		\$125,092	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
00010037		\$9,072	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
#203278GT-BAKIR		\$200,997	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
203278GT-KHAN		\$267,670	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
203278GT-NAEEMI		\$227,505	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
208107GT		\$455,729	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
575015		\$153,970	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
CP0049402		\$27,537	\$140,501,732	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGR DTD 4-20-18	\$5,399,826	<i>\$22,867</i> \$120,603,239	\$140,501,732 \$140,501,732	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	<i>\$1,033,282,52</i> \$1,033,282,52
		4040	4444		
1050 015 01 015		\$616	\$616	RESEARCH AND DEVELOPMENT	\$1,033,282,52
4050-015-01-015		\$123	\$217,571,468 \$217,571,468	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
ESCE-002 7500157027		\$313,544 \$237,573	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
R17N0095		\$237,573	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
TO SR20171847		\$1,342	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGR DTD 04/12/17		\$45,669	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
1 (PLA-0011)		\$23,829	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
J99080CT		\$66,483	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
S-124-001-004		\$155,292	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$239	\$217,571,468	N/A	5
AGR DTD 10/02/2017		\$78,862	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
SUB1148651-002		\$86,694	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
00115		\$97,295	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA9453-12-D-0285		\$52,422	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA8651-18-P-0054		\$41,986	\$217,571,468	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGR DTD 11/14/17 AVA-18-0012		\$11,234 \$121,148	\$217,571,468 \$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
238-5404-GIT2		\$112,432	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2385404UGAD2		\$5,516	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
994129		\$401,648	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
2204		-\$302	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
77723/1138629		\$144,624	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
81628/1147215-2		\$52,922	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
106445SB18		\$517,750	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
106445SB18/TO 3		\$361,680	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA945318P0238		\$65,000	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
13-S7700-02-C2		\$100,912	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
4050-015-01-021		\$1,891	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGT DTD NOVEMBER 27, 2017		\$58	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA8650-18-P-5047		\$41,675	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGT DTD APRIL 20, 2018		\$54,609	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
3 800009491-01UG		\$374,113 \$111,856	\$217,571,468 \$217,571,468	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
NA		\$45,000	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
CW2275049		\$96,266	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
\$1309A		\$1,065	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA865015D2516		\$181,803	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGT DTD AUGUST 25, 2017		\$194,318	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA650-19-P-2026		\$11,705	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
130186		\$98,774	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FA8240-18-C-7218		\$8,223	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGT DTD DECEMBER 23, 2016		\$113,118	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
APSC02292		\$35,827	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
LXS005518		\$11,806	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,52
4103577628 6574008559		\$26,245 \$965,493	\$217,571,468	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
3660-AFR-1S/GTARC		\$965,493 \$6,055	\$217,571,468 \$217,571,468	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800	(Optional)	,
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		LUNA INNOVATIONS INCORPORATED MAGEE TECHNOLOGIES, LLC (MTECH)
AINTONCE DEI ENSE RESEARCH SCIENCES PROONAM	12.800		MASSACHUSETTS INSTITUTE OF TECHNOLOGY.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		LINCOLN LABORATORY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		MASSTECH INNOVATIONS, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		MATRIX RESEARCH, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		MATRIX RESEARCH, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		MATRIX RESEARCH, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		NEXTFLEX
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		NORTHROP GRUMMAN CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		NORTHROP GRUMMAN CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		OHIO AEROSPACE INSTITUTE
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		OPTOXENSE, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		ORBITAL ATK, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		PENNSYLVANIA STATE UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		PENNSYLVANIA STATE UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		PURDUE UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		RAYTHEON COMPANY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		ROCCOR, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SCIENCE SYSTEMS AND APPLICATIONS, INC. (SSAI)
			SCIENTIFIC APPLICATIONS AND RESEARCH
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		ASSOCIATES, INC. (SARA)
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SOSSEC, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SPECTRAL ENERGIES, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SPECTRAL ENERGIES, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SPECTRAL ENERGIES, LLC
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SRI INTERNATIONAL
			STONY BROOK UNIVERSITY, STATE UNIVERSITY OF
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		NEW YORK
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		SURVICE ENGINEERING COMPANY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		THE BOEING COMPANY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		THE BOEING COMPANY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		TREX ENTERPRISES CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UES, INC.
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNITED TECHNOLOGIES CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNITED TECHNOLOGIES CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSAL TECHNOLOGY CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSAL TECHNOLOGY CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSAL TECHNOLOGY CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSAL TECHNOLOGY CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSITY OF CALIFORNIA
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSITY OF CENTRAL FLORIDA
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSITY OF HAWAI'I
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSITY OF HOUSTON-CLEAR LAKE
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UTAH STATE UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		VERUS RESEARCH
			VIRGINIA POLYTECHNIC INSTITUTE AND STATE
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		UNIVERSITY
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		WANG ELECTRO-OPTO CORPORATION
AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM	12.800		
LANGUAGE GRANT PROGRAM	12.900		
LANGUAGE GRANT PROGRAM	12.900		
MATHEMATICAL SCIENCES GRANTS	12.901		
MATHEMATICAL SCIENCES GRANTS	12.901		FULTON COUNTY
MATHEMATICAL SCIENCES GRANTS	12.901		
INFORMATION SECURITY GRANTS	12.902		
INFORMATION SECURITY GRANTS	12.902		UNIVERSITY OF UTAH
INFORMATION SECURITY GRANTS	12.902		
GENCYBER GRANTS PROGRAM	12.903		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
GENCYBER GRANTS PROGRAM	12.903		SERVICE FOUNDATION, INC.

Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
FA8650-18-P-5043		\$14,967	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,
N000197248P800		\$72,746	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282,
7000437192		\$69,038	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
FA8650-17-C-9104-GT		\$817	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-2014-011-02-03		\$146,865	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-2014-011-02-04		\$163,209	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
TASK ORDER 02-01		\$305,227	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
GREEMENT DATED 21-FEB-2017		\$185,058	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
FA8720-10-D-0001		\$356,363	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
MP00214577		\$15,652	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
OAI-PACE-17005 MOD#002		\$110,735	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
FA8650-18-P-2139		\$99,990	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
MP00175454		\$159	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
4791-GIT-AFOSR-0004		\$107,012	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
5676-GTRC-AFOSR-0017		\$177,211	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
#13000716-051		\$9,850	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
14787		\$587,849	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
FA8650-18-P-9211		\$5,885	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
DESP-093-RJ02-01		\$12,688	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
2207 000 1802 01		<i><i><i>ϕ</i>22)000</i></i>	<i>\(__\)</i>		<i>\$1,000,202</i>
ATP DTD 3/20/19		\$358,596	\$217.571.468	RESEARCH AND DEVELOPMENT	\$1,033,282
PLA-0046		\$156,353	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
FA8650-18-C-2001		\$39,201	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
SB1717-001-1		\$67,843	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
SB1819-001-1		\$52,910	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
19000270		\$91,061	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
AGR DTD 3/16/2017		\$83,400	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
TR SUBCONTRACT DTD 6/25/14		\$27,558	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
1404360		\$148,663	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
1636529		\$8 <i>3,995</i>	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
102963		\$37,000	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-111-048-001		\$32,613	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-953-21-MR015		\$94,073	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-953-21-MR016		\$174,675	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-953-21-MR019		\$80,000	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
S-977-028-003		\$31,166	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
17-S8602-02-C3		\$5,549	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
24102 TASK 24		\$119,134	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
165852-18F5828-19-16-C1		\$5,322	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
17-S7700-01-C4		\$121,489	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
17-S8401-03-C1		\$105,545	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
18-7900-0008-38-C11		\$17,431	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
#KK1912		\$59,541	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
287381		\$325,408	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
CON007875		\$258,417	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
R170055		\$40,001	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
CP0043229		\$2,081	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
AGT DTD AUGUST 9, 2018		\$53,605	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
45017410105		¢c0 221	6247 574 460		¢1 022 202
45017419105		\$60,331	\$217,571,468	RESEARCH AND DEVELOPMENT	\$1,033,282
FA8651-17-C-0042	¢FF 094 627	\$37,682	\$217,571,468	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282
	\$55,084,627	\$206,855,491	\$217,571,468		\$1,033,282
		\$1,508	\$1,315		61 022 202
		-\$193	\$1,315	RESEARCH AND DEVELOPMENT N/A	\$1,033,282
CON008346		-\$35 - <i>\$1,371</i>	\$68,015 <i>\$68,015</i>	N/A RESEARCH AND DEVELOPMENT	\$1,033,282
00000340		\$69,421	\$68,015	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$517,164	\$703,417	N/A	γ1,055,28.
CON010749		\$23,877	\$703,417	RESEARCH AND DEVELOPMENT	\$1,033,282
01010745		\$23,877 \$162,376	\$703,417 \$703,417	RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282
		\$249,401	\$338,664	N/A	1,055,284
		ŞZ 4 5,401	<i>\$336,004</i>		

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
GENCYBER GRANTS PROGRAM	12,903	(optional)	,
CYBERSECURITY CORE CURRICULUM	12.905		
CYBERSECURITY CORE CURRICULUM	12.905		
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		EMORY UNIVERSITY
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		EMORY UNIVERSITY
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		GENERAL DYNAMICS MISSION SYSTEMS, INC.
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		INTERNATIONAL BUSINESS MACHINES CORPORATION
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		SIEMENS CORPORATION
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		SRI INTERNATIONAL
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		TELEDYNE SCIENTIFIC AND IMAGING, LLC
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		TEXAS A&M UNIVERSITY
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		UNIVERSITY OF CALIFORNIA
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		UNIVERSITY OF COLORADO
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		UNIVERSITY OF TENNESSEE
RESEARCH AND TECHNOLOGY DEVELOPMENT	12.910		
		ARM212UGA,	
WILL CLIMATE-MEDIATED PHENOLOGICAL SHIFTS AFFECT P	12.RD	EP0165508	TUFTS UNIVERSITY
IPA FOR HABITAT MODELING (CAITLIN CONN)	12.RD	AWD00010293	
TEEN LEADERSHIP CAMP	12.RD	F4199917P1701	
2019 TEEN LEADERSHIP	12.RD	F4199919P0719	
		F8W3LS8220	
2018 LABOR DAY- 165TH ANNUAL TEEN RESILIENCY AND L	12.RD	AW01	
		UGA-SREL	
2018 WADING BIRD SURVEYS AT THE NAVAL SUBMARINE BA	12.RD	WO 2018-001	LG2 ENVIRONMENTAL SOLUTIONS, INC.
		W911QY	
COVALENT GRAFTING OF DURABLE AND OPTICALLY CLEAR A	12.RD	19P0013	
		W911QY-16-	
DEPARTMENT OF DEFENSE OTHER FINANCIAL ASSISTANCE	12.RD	A-0014-0017	GENEVA FOUNDATION
		W9124D-10-C-	
OVERSEAS MILITARY AND CULTURE	12.RD	0036	
		W912HQ17C0	
A NOVEL REACTIVE ELECTROCHEMICAL MEMBRANE SYSTEM F	12.RD	010	
		W912JM17P0	
165TH AW JULY CAMP	12.RD	027	
		W912JM18P0	
165TH CHOPPED PROGRAM	12.RD	073	
		40-00250, 40-	
	12,1102	00251, 40-	
MILITARY TUITION ASSISTANCE	12.003	00252	
SALE OF FOREST PRODUCTS TOTAL DEPARTMENT OF DEFENSE	12.U04	486TIMBER	
TOTAL DEPARTMENT OF DEPENSE			
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT			
	14.100		
HOUSING COUNSELING ASSISTANCE PROGRAM	14.169		
MANUFACTURED HOME DISPUTE RESOLUTION	14.171		
COMMUNITY DEVELOPMENT BLOCK GRANTS/STATE'S PROGRAM AND NON-ENTITLEMENT GRANTS IN HAWAII	14.228		
EMERGENCY SOLUTIONS GRANT PROGRAM SUPPORTIVE HOUSING PROGRAM	14.231		
SUPPORTIVE HOUSING PROGRAM	14.235 14.238		
HOME INVESTMENT PARTNERSHIPS PROGRAM	14.239		
HOUSING OPPORTUNITIES FOR PERSONS WITH AIDS CONTINUUM OF CARE PROGRAM	14.241 14.267		
HOUSING TRUST FUND	14.275		
PROJECT RENTAL ASSISTANCE DEMONSTRATION (PRA DEMO) PROGRAM OF SECTION 811 SUPPORTIVE HOUSING FOR PERSONS WITH DISABILITIES	14.326		
SECTION 8 HOUSING CHOICE VOUCHERS	14.871		
MAINSTREAM VOUCHERS	14.879		
MOVING TO WORK DEMONSTRATION PROGRAM	14.881		HOUSING AUTHORITY COLUMBUS, GEORGIA

Assigned By Funder	Total Amount		Federal		
Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$11,478	\$338,664	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$163,661	\$217,475	N/A	ç
		\$53,814	\$217,475	RESEARCH AND DEVELOPMENT	\$1,033,282,52
T680127		\$164,253	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
T793318		\$429,942	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
02ESM1022277		\$763,876	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
5004876066		\$169,724	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
SUB00000007 PO# 624585		\$11,618	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
126-003		\$334,723	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
206-000114		\$125,340	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
PO00143792		\$66,262	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
06M1703099		\$17,188	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
#00009974		\$72,519	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
FY18.920.001		\$377,178	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
A18-0652-S001	6204.205	\$77,791	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$294,306	\$2,672,431	\$5,282,845	RESEARCH AND DEVELOPMENT	\$1,033,282,52
ARM212UGA, EP0165508		\$60,060	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
ARM2120GA, EP0103308		\$0,000		RESEARCH AND DEVELOPMENT	
	\$120,323	\$402,453	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
	\$120,323	\$402,453	\$714,483	RESEARCH AND DEVELOPMENT	. , , ,
		\$3,984	\$714,483	RESEARCH AND DEVELOPIVIENT	\$1,033,282,52
		\$18,304	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
UGA-SREL WO 2018-001		\$43,260	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
004 5/12 100 2010 001		<i>\$</i> 4 3,200	<i>\$714,403</i>	RESEARCH AND DEVELOPMENT	<i>¥1,033,202,32</i>
		\$8,876	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
CONTRACT#: S-40037-0017-01		\$25,985	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$26,452	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$121,942	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$12	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$644	\$714,483	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$1,686,489	\$1,686,489	N/A	
	\$1,800	\$1,800	\$1,800	N/A	Ş
	\$91,708,067	\$609,127,560			
		\$573,672	\$573,672	N/A	
		\$628,769	\$628,769	N/A	
	\$40,551,731	\$41,743,607	\$41,743,607	N/A	:
	+ .0,001,701	\$4,326,159	\$4,326,159	N/A	
		\$451,403	\$451,403	N/A	
		\$14,524,852	\$14,524,852	N/A	
	\$13,197,882	\$22,595,652	\$22,595,652	N/A	
	<i>413,137,002</i>	\$2,583,906	\$2,583,906	N/A	
		\$1,786,201	\$1,786,201	N/A	
		\$2,707,685	\$2,707,685	N/A N/A	
			.,,,		
		\$129,935	\$129,935	N/A	
		\$111,006,879	\$111,006,879	HOUSING VOUCHER CLUSTER	\$111,304,68
		\$297,805	\$297,805	HOUSING VOUCHER CLUSTER	\$111,304,68
30445		\$297,805 <i>\$14,775</i>	\$297,805 <i>\$14,775</i>	HOUSING VOUCHER CLUSTER RESEARCH AND DEVELOPMENT	\$111,304,68 <i>\$1,033,282,52</i>

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
DEPARTMENT OF THE INTERIOR	Number	(Optional)	Linky
AGRICULTURE ON INDIAN LANDS	15.034		
WILDLAND FIRE RESEARCH AND STUDIES	15.232		
			SOUTH CAROLINA DEPARTMENT OF NATURAL
MARINE MINERALS ACTIVITIES	15.424		RESOURCES
MARINE MINERALS ACTIVITIES SPORT FISH RESTORATION	15.424 15.605		
FISH AND WILDLIFE MANAGEMENT ASSISTANCE	15.608		GULF STATES MARINE FISHERIES COMMISSION
FISH AND WILDLIFE MANAGEMENT ASSISTANCE	15.608		
NILDLIFE RESTORATION AND BASIC HUNTER EDUCATION	15.611		
WILDLIFE RESTORATION AND BASIC HUNTER EDUCATION	15.611		ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
			ALABAMA DEPARTMENT OF CONSERVATION AND
WILDLIFE RESTORATION AND BASIC HUNTER EDUCATION	15.611		NATURAL RESOURCES ALABAMA DEPARTMENT OF CONSERVATION AND
WILDLIFE RESTORATION AND BASIC HUNTER EDUCATION	15.611		NATURAL RESOURCES
	15.611		CORNELL UNIVERSITY KENTUCKY DEPARTMENT OF FISH AND WILDLIFE
WILDLIFE RESTORATION AND BASIC HUNTER EDUCATION	15.611		
WILDLIFE RESTORATION AND BASIC HUNTER EDUCATION COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION	15.611 15.614		TEXAS PARKS AND WILDLIFE DEPARTMENT
	10.014		ALABAMA DEPARTMENT OF CONSERVATION AND
COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND	15.615		NATURAL RESOURCES
COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND	15.615		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
			SOUTH CAROLINA DEPARTMENT OF NATURAL
COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND	15.615		RESOURCES
COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND	15.615		
SPORTFISHING AND BOATING SAFETY ACT ENHANCED HUNTER EDUCATION AND SAFETY	15.622 15.626		
MULTISTATE CONSERVATION GRANT	15.628		
COASTAL	15.630		
COASTAL	15.630		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
COASTAL	15.630		LONGLEAF ALLIANCE
PARTNERS FOR FISH AND WILDLIFE	15.631		
PARTNERS FOR FISH AND WILDLIFE	15.631		
STATE WILDLIFE GRANTS	15.634		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
STATE WILDLIFE GRANTS RESEARCH GRANTS (GENERIC)	<i>15.634</i> 15.650		SERVICE FOUNDATION, INC.
RESEARCH GRANTS (GENERIC)	15.650		GALLUP
RESEARCH GRANTS (GENERIC)	15.650		0,120
			KENNESAW STATE UNIVERSITY RESEARCH AND
ENDANGERED SPECIES CONSERVATION RECOVERY IMPLEMENTATION FUNDS	15.657		SERVICE FOUNDATION
ENDANGERED SPECIES CONSERVATION RECOVERY IMPLEMENTATION FUNDS	15.657		
NFWF-USFWS CONSERVATION PARTNERSHIP	15.663		THE NATURE CONSERVANCY
NFWF-USFWS CONSERVATION PARTNERSHIP FISH AND WILDLIFE COORDINATION AND ASSISTANCE	15.663 15.664		
ADAPTIVE SCIENCE	15.670		THE NATURE CONSERVANCY
ADAPTIVE SCIENCE	15.670		
COOPERATIVE ECOSYSTEM STUDIES UNITS	15.678		
ASSISTANCE TO STATE WATER RESOURCES RESEARCH INSTITUTES	15.805		
EARTHQUAKE HAZARDS PROGRAM ASSISTANCE	15.807		UNIVERSITY OF SOUTHERN CALIFORNIA
U.S. GEOLOGICAL SURVEY RESEARCH AND DATA COLLECTION	15.808		
COOPERATIVE RESEARCH UNITS NATIONAL LAND REMOTE SENSING EDUCATION OUTREACH AND RESEARCH	15.812 <i>15.815</i>		AMERICAVIEW
NATIONAL LAND REMOTE SENSING EDUCATION OUTREACH AND RESEARCH	15.815		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
NATIONAL LAND REGIONAL CLIMATE ADAPTATION SCIENCE CENTERS	15.815		OKLAHOMA STATE UNIVERSITY
HISTORIC PRESERVATION FUND GRANTS-IN-AID	15.904		
HISTORIC PRESERVATION FUND GRANTS-IN-AID	15.904		
TECHNICAL PRESERVATION SERVICES	15.915		
OUTDOOR RECREATION ACQUISITION, DEVELOPMENT AND PLANNING	15.916		

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		¢2 (21	¢2 (24	RESEARCH AND DEVELOPMENT	¢1 022 202 5
		\$2,621 \$23.606	\$2,621 \$23,606	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
		923,000	\$25,000	RESEARCH AND DEVELOF MENT	91,033,202,32
SCDNRFY2017018		\$21,990	\$61,261	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$39,271	\$61,261	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$7,219,768	\$7,219,768	FISH AND WILDLIFE CLUSTER	\$28,320,8
WS-800-037-2018-UGA	\$7,517	\$14,630	\$95,437	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$80,807	\$95,437	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$20,911,721	\$21,033,611	FISH AND WILDLIFE CLUSTER	\$28,320,8
1162_54		\$42,372	\$21,033,611	RESEARCH AND DEVELOPMENT	\$1,033,282,52
5724001	\$10,213	\$10,213	\$21,033,611	RESEARCH AND DEVELOPMENT	\$1,033,282,52
COYOTE ECOLOGY		¢26 201	621 022 611	RESEARCH AND DEVELOPMENT	¢1 022 202 5
74496-10644		\$36,291 \$11,269	\$21,033,611 \$21,033,611	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
74490-10044		\$11,209	\$21,035,011	RESEARCH AND DEVELOPMENT	\$1,035,262,52
1600001324	\$4,888	\$4,888	\$21,033,611	RESEARCH AND DEVELOPMENT	\$1,033,282,52
479099	\$16,857	\$16,857	\$21,033,611	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$1,015,628	\$1,015,628	N/A	, ,
F16AP00584		\$419,445	\$496,094	N/A	\$
63828383-9		\$26,992	\$496,094	RESEARCH AND DEVELOPMENT	\$1,033,282,52
P24014306117	404 077	\$17,129	\$496,094	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$21,277	\$32,528	\$496,094	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$34,363 \$189,323	\$34,363 \$189,323	N/A FISH AND WILDLIFE CLUSTER	\$28,320,8
		\$189,323	\$185,525	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$21	\$14,554	N/A	<i>\</i>
63828383-10		\$8,526	\$14,554	RESEARCH AND DEVELOPMENT	\$1,033,282,52
LLA201807		\$6,007	\$14,554	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$36,564	\$40,814	N/A	:
		\$4,250	\$40,814	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$1,978,808	\$1,997,558	N/A	:
63828383-11		\$18,750	\$1,997,558	RESEARCH AND DEVELOPMENT	\$1,033,282,52
00020000 11		\$20,266	\$346,398	N/A	<i>\$1,033,202,32</i>
D17PC00002		\$311,958	\$346,398	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$14,174	\$346,398	RESEARCH AND DEVELOPMENT	\$1,033,282,52
F17AP00100		\$11,722	\$41,722	N/A	Ş
FITAPOULOU		\$30,000	\$41,722	N/A N/A	,
GABU01072019		\$50,000	\$61,330	N/A	
		\$11,330	\$61,330	N/A	
		\$51,563	\$51,563	N/A	:
050818-01		\$53,613	\$70,907	N/A	(7
		\$17,294	\$70,907	N/A	
		\$115,754	\$115,754	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$9,845	\$103,717	\$103,717	RESEARCH AND DEVELOPMENT	\$1,033,282,5
104713868		\$27,387	\$27,387	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$156,228 \$264.082	\$156,228 \$264,082	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5
AV18-GA-01	\$2,341	\$264,082 <i>\$16,831</i>	\$264,082 <i>\$17,139</i>	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,52
V13-GA01/G14AP00002		\$308	\$17,139	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
2-561570.UGA		\$17,786	\$17,786	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$749,215	\$753,752	N/A	<i><i>q</i>1,033,202,32</i>
		\$4,537	\$753,752	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$78,794	\$78,794	RESEARCH AND DEVELOPMENT	\$1,033,282,5

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
COOPERATIVE RESEARCH AND TRAINING PROGRAMS - RESOURCES OF THE	Humber	(optional)	Linty
NATIONAL PARK SYSTEM	15.945		PENNSYLVANIA STATE UNIVERSITY
COOPERATIVE RESEARCH AND TRAINING PROGRAMS - RESOURCES OF THE NATIONAL PARK SYSTEM	15.945		
DIAGNOSTIC, FIELD AND TRAINING ASSISTANCE FOR WILD	15.RD	F15PX01848	
TOTAL DEPARTMENT OF THE INTERIOR			
DEPARTMENT OF JUSTICE			
SEXUAL ASSAULT SERVICES FORMULA PROGRAM	16.017		
OVW RESEARCH AND EVALUATION PROGRAM	16.026		
JUVENILE ACCOUNTABILITY BLOCK GRANTS	16.523		
LEGAL ASSISTANCE FOR VICTIMS	16.524		
GRANTS TO REDUCE DOMESTIC VIOLENCE, DATING VIOLENCE, SEXUAL ASSAULT, AND STALKING ON CAMPUS	16.525		
ENHANCED TRAINING AND SERVICES TO END VIOLENCE AND ABUSE OF WOMEN LATER IN			
LIFE	16.528		
JUVENILE JUSTICE AND DELINQUENCY PREVENTION	16.540		
MISSING CHILDREN'S ASSISTANCE	16.543		
STATE JUSTICE STATISTICS PROGRAM FOR STATISTICAL ANALYSIS CENTERS	16.550		
NATIONAL INSTITUTE OF JUSTICE RESEARCH, EVALUATION, AND DEVELOPMENT PROJECT GRANTS	16.560		WESTED
NATIONAL INSTITUTE OF JUSTICE RESEARCH, EVALUATION, AND DEVELOPMENT PROJECT GRANTS	16.560		
NATIONAL INSTITUTE OF JUSTICE RESEARCH, EVALUATION, AND DEVELOPMENT PROJECT GRANTS	16.560		APPLIED RESEARCH SOLUTIONS
NATIONAL INSTITUTE OF JUSTICE RESEARCH, EVALUATION, AND DEVELOPMENT PROJECT GRANTS	16.560		RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
NATIONAL INSTITUTE OF JUSTICE RESEARCH, EVALUATION, AND DEVELOPMENT PROJECT			······································
GRANTS	16.560		
CRIME VICTIM ASSISTANCE	16.575		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
CRIME VICTIM ASSISTANCE	16.575		
CRIME VICTIM COMPENSATION	16.576		
CRIME VICTIM ASSISTANCE/DISCRETIONARY GRANTS	16.582		
CRIME VICTIM ASSISTANCE/DISCRETIONARY GRANTS	16.582		EQUAL JUSTICE WORKS
CRIME VICTIM ASSISTANCE/DISCRETIONARY GRANTS	16.582		GEORGIA COALITION AGAINST DOMESTIC VIOLENCE
DRUG COURT DISCRETIONARY GRANT PROGRAM	16.585		
VIOLENCE AGAINST WOMEN FORMULA GRANTS	16.588		
GRANTS TO ENCOURAGE ARREST POLICIES AND ENFORCEMENT OF PROTECTION ORDERS			
PROGRAM	16.590		
RESIDENTIAL SUBSTANCE ABUSE TREATMENT FOR STATE PRISONERS	16.593		
CORRECTIONS TRAINING AND STAFF DEVELOPMENT	16.601 16.606		
STATE CRIMINAL ALIEN ASSISTANCE PROGRAM PROJECT SAFE NEIGHBORHOODS	16.609		
PROJECT SAFE NEIGHBORHOODS	16.609		
REGIONAL INFORMATION SHARING SYSTEMS	16.610		CRIMINAL INFORMATION SHARING ALLIANCE, INC.
PUBLIC SAFETY PARTNERSHIP AND COMMUNITY POLICING GRANTS	16.710		
JUVENILE MENTORING PROGRAM	16.726		NATIONAL 4-H COUNCIL
JUVENILE MENTORING PROGRAM	16.726		
SPECIAL DATA COLLECTIONS AND STATISTICAL STUDIES	16.734		
PREA PROGRAM: STRATEGIC SUPPORT FOR PREA IMPLEMENTATION	16.735		
EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT PROGRAM	16.738		
EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT PROGRAM	16.738		
DNA BACKLOG REDUCTION PROGRAM	16.741		
PAUL COVERDELL FORENSIC SCIENCES IMPROVEMENT GRANT PROGRAM CRIMINAL AND JUVENILE JUSTICE AND MENTAL HEALTH COLLABORATION PROGRAM	16.742 16.745		BIBB COUNTY SHERIFF'S OFFICE
CRIMINAL AND JOVENILE JOSTICE AND MENTAL HEALTH COLLABORATION PROGRAM			FULTON COUNTY
CRIMINAL AND JUVENILE JUSTICE AND MENTAL HEALTH COLLABORATION PROGRAM			NEWTON COUNTY
EDWARD BYRNE MEMORIAL COMPETITIVE GRANT PROGRAM	16.751		
SECOND CHANCE ACT REENTRY INITIATIVE	16.812		
JOHN R. JUSTICE PROSECUTORS AND DEFENDERS INCENTIVE ACT	16.816		
VISION 21	16.826		
JUSTICE REINVESTMENT INITIATIVE	16.827		THE COUNCIL OF STATE GOVERNMENTS

CONDO SUBAWAR	NPS5414	Sub-Recipients \$7,399 \$80,337 \$777,865 \$11,327 \$121,326 \$96,873 \$745,430	Expenditures \$563 \$838,390 \$67,069 \$37,099,168 \$813,525 \$85,721 \$85,721 \$75 \$123,385 \$247,561	Total \$838,953 \$838,953 \$67,069 \$813,525 \$85,721 -\$75 \$123,385	Name RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT N/A RESEARCH AND DEVELOPMENT N/A N/A N/A N/A N/A	Total \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$0 \$0 \$1,033,282,522 \$0
СОНОО		\$80,337 \$777,865 \$11,327 \$121,326 \$96,873	\$838,390 \$67,069 \$37,099,168 \$813,525 \$85,721 -\$75 \$123,385	\$838,953 \$67,069 \$813,525 \$85,721 -\$75	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT N/A RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$0 \$1,033,282,522 \$0
CONOO		\$80,337 \$777,865 \$11,327 \$121,326 \$96,873	\$67,069 \$37,099,168 \$813,525 \$85,721 -\$75 \$123,385	\$67,069 \$813,525 \$85,721 -\$75	RESEARCH AND DEVELOPMENT N/A RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522 \$0 \$1,033,282,522 \$0
CONOO		\$777,865 \$11,327 \$121,326 \$96,873	\$37,099,168 \$813,525 \$85,721 -\$75 \$123,385	\$813,525 \$85,721 -\$75	N/A RESEARCH AND DEVELOPMENT N/A	\$0 \$1,033,282,522 \$0
CONOO		\$777,865 \$11,327 \$121,326 \$96,873	\$813,525 \$85,721 -\$75 \$123,385	\$85,721 -\$75	RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522 \$0
CONOO		\$11,327 \$121,326 \$96,873	\$85,721 -\$75 \$123,385	\$85,721 -\$75	RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522 \$0
CONOO		\$11,327 \$121,326 \$96,873	\$85,721 -\$75 \$123,385	\$85,721 -\$75	RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522 \$0
CONOO		\$11,327 \$121,326 \$96,873	\$85,721 -\$75 \$123,385	\$85,721 -\$75	RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522 \$0
CONOO		\$121,326 \$96,873	-\$75 \$123,385	-\$75	N/A	\$0
CONOO		\$96,873		\$123,385	NI/A	
CONOO			\$247,561		N/ A	\$0
CONOO				\$247,561	N/A	\$0
CONOO						
CONOO		\$745,430	\$96,873	\$96,873	N/A	\$0 \$0
CONOO			\$962,258 \$467,130	\$962,258 \$467,130	N/A N/A	\$0 \$0
CONOO			\$13,650	\$13,650	N/A	\$0
CONOO			+,	+		
	06958		\$102,812	\$773,107	N/A	\$0
			\$5,406	\$773,107	N/A	\$0
SUBAWAF	04258		-\$84	\$773,107	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	SUBAWARD 0798		\$36,657	\$773,107	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$2,174	\$628,316	\$773,107	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2015 1/4 /	CY 0057		670 755	¢60.040.470	A1/A	ćo
2015-VA-0	·GX-0057	\$51,554,643	<i>\$79,755</i> \$69,869,715	<i>\$69,949,470</i> \$69,949,470	N/A N/A	<i>\$0</i> \$0
		\$51,554,045	\$11,150,233	\$11,150,233	N/A N/A	\$0 \$0
		\$214,351	\$214,351	\$317,070	N/A	\$0
20180	CVJC	. ,	\$56,737	\$317,070	RESEARCH AND DEVELOPMENT	\$1,033,282,522
57085	3501		\$45,982	\$317,070	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$122,100	\$122,100	\$122,100	N/A	\$0
		\$3,892,142	\$4,851,352	\$4,851,352	N/A	\$0
			\$116,910	\$116,910	N/A	\$0
		\$40,952	\$348,659	\$348,659	N/A	\$0
		¢ 10,002	\$105,304	\$105,304	N/A	\$0
			\$916,219	\$916,219	N/A	\$0
			\$1,425	\$168,008	N/A	\$0
		\$156,681	\$166,583	\$168,008	RESEARCH AND DEVELOPMENT	\$1,033,282,522
001-98-	3-07SA		\$443	\$443	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2010 ///	514 0005		\$148,455	\$148,455	N/A	\$0
2018-JU-F	FX-0005		<i>\$53,091</i> \$28,534	<i>\$81,625</i> \$81,625	N/A RESEARCH AND DEVELOPMENT	\$0 \$1,033,282,522
			\$28,554	\$22,489	N/A	\$1,033,282,322
			\$86,506	\$86,506	N/A	\$0
		\$4,387,977	\$6,984,195	\$7,139,319	N/A	\$0
			\$155,124	\$7,139,319	RESEARCH AND DEVELOPMENT	\$1,033,282,522
			\$2,537,686	\$2,537,686	N/A	\$0
			\$198,450	\$198,450	N/A	\$0
2016-MO-1			\$6,740	\$92,957	RESEARCH AND DEVELOPMENT	\$1,033,282,522
55822			\$17,678	\$92,957	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2017MOE	BX0024		\$68,539	\$92,957	RESEARCH AND DEVELOPMENT	\$1,033,282,522
			\$125,030	\$125,030	N/A	\$0 \$0
			\$612,883 \$51,658	\$612,883 \$51,658	N/A N/A	\$0 \$0
			\$365	\$365	N/A N/A	\$0 \$0
3180			\$179,740	\$179,740	N/A	\$0

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
USTICE REINVESTMENT INITIATIVE	16.827	(-,,	
NATIONAL SEXUAL ASSAULT KIT INITIATIVE	16.833		
STOP SCHOOL VIOLENCE	16.839		BEN HILL COUNTY
STOP SCHOOL VIOLENCE	16.839		COFFEE COUNTY
QUITABLE SHARING PROGRAM	16.922		
FIELD MEDICAL SUPPORT PROGRAM	16.U05	J-FBI-13-060	VIGHTER MEDICAL GROUP, LLC
PEA OVERTIME	16.U06	29001	
	46,007	ICE OVERTIME REIMBURSE-	
OINT LAW ENFORCEMENT OPERATIONS	16.U07	MENT	
OOJ, FBI,DEA COOPERATIVE AGREEMENTS	16.U08	15007	
OJ FBI JTTF OCDETF OVERTIME OTAL DEPARTMENT OF JUSTICE	16.009	FS11404	
DEPARTMENT OF LABOR			
ABOR FORCE STATISTICS	17.002		
LABOR FORCE STATISTICS	17.002		MIDDLE GEORGIA REGIONAL COMMISSION
OMPENSATION AND WORKING CONDITIONS	17.005		
MPLOYMENT SERVICE/WAGNER-PEYSER FUNDED ACTIVITIES	17.207		
INEMPLOYMENT INSURANCE	17.225		
ENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM	17.235		
RADE ADJUSTMENT ASSISTANCE	17.245		
WIOA ADULT PROGRAM	17.258		CITY OF COLQUITT
WIOA ADULT PROGRAM	17.258		ATLANTA REGIONAL COMMISSION CENTRAL SAVANNAH RIVER AREA REGIONAL
WIOA ADULT PROGRAM	17.258		COMMISSION
WIOA ADULT PROGRAM	17.258		CITY OF MACON
WIOA ADULT PROGRAM	17.258		GEORGIA MOUNTAINS REGIONAL COMMISSION
WIOA ADULT PROGRAM	17.258		MIDDLE GEORGIA CONSORTIUM, INC.
WIOA ADULT PROGRAM	17.258		NORTHEAST GEORGIA REGIONAL COMMISSION
WIOA ADULT PROGRAM	17.258		NORTHEAST GEORGIA REGIONAL COMMISSION
WIOA ADULT PROGRAM	17.258		NORTHWEST GEORGIA REGIONAL COMMISSION
WIOA ADULT PROGRAM	17.258		NORTHWEST GEORGIA REGIONAL COMMISSION
WIOA ADULT PROGRAM	17.258		
WIOA ADULT PROGRAM WIOA ADULT PROGRAM	17.258 17.258		RIVER VALLEY REGIONAL COMMISSION
			SAMUELI INSTITUTE WEST CENTRAL GEORGIA WORKFORCE
WIOA ADULT PROGRAM	<i>17.258</i> 17.258		DEVELOPMENT CORPORATION
/IOA ADULT PROGRAM WIOA YOUTH ACTIVITIES	17.258		GEORGIA MOUNTAINS REGIONAL COMMASCION
WIDA YOUTH ACTIVITIES	17.259		
WIOA YOUTH ACTIVITIES	17.259		MIDDLE GEORGIA CONSORTIUM, INC. NORTHEAST GEORGIA REGIONAL COMMISSION
WIOA FOOTH ACTIVITIES	17.259		NORTHEAST GEORGIA REGIONAL COMMISSION
WIOA TOOTT ACTIVITIES	17.259		NORTHEAST GEORGIA REGIONAL COMMISSION
WIOA YOUTH ACTIVITIES	17.259		NORTHWEST GEORGIA REGIONAL COMMISSION
WIOA YOUTH ACTIVITIES	17.259		SAMUELI INSTITUTE
WIQA YOUTH ACTIVITIES	17.259		WEST CENTRAL GEORGIA WORKFORCE DEVELOPMENT CORPORATION
VIOA YOUTH ACTIVITIES	17.259		
VIOA FIGUTTACTIVITES	17.261		
I-1B JOB TRAINING GRANTS	17.261		
REENTRY EMPLOYMENT OPPORTUNITIES	17.200		URBAN LEAGUE OF GREATER ATLANTA
VORK OPPORTUNITY TAX CREDIT PROGRAM (WOTC)	17.271		
EMPORARY LABOR CERTIFICATION FOR FOREIGN WORKERS	17.273		
YOUTHBUILD	17.274		FUTURE SEEKERS, INC.
OUTHBUILD	17.274		-,
VIOA NATIONAL DISLOCATED WORKER GRANTS / WIA NATIONAL EMERGENCY GRANTS	17.277		
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		SOUTHERN GEORGIA REGIONAL COMMISSION
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		CITY OF MACON
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		MIDDLE GEORGIA CONSORTIUM, INC.
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		MIDDLE GEORGIA CONSORTIUM, INC.
WIDA DISLOCATED WORKER FORMULA GRANTS			

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$0	\$179,740	N/A	
	\$512,915	\$818,851	\$818,851	N/A	
2018SVWX0011	+/	\$28,404	\$103,404	N/A	
2018SVWX0057		\$75,000	\$103,404	N/A	
201837 10 20037					
		\$1,738,183	\$1,738,183	N/A	
J-FBI-13-060		\$6,153	\$6,153	N/A	
		\$367,117	\$367,117	N/A	
		\$5,958	\$5,958	N/A	
		\$269,923	\$269,923	N/A	
		\$21,895	\$21,895	N/A	
		+/	+/		
	\$62,636,756	\$106,237,550			
		¢1 435 336	¢1 437 003	N/A	
EE12001		\$1,435,326	\$1,437,902	N/A	61 022 202
5513801		\$2,576	\$1,437,902	RESEARCH AND DEVELOPMENT	\$1,033,282,
		\$219,020	\$219,020	N/A	
		\$13,089,949	\$13,089,949	EMPLOYMENT SERVICE CLUSTER	\$18,885
		\$345,018,469	\$345,018,469	N/A	
	\$1,502,053	\$1,605,776	\$1,605,776	N/A	
		\$4,813,829	\$4,813,829	N/A	
5783001		\$42,427	\$33,968,604	RESEARCH AND DEVELOPMENT	\$1,033,282,
WD1817.2		\$445,806	\$33,968,604	WIOA CLUSTER	\$106,528,
WD1017.2		<i>9443,800</i>	<i>\$33,308,00</i> 4	WIGA CLOSIER	\$100,328,
WIOA1		\$198,507	\$33,968,604	WIOA CLUSTER	\$106,528,
MOA2018MGRC-AD		\$2,826	\$33,968,604	WIOA CLUSTER	\$106,528,
FY19ADULT		\$147,819	\$33,968,604	WIOA CLUSTER	\$106,528,
17-11-19-AD		\$235,221	\$33,968,604	WIOA CLUSTER	\$106,528,
25859		\$136,072	\$33,968,604	WIOA CLUSTER	\$106,528,
2919A		\$1,941,194	\$33,968,604	WIOA CLUSTER	\$106,528,
01-15-108-CA1					
		\$317,765	\$33,968,604	WIOA CLUSTER	\$106,528,
01-15-114		\$363,768	\$33,968,604	WIOA CLUSTER	\$106,528,
82717001		\$258,510	\$33,968,604	WIOA CLUSTER	\$106,528,
11-15-16-08-015`		\$244,688	\$33,968,604	WIOA CLUSTER	\$106,528,
16-05-01		\$286,492	\$33,968,604	WIOA CLUSTER	\$106,528
270529166		\$102,018	\$33,968,604	WIOA CLUSTER	\$106,528
	\$27,426,866	\$29,245,491	\$33,968,604	WIOA CLUSTER	\$106,528
PY16GED	. , ,	\$149,616	\$29,722,741	WIOA CLUSTER	\$106,528
17-11-24		\$280,606	\$29,722,741	WIOA CLUSTER	\$106,528
25752			\$29,722,741	WIOA CLUSTER	
		\$66,015			\$106,528,
25995/35994		\$169,394	\$29,722,741	WIOA CLUSTER	\$106,528,
2919Y		\$115,141	\$29,722,741	WIOA CLUSTER	\$106,528,
01-15-20-989		\$670,652	\$29,722,741	WIOA CLUSTER	\$106,528,
16-05-02		\$57,984	\$29,722,741	WIOA CLUSTER	\$106,528,
270529166		\$124,698	\$29,722,741	WIOA CLUSTER	\$106,528,
	\$27,728,576	\$28,088,635	\$29,722,741	WIOA CLUSTER	\$106,528
		\$1,172,416	\$1,172,416	N/A	
		\$1,011,562	\$1,011,562	N/A	
35222		\$5,413	\$5,413	N/A	
JJ222					
		\$380,596	\$380,596	N/A	
		\$775,039	\$775,039	N/A	
35320		\$10,120	\$95,037	N/A	
		\$84,917	\$95,037	N/A	
		\$151,286	\$151,286	N/A	
1714CFDA17278		\$50,920	\$42,930,162	RESEARCH AND DEVELOPMENT	\$1,033,282,
MOA2018MGRC-DW		\$2,503	\$42,930,162	WIOA CLUSTER	\$106,528,
17-11-19-DW		\$249,596	\$42,930,162	WIOA CLUSTER	\$106,528,
WIA2019		\$82,314	\$42,930,162	WIOA CLUSTER	\$106,528,
VVIAZU13		202,314	-2,990,102	WICH CLOSTER	\$100,528,
2919D		\$125,457	\$42,930,162	WIOA CLUSTER	\$106,528,

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		RIVER VALLEY REGIONAL COMMISSION
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		SAMUELI INSTITUTE
			WEST CENTRAL GEORGIA WORKFORCE
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		DEVELOPMENT CORPORATION
WIOA DISLOCATED WORKER FORMULA GRANTS	17.278		
TRADE ADJUSTMENT ASSISTANCE COMMUNITY COLLEGE AND CAREER TRAINING			
(TAACCCT) GRANTS	17.282		
OCCUPATIONAL SAFETY AND HEALTH SUSAN HARWOOD TRAINING GRANTS	17.502		
OCCUPATIONAL SAFETY AND HEALTH SUSAN HARWOOD TRAINING GRANTS	17.502		
CONSULTATION AGREEMENTS	17.504		
MINE HEALTH AND SAFETY GRANTS	17.600		
BROOKWOOD-SAGO GRANT	17.603		
DEPARTMENT OF LABOR CHIEF EVALUATION OFFICE	17.791		
DISABLED VETERANS' OUTREACH PROGRAM (DVOP)	17.801		
TOTAL DEPARTMENT OF LABOR			
DEPARTMENT OF STATE			
ACADEMIC EXCHANGE PROGRAMS - UNDERGRADUATE PROGRAMS	19.009		IREX
ACADEMIC EXCHANGE PROGRAMS - UNDERGRADUATE PROGRAMS	19.009		IREX
ACADEMIC EXCHANGE PROGRAMS - UNDERGRADUATE PROGRAMS	19.009		IREX
ACADEMIC EXCHANGE PROGRAMS - UNDERGRADUATE PROGRAMS	19.009		IREX
			KENNESAW STATE UNIVERSITY RESEARCH AND
ACADEMIC EXCHANGE PROGRAMS - UNDERGRADUATE PROGRAMS	19.009		SERVICE FOUNDATION
NTERNATIONAL PROGRAMS TO COMBAT HUMAN TRAFFICKING	19.019		
INVESTING IN PEOPLE IN THE MIDDLE EAST AND NORTH AFRICA	19.021		IREX
INVESTING IN PEOPLE IN THE MIDDLE EAST AND NORTH AFRICA	19.021		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
INVESTING IN PEOPLE IN THE MIDDLE EAST AND NORTH AFRICA	19.021		IREX
GLOBAL THREAT REDUCTION	19.033		
PUBLIC DIPLOMACY PROGRAMS	19.040		
PUBLIC DIPLOMACY PROGRAMS	19.040		
			KENNESAW STATE UNIVERSITY RESEARCH AND
ACADEMIC EXCHANGE PROGRAMS - GRADUATE STUDENTS	19.400		SERVICE FOUNDATION
PUBLIC DIPLOMACY PROGRAMS FOR AFGHANISTAN AND PAKISTAN	19.501		CONSTELLIS GROUP, INC.
			KENNESAW STATE UNIVERSITY RESEARCH AND
PUBLIC DIPLOMACY PROGRAMS FOR AFGHANISTAN AND PAKISTAN	19.501		SERVICE FOUNDATION
AEECA/ESF PD PROGRAMS	19.900		
EXPORT CONTROL AND RELATED BORDER SECURITY FOTAL DEPARTMENT OF STATE	19.901		
DEPARTMENT OF TRANSPORTATION			
	20.105		
AIRPORT IMPROVEMENT PROGRAM	20.106		THE NATIONAL INSTITUTE OF ASSOCIASE
AVIATION RESEARCH GRANTS	20.108		THE NATIONAL INSTITUTE OF AEROSPACE
AVIATION RESEARCH GRANTS AIR TRANSPORTATION CENTERS OF EXCELLENCE	20.108		
	20.109		
HIGHWAY RESEARCH AND DEVELOPMENT PROGRAM	20.200		THE NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE
HIGHWAY RESEARCH AND DEVELOPMENT PROGRAM	20.200		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
	20.202		KENNESAW STATE UNIVERSITY RESEARCH AND
HIGHWAY RESEARCH AND DEVELOPMENT PROGRAM HIGHWAY RESEARCH AND DEVELOPMENT PROGRAM	20.200		SERVICE FOUNDATION
	20.200		NATIONAL ACADEMY OF SCIENCES
	20.200		
HIGHWAY PLANNING AND CONSTRUCTION	20.205		
LUCHNARY DI ANNUNC AND CONSTRUCTION	20.205		ICF INTERNATIONAL, INC.
HIGHWAY PLANNING AND CONSTRUCTION			
IIGHWAY PLANNING AND CONSTRUCTION	20.205		
HIGHWAY PLANNING AND CONSTRUCTION HIGHWAY PLANNING AND CONSTRUCTION HIGHWAY TRAINING AND EDUCATION HIGHWAY TRAINING AND EDUCATION			

Identifying Number Assigned By Funder	Total Amount		Federal		
Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
31-15-16-08-015		\$12,252	\$42,930,162	WIOA CLUSTER	\$106,528,160
16-06-03		\$8,816	\$42,930,162	WIOA CLUSTER	\$106,528,160
581656795		\$421,382	\$42,930,162	WIOA CLUSTER	\$106,528,160
	\$33,306,238	\$41,976,922	\$42,930,162	WIOA CLUSTER	\$106,528,160
		470.001	4=0.004		4.0
		\$79,004	\$79,004	N/A	\$0
		\$101,507	\$360,022	N/A	\$0
		\$258,515	\$360,022	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$1,544,859	\$1,544,859	N/A	\$0
		\$225,525	\$225,525	N/A	\$0
		\$16,030	\$16,030	N/A	\$0
		\$32,862	\$32,862	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$5,795,434	\$5,795,434	EMPLOYMENT SERVICE CLUSTER	\$18,885,383
	\$89,963,733	\$484,451,537			
CON006322		-\$548	\$311,466	N/A	\$0
198803		\$26.093	\$311,466	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010159		\$89,618	\$311,466	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011488		\$58,922	\$311,466	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00/1012/00		<i>\$50,522</i>	<i>4011</i> ,100		<i>\(\)</i>
S-ECAGD-15-CA-1074-001		\$137,381	\$311,466	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5 26/65 15 6/ 10/4 661		\$176,888	\$176,888	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SP00010841		\$0	\$259	N/A	\$0
5/00010041		ŲŲ	<i>Ş</i> 233	N/A	ÛÇ
SIZ-100-15-GR025		\$259	\$259	N/A	\$0
CON002641		\$233 \$0	\$259	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00002041	\$4,145	\$52,231	\$52,231	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	Ş4,14J	\$50,090	\$97,487	N/A	\$1,033,282,322
		\$47,397	\$97,487	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		,551	Ş57,407	RESEARCH AND DEVELOPMENT	\$1,033,202,322
S-ECAGD-15-CA-1015		\$1,613	\$1,613	N/A	\$0
CON002249		-\$7	-\$5,870	N/A N/A	\$0 \$0
00002245		ر پ	<i>\$3,670</i>	M/A	ζŲ
S-PK330-13-CA-051		-\$5,863	-\$5,870	N/A	\$0
3-FR330-13-CA-031		\$129,324	\$129,324	RESEARCH AND DEVELOPMENT	\$1,033,282,522
				RESEARCH AND DEVELOPMENT	
		\$464,756	\$464,756	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$4,145	\$1,228,154			
	\$46,466,290	\$47,195,908	\$47,195,908	N/A	\$0
X16-8329-GTRC	Ş + 0, 4 00,2 <i>3</i> 0	\$28,683	\$343,393	RESEARCH AND DEVELOPMENT	\$0 \$1,033,282,522
×10-8529-07//C				RESEARCH AND DEVELOPMENT	\$1,033,282,522
	¢2 777	\$314,710	\$343,393	RESEARCH AND DEVELOPMENT	
	\$3,272	\$1,544,218	\$1,544,218	RESEARCH AND DEVELOPINEINT	\$1,033,282,522
FELLOWSHIP FOR MOSES IKE-SEP 2		\$24,000	\$108,612	N/A	\$0
RP 14-29		\$17,249	\$108,612	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RP 18-22/I.O. 2015-03		\$64,390	\$108,612	RESEARCH AND DEVELOPMENT	\$1,033,282,522
HR2044015	\$1,176	\$1,176	\$108,612	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$1,797	\$108,612	RESEARCH AND DEVELOPMENT	\$1,033,282,522
				HIGHWAY PLANNING AND CONSTRUCTION	
	\$78,307,455	\$1,487,821,119	\$1,487,957,891	CLUSTER	\$1,489,639,111
17ANSK0018	,,	\$32,537	\$1,487,957,891	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$24,933	\$104,235	\$1,487,957,891	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	, ,	\$73,224	\$82,408	N/A	\$0
		\$9,184	\$82,408	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$8,735,809	\$8,735,809	N/A	\$0
		ço,. 55,005	<i>ç</i> 0,, 00,000		ŲÇ

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
	20.240		
RECREATIONAL TRAILS PROGRAM TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT (TIFIA) PROGRAM	20.219 20.223		
TRANSPORTATION INFRASTRUCTORE FINANCE AND INNOVATION ACT (TIFIA) PROGRAM	20.225		
FEDERAL LANDS ACCESS PROGRAM	20.224		
PERFORMANCE AND REGISTRATION INFORMATION SYSTEMS MANAGEMENT	20.231		
COMMERCIAL DRIVER'S LICENSE PROGRAM IMPLEMENTATION GRANT	20.232		
COMMERCIAL MOTOR VEHICLE OPERATOR SAFETY TRAINING GRANTS	20.235		
MOTOR CARRIER SAFETY ASSISTANCE HIGH PRIORITY ACTIVITIES GRANTS AND	20 227		
COOPERATIVE AGREEMENTS HIGH-SPEED RAIL CORRIDORS AND INTERCITY PASSENGER RAIL SERVICE - CAPITAL	20.237		
ASSISTANCE GRANTS	20.319		
FEDERAL TRANSIT CAPITAL INVESTMENT GRANTS	20.500		
METROPOLITAN TRANSPORTATION PLANNING AND STATE AND NON-METROPOLITAN			
PLANNING AND RESEARCH	20.505		
FEDERAL TRANSIT FORMULA GRANTS	20.507		
FORMULA GRANTS FOR RURAL AREAS	20.509		
ENHANCED MOBILITY OF SENIORS AND INDIVIDUALS WITH DISABILITIES	20.513		
JOB ACCESS AND REVERSE COMMUTE PROGRAM NEW FREEDOM PROGRAM	20.516		
ALTERNATIVES ANALYSIS	20.521		
STATE OF GOOD REPAIR GRANTS PROGRAM	20.522		
BUS AND BUS FACILITIES FORMULA PROGRAM	20.525		
RAIL FIXED GUIDEWAY PUBLIC TRANSPORTATION SYSTEM STATE SAFETY OVERSIGHT			
FORMULA GRANT PROGRAM	20.528		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
STATE AND COMMUNITY HIGHWAY SAFETY	20.600		SERVICE FOUNDATION, INC.
STATE AND COMMUNITY HIGHWAY SAFETY	20.600		
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) DISCRETIONARY SAFETY	20.614		
GRANTS AND COOPERATIVE AGREEMENTS	20.014		KENNESAW STATE UNIVERSITY RESEARCH AND
NATIONAL PRIORITY SAFETY PROGRAMS	20.616		SERVICE FOUNDATION
NATIONAL PRIORITY SAFETY PROGRAMS	20.616		
PIPELINE SAFETY PROGRAM STATE BASE GRANT	20.700		
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		TEXAS A&M UNIVERSITY
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		UNIVERSITY OF FLORIDA
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		UNIVERSITY OF TEXAS AT ARLINGTON
UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701		UNIVERSITY OF TEXAS AT ARLINGTON
UNIVERSITY TRANSPORTATION CENTERS PROGRAM UNIVERSITY TRANSPORTATION CENTERS PROGRAM	20.701 20.701		UNIVERSITY OF TEXAS AT ARLINGTON UNIVERSITY OF TEXAS AT ARLINGTON
INTERAGENCY HAZARDOUS MATERIALS PUBLIC SECTOR TRAINING AND PLANNING GRANTS	20.701		UNIVERSITY OF TEXAS AT ARLINGTON
BIOBASED TRANSPORTATION RESEARCH	20.761		
RESEARCH GRANTS	20.762		AMERICAN PLANNING ASSOCIATION
RESEARCH GRANTS	20.762		ARIZONA STATE UNIVERSITY
RESEARCH GRANTS	20.762		BOOZ ALLEN HAMILTON, INC.
RESEARCH GRANTS	20.762		CREARE, LLC
RESEARCH GRANTS	20.762		HDR, INC. THE NATIONAL ACADEMIES OF SCIENCES,
RESEARCH GRANTS	20.762		ENGINEERING, AND MEDICINE
RESEARCH GRANTS	20.762		TRANSPORTATION RESEARCH BOARD
RESEARCH GRANTS	20.762		TRANSPORTATION RESEARCH BOARD
RESEARCH GRANTS	20.762		TRANSPORTATION RESEARCH BOARD
RESEARCH GRANTS	20.762		UNIVERSITY OF CALIFORNIA, DAVIS
RESEARCH GRANTS	20.762		UNIVERSITY OF CALIFORNIA, DAVIS
RESEARCH GRANTS	20.762		UNIVERSITY OF FLORIDA
RESEARCH GRANTS	20.762		UNIVERSITY OF FLORIDA
RESEARCH GRANTS RESEARCH GRANTS	20.762 20.762		UNIVERSITY OF FLORIDA UNIVERSITY OF FLORIDA
RESEARCH GRANTS	20.762		UNIVERSITY OF FLORIDA
	20.762		UNIVERSITY OF FLORIDA
RESEARCH GRANTS	20.702		UNIVERSITY OF FLORIDA

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
				HIGHWAY PLANNING AND CONSTRUCTION	
		\$1,817,961	\$1,817,961	CLUSTER	\$1,489,639,11
		\$248,165,625	\$248,165,625	N/A	\$(
		40.4	4.4.4	HIGHWAY PLANNING AND CONSTRUCTION	
		\$31	\$31	CLUSTER	\$1,489,639,11
		\$331,760 \$313,782	\$331,760	N/A	\$1
		\$313,782	\$313,782 \$47,704	N/A N/A	\$(\$(
		547,704	Ş47,704	N/A	ىر <u>.</u>
		\$185,657	\$185,657	N/A	Ş
		+	+		•
		\$61,505	\$61,505	N/A	\$(
		\$811,478	\$811,478	FEDERAL TRANSIT CLUSTER	\$27,376,14
	\$2,258,170	\$2,507,377	\$2,507,377	N/A	\$(
	\$16,345,866	\$24,279,167	\$24,279,167	FEDERAL TRANSIT CLUSTER	\$27,376,14
	\$12,766,213	\$17,934,065	\$17,934,065	N/A	Şi
		\$8,564,403	\$8,564,403	TRANSIT SERVICES PROGRAMS CLUSTER	\$9,478,57
	\$814,076	\$869,225	\$869,225	TRANSIT SERVICES PROGRAMS CLUSTER	\$9,478,57
		\$44,949	\$44,949	TRANSIT SERVICES PROGRAMS CLUSTER	\$9,478,57
		\$7,673	\$7,673		\$I
	\$1,476,226	\$750,466 \$1,535,031	\$750,466 \$1,535,031	FEDERAL TRANSIT CLUSTER FEDERAL TRANSIT CLUSTER	\$27,376,14 \$27,376,14
	\$1,470,220	\$1,555,051	\$1,555,051	FEDERAL TRANSIT CLOSTER	\$27,570,14
		\$699,285	\$699,285	N/A	Şi
		<i>\$055,205</i>	<i>4033,203</i>		Ŷ,
63828383-12		\$5,084	\$7,348,033	HIGHWAY SAFETY CLUSTER	\$14,526,918
	\$3,811,604	\$7,342,949	\$7,348,033	HIGHWAY SAFETY CLUSTER	\$14,526,918
		\$124,933	\$124,933	N/A	\$(
YA-2018402TSP-010		\$12,111	\$7,178,885	HIGHWAY SAFETY CLUSTER	\$14,526,918
	\$673,007	\$7,166,774	\$7,178,885	HIGHWAY SAFETY CLUSTER	\$14,526,91
		\$1,244,916	\$1,244,916	N/A	Şi
00055082-02A		\$51,225	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00055082-02B		\$80,373	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00055082-02C		\$61,930	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
12-S171237		\$189,678	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UFDSP00011673		\$12,000	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CTEDD 017-02; TO# 2A		\$12,503	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CTEDD 017-03; TO# 2B		\$37,063	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CTEDD 017-04; TO #2C		\$6,410	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CTEDD 018-02		\$12,672	\$463,854	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$561,657	\$561,657	N/A	\$1
		\$46,437	\$46,437	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGMT DTD 7/24/18		\$51,717	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
17-166		\$407,776	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S901463BAH		\$98,504	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
6913G618C100008		\$516	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PO#1000100006996		\$25,000	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
HR-01-60		600 8FC	¢1.010.679		61 022 202 52
		\$99,856	\$1,919,678	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
HR 08-102 ITEM 12 NCHRP-214		\$19,313 \$32,618	\$1,919,678 \$1,919,678	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
TCRP J-11(028)		\$60,000	\$1,919,678	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52.
201302432-04; PO# 38352		\$47,900	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,52
A17-0183-S002		\$405,521	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AMEND #6 (UFDSP00011673		\$23,254	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AMEND #7 (UFDSP00011673)		\$38,398	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,52
PROJECT A2: UFDSP00011673		\$85,000	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,52.
JFDSP00011673 - PROJECT Q2		\$1,049	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UFDSP00011673 (AMEND 4)		\$68,492	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UFDSP00011673 AMEND. 5		\$11,308	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$10,108	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
RESEARCH GRANTS	20.762		UNIVERSITY OF TEXAS AT ARLINGTON
RESEARCH GRANTS	20.762		UNIVERSITY OF TEXAS AT ARLINGTON
RESEARCH GRANTS	20.762		
NATIONALLY SIGNIFICANT FREIGHT AND HIGHWAY PROJECTS	20.934		
TOTAL DEPARTMENT OF TRANSPORTATION			
DEPARTMENT OF TREASURY			
VOLUNTEER INCOME TAX ASSISTANCE (VITA) MATCHING GRANT PROGRAM	21.009		BRENAU UNIVERSITY
EQUITABLE SHARING	21.016		
		PL 114-	
NATIONAL FORECLOSURE MITIGATION COUNSELING PROGRAM TOTAL DEPARTMENT OF TREASURY	21.U10	113X1350	NEIGHBORHOOD REINVESTMENT CORPORATION
APPALACHIAN REGIONAL COMMISSION			
APPALACHIAN AREA DEVELOPMENT	23.002		APPALACHIAN REGIONAL COMMISSION
APPALACHIAN AREA DEVELOPMENT	23.002		APPALACHIAN REGIONAL COMMISSION
APPALACHIAN AREA DEVELOPMENT	23.002		
APPALACHIAN AREA DEVELOPMENT APPALACHIAN RESEARCH, TECHNICAL ASSISTANCE, AND DEMONSTRATION PROJECTS	23.002		
TOTAL APPALACHIAN REGIONAL COMMISSION	23.011		
EQUAL EMPLOYMENT OPPORTUNITY COMMISSION			
EQUAL EMPLOYMENT OPPORTUNITY COMMISSION EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION	30.001		
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964	30.001		
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY			
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION			AUBURN UNIVERSITY
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION	39.003		AUBURN UNIVERSITY AURORA FLIGHT SCIENCES
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION SCIENCE	39.003 43.001		
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION SCIENCE SCIENCE	39.003 43.001 43.001		AURORA FLIGHT SCIENCES
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION SCIENCE SCIENCE SCIENCE	39.003 43.001 43.001 43.001		AURORA FLIGHT SCIENCES DARTMOUTH COLLEGE
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION SCIENCE SCIENCE SCIENCE SCIENCE	39.003 43.001 43.001 43.001 43.001		AURORA FLIGHT SCIENCES DARTMOUTH COLLEGE FLORIDA INTERNATIONAL UNIVERSITY GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION SCIENCE SCIENCE SCIENCE SCIENCE	39.003 43.001 43.001 43.001 43.001 43.001		AURORA FLIGHT SCIENCES DARTMOUTH COLLEGE FLORIDA INTERNATIONAL UNIVERSITY GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
EMPLOYMENT DISCRIMINATION TITLE VII OF THE CIVIL RIGHTS ACT OF 1964 TOTAL EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GENERAL SERVICES ADMINISTRATION DONATION OF FEDERAL SURPLUS PERSONAL PROPERTY TOTAL GENERAL SERVICES ADMINISTRATION NATIONAL AERONAUTICS & SPACE ADMINISTRATION SCIENCE SCIENCE SCIENCE SCIENCE SCIENCE SCIENCE	39.003 43.001 43.001 43.001 43.001 43.001		AURORA FLIGHT SCIENCES DARTMOUTH COLLEGE FLORIDA INTERNATIONAL UNIVERSITY GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC. HARVARD UNIVERSITY
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Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
CTEDD 018-07		\$34,367	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CTEDD 018-08		\$35,825	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$9,997	\$363,156	\$1,919,678	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	<i><i><i>ϕ</i>σγ<i></i></i></i>	\$19,678,617	\$19,678,617	N/A	\$0
		<i><i>q</i>10,0,0,01,</i>	<i>\(_\)</i>		φu
	\$162,958,285	\$1,893,462,393			
AWD00009708		\$5,015	\$5,015	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$115,104	\$115,104	N/A	\$0
PL112-1095X1350		\$426	\$426	N/A	\$0
	-	\$120,545			
35417001		\$263	\$2,671,131	N/A	\$0
GA-18660-302-16		\$8,778	\$2,671,131	N/A	\$0
	\$2,579,315	\$2,662,090	\$2,671,131	N/A	\$0
	\$92,386	\$418,710	\$418,710	N/A	\$0
	\$2,671,701	\$3,089,841			
	-				
		-\$4,217	-\$4,217	N/A	\$C
		-\$4,217			
		\$7,388,169	\$7,388,169	N/A	\$C
		\$7,388,169			
15PHY209376UGARF			\$12,752,800	RESEARCH AND DEVELOPMENT	
15PHY209376UGARF AFSA4-2379		\$7,388,169	\$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	
		\$7,388,169 \$17,407			\$1,033,282,522 \$1,033,282,522
AFSA4-2379		\$7,388,169 \$17,407 \$13,150	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615	\$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691	-	\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1586691 1587199	-	\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1586691 1587199 1587222	-	\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587199 1587222 1587288		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587299 1587222 1587288 1588482		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677 \$21,995	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587292 1587288 1587288 1588482 1596803		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,677 \$21,995 \$10,373	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587199 1587222 1587288 1587288 1588482 1596803 1609494		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587292 1587228 1587288 1588482 1596803 1609494 1611139		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587199 1587222 1587288 1588482 1596803 1609494 1611139 1614730		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587222 1587288 1587288 1587288 1587288 158603 1609494 1611139 1614730 1614809		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845 \$6,749	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587199 1587222 1587288 1588482 1596803 1609494 1611139 1614730		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587222 1587288 1587288 1587288 1587288 158603 1609494 1611139 1614730 1614809		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845 \$6,749	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587222 1587288 1587288 1587288 1588482 1596803 1609494 1611139 1614730 1614809 1616612		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845 \$6,749 \$70,882	\$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587199 1587222 1587288 1588482 1596803 1609494 1611139 16144730 1614809 1616612 1619992		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845 \$6,749 \$70,882 \$24,933	\$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587199 1587222 1587288 1587488 1588482 1596803 1609494 1611139 1611139 1614730 1614809 1616612 1619992 1626782		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845 \$6,749 \$70,882 \$24,933 \$6,804	\$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
AFSA4-2379 R1017 800007887-01UG 63828383-13 TM7-18008X 1570950 1586278 1586691 1587299 1587222 1587288 1588482 1596803 1609494 1611139 1614730 1614730 1614612 1619992 1626782 1627916		\$7,388,169 \$17,407 \$13,150 \$19,664 \$119,615 \$41,167 \$67,717 \$44,545 \$53,367 \$21,557 \$951 \$7,852 \$7,677 \$21,995 \$10,373 \$49,263 \$75,205 \$13,845 \$6,749 \$70,882 \$24,933 \$6,804 \$24,979	\$12,752,800 \$12,752,800	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522

	Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
SCIENCE		43.001		NORTHERN ARIZONA UNIVERSITY
SCIENCE		43.001		PENNSYLVANIA STATE UNIVERSITY
SCIENCE		43.001		PREDICTIVE SCIENCE, INC.
SCIENCE		43.001		SOUTHWEST RESEARCH INSTITUTE
SCIENCE		43.001		SPACE TELESCOPE SCIENCE INSTITUTE
SCIENCE		43.001		THE NATIONAL INSTITUTE OF AEROSPACE
SCIENCE		43.001		TROUT UNLIMITED - NATIONAL OFFICE
SCIENCE		43.001		UNIVERSITY OF CALIFORNIA
SCIENCE		43.001		UNIVERSITY OF CALIFORNIA
SCIENCE		43.001		UNIVERSITY OF CALIFORNIA, LOS ANGELES
SCIENCE		43.001		UNIVERSITY OF CALIFORNIA, EUS ANGELLS
SCIENCE		43.001		UNIVERSITY OF CALIFORNIA, RIVERSIDE
				VIRGINIA POLYTECHNIC INSTITUTE AND STATE
SCIENCE		43.001		UNIVERSITY
SCIENCE		43.001		YALE UNIVERSITY
SCIENCE		43.001		
AERONAUTICS		43.002		
AERONAUTICS		43.002		ADVANCED ROTORCRAFT TECHNOLOGY, INC.
AERONAUTICS		43.002		BOOZ ALLEN HAMILTON, INC.
AERONAUTICS		43.002		CROWN CONSULTING, INC.
AERONAUTICS		43.002		CROWN CONSULTING, INC.
AERONAUTICS		43.002		CROWN CONSULTING, INC.
AERONAUTICS		43.002		CROWN CONSULTING, INC.
AERONAUTICS		43.002		CROWN CONSULTING, INC.
AERONAUTICS		43.002		CROWN CONSULTING, INC.
AERONAUTICS		43.002		DNC PARKS & RESORTS AT KSC, INC.
AERONAUTICS		43.002		DNC PARKS & RESORTS AT KSC, INC.
AERONAUTICS		43.002		IRVINE SENSORS CORPORATION
AERONAUTICS		43.002		IRVINE SENSORS CORPORATION
AERONAUTICS		43.002		JACOBS TECHNOLOGY, INC.
AERONAUTICS		43.002		JACOBS TECHNOLOGY, INC.
AERONAUTICS		43.002		JET PROPULSION LABORATORY
AERONAUTICS		43.002		MAGNOLIA OPTICAL TECHNOLOGIES, INC.
AERONAUTICS		43.002		OEWAVES, INC.
AERONAUTICS		43.002		OHIO STATE UNIVERSITY
AERONAUTICS		43.002		PURDUE UNIVERSITY
AERONAUTICS		43.002		ROLLS-ROYCE MOTOR CARS LIMITED
AERONAUTICS		43.002		SANDIA NATIONAL LABORATORIES
AERONAUTICS		43.002		SETI INSTITUTE
AERONAUTICS		43.002		SPACE DYNAMICS LABORATORY
AERONAUTICS		43.002		SPACE DEVALUATION SPACE TELESCOPE SCIENCE INSTITUTE
		43.002		THE BOEING COMPANY
AERONAUTICS				THE CENTER FOR THE ADVANCEMENT OF SCIENCE IN
AERONAUTICS		43.002		SPACE, INC.
AERONAUTICS		43.002		THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY, LLC
AERONAUTICS		43.002		THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY, LLC
AERONAUTICS		43.002		THE NATIONAL INSTITUTE OF AEROSPACE
AERONAUTICS		43.002		THE NATIONAL INSTITUTE OF AEROSPACE
AERONAUTICS		43.002		THE NATIONAL INSTITUTE OF AEROSPACE
AERONAUTICS		43.002		TRACLABS, INC.
AERONAUTICS		43.002		UNIVERSITY OF COLORADO
AERONAUTICS		43.002		UNIVERSITY OF CONNECTICUT
AERONAUTICS		43.002		UNIVERSITY OF MINNESOTA
AERONAUTICS		43.002		UNIVERSITY OF TEXAS AT AUSTIN
AERONAUTICS		43.002		UNIVERSITY OF VIRGINIA
AERONAUTICS		43.002		VERUS RESEARCH
AERONAUTICS		43.002		XAVIER UNIVERSITY OF LOUISIANA
AERONAUTICS		43.002		
EXPLORATION		43.003		
EDUCATION		43.008		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
				GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
EDUCATION		43.008		SERVICE FOUNDATION, INC.

Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
1003545		\$18,830	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
5953-GTRC-NASA-B50G		\$31,481	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
CON005498		\$110,296	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
699054X/15.12029		\$165,006	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
CON005818		\$3,254	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
601025		\$256,798	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
NASAGA2		\$2,352	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
00009623		\$95,141	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
KK1832		\$66,654	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
2090-S-RB151		\$68,129	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
S-000728		\$277,597	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
601050		\$118,053	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
426689-19105		\$14,957	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
C16N12519 (CON80001051)		\$50,449	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$2,188,878	\$10,539,028	\$12,752,800	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$16,428	\$5,347,051	N/A	
AGT DTD AUG 19, 2016		\$76,237	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
S900016BAH		\$680,272	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
G025-GATECH-001 TO 03		\$83,632	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
G025-GATECH-001 TO 04		\$124,921	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
TASK ORDER 02-02		\$213,795	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
TASK ORDER 03		\$32,323	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
TASK ORDER NO. 02		\$67,735	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
TASK ORDER NO. 6		\$8,021	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
13410-2		\$295,263	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
TO 1 DTD 11/18/15		\$379,238	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
80NSSC18C0087		\$65,862	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
AGT DTD OCT 5, 2017		\$119,717	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
80MSFC18C0011		\$41,155	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
PO #18N0758		\$38,231	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
1562787		\$1,423	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
80NSSC18C0093		\$130,612	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
60NSSC18P2149		\$62,237	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
60061601		\$319,402	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
4103-83991		\$12,769	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
5100002879		\$32,301	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
2005349		\$13,896	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
SC3131		\$40,907	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
CP0055174		\$28,449	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
HST-AR-143326.001		\$8,069	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
1435446		\$16,783	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
GA-2019-001		\$77,539	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28.
134620 PROJECT # 1GA02		\$5,807	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
MSA # 115841		\$72,322	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
601036		\$639,231	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
601047		\$45,463	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
601052		\$21,229	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
AGT DTD AUG 25, 2017		\$99,691	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
1554484		\$23,634	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
106763		\$8,245	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
H006201401		\$126,334	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
#133480		\$39,064	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
GD10052 152367		\$210,202	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
80NSSC18P1931		\$14,470	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
OSP-15-216811-02A		\$169,856	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$194,941	\$884,286	\$5,347,051	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$277,170	\$710,606	\$710,606	RESEARCH AND DEVELOPMENT	\$1,033,28
NNX15AP85H		\$7,661	\$1,044,781	N/A	
63828383-14		\$10,070	\$1,044,781	RESEARCH AND DEVELOPMENT	\$1,033,28

	Federal	Award	Name of Funder
	CFDA	Identification	Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	
EDUCATION	43.008		THE NATIONAL INSTITUTE OF AEROSPACE
EDUCATION	43.008		THE NATIONAL INSTITUTE OF AEROSPACE
EDUCATION	43.008		THE NATIONAL INSTITUTE OF AEROSPACE
EDUCATION	43.008		THE NATIONAL INSTITUTE OF AEROSPACE
DUCATION	43.008		
ROSS AGENCY SUPPORT	43.009		
PACE TECHNOLOGY	43.012		
SPACE TECHNOLOGY	43.012		MICHIGAN STATE UNIVERSITY
PACE TECHNOLOGY	43.012		
OTAL NATIONAL AERONAUTICS & SPACE ADMINISTRATION			
ISTITUTE OF MUSEUM AND LIBRARY SERVICES OR NATIONAL ENDOWMENT FOR THE RTS OR NATIONAL ENDOWMENT FOR THE HUMANITIES			
PROMOTION OF THE ARTS GRANTS TO ORGANIZATIONS AND INDIVIDUALS	45.024		ARTS MIDWEST
			KENNESAW STATE UNIVERSITY RESEARCH AND
PROMOTION OF THE ARTS GRANTS TO ORGANIZATIONS AND INDIVIDUALS	45.024		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
PROMOTION OF THE ARTS GRANTS TO ORGANIZATIONS AND INDIVIDUALS	45.024		SERVICE FOUNDATION
ROMOTION OF THE ARTS GRANTS TO ORGANIZATIONS AND INDIVIDUALS	45.024		
ROMOTION OF THE ARTS GRANTS TO ORGANIZATIONS AND INDIVIDUALS	45.024		
ROMOTION OF THE ARTS PARTNERSHIP AGREEMENTS	45.025		
	45.025		UNIVERSITY OF NORTH GEORGIA RESEARCH
PROMOTION OF THE HUMANITIES FEDERAL/STATE PARTNERSHIP	45.129		FOUNDATION
ROMOTION OF THE HUMANITIES CHALLENGE GRANTS	45.129		TOUNDATION
ROMOTION OF THE HUMANITIES CHALLENGE GRANTS	45.130		
ROMOTION OF THE HUMANITIES DIVISION OF PRESERVATION AND ACCESS	45.149		
ROMOTION OF THE HUMANITIES DIVISION OF PRESERVATION AND ACCESS	45.149		
ROMOTION OF THE HUMANITIES FELLOWSHIPS AND STIPENDS	45.160		
ROMOTION OF THE HUMANITIES RESEARCH	45.161		
ROMOTION OF THE HUMANITIES RESEARCH	45.161		
ROMOTION OF THE HUMANITIES TEACHING AND LEARNING RESOURCES AND			
URRICULUM DEVELOPMENT	45.162		
			KENNESAW STATE UNIVERSITY RESEARCH AND
PROMOTION OF THE HUMANITIES PROFESSIONAL DEVELOPMENT	45.163		SERVICE FOUNDATION
ROMOTION OF THE HUMANITIES PROFESSIONAL DEVELOPMENT	45.163		
ROMOTION OF THE HUMANITIES PROFESSIONAL DEVELOPMENT	45.163		
ROMOTION OF THE HUMANITIES PUBLIC PROGRAMS	45.164		
ROMOTION OF THE HUMANITIES OFFICE OF DIGITAL HUMANITIES	45.169		
PROMOTION OF THE HUMANITIES OFFICE OF DIGITAL HUMANITIES	45.169		DAVIDSON COLLEGE
PROMOTION OF THE HUMANITIES OFFICE OF DIGITAL HUMANITIES	45.169		LOUISIANA STATE UNIVERSITY
ROMOTION OF THE HUMANITIES OFFICE OF DIGITAL HUMANITIES	45.169		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AN
MUSEUMS FOR AMERICA	45.301		SERVICE FOUNDATION, INC.
IUSEUMS FOR AMERICA	45.301		
IUSEUMS FOR AMERICA	45.301		
RANTS TO STATES	45.310		
ATIONAL LEADERSHIP GRANTS	45.312		
	45.312		
ATIONAL LEADERSHIP GRANTS			
ATIONAL LEADERSHIP GRANTS AURA BUSH 21ST CENTURY LIBRARIAN PROGRAM EACE CORPS GLOBAL HEALTH AND PEPFAR INITIATIVE PROGRAM	45.313 45.400		

NATIONAL SCIENCE FOUNDATION

		KENNESAW STATE UNIVERSITY RESEARCH AND
ENGINEERING GRANTS	47.041	SERVICE FOUNDATION
ENGINEERING GRANTS	47.041	
ENGINEERING GRANTS	47.041	ARIZONA STATE UNIVERSITY
ENGINEERING GRANTS	47.041	ARIZONA STATE UNIVERSITY
ENGINEERING GRANTS	47.041	ARIZONA STATE UNIVERSITY

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
201077-GTRC		\$47,590	\$1,044,781	RESEARCH AND DEVELOPMENT	\$1,033,282,52
201078-GTRC		\$133,014	\$1,044,781	RESEARCH AND DEVELOPMENT	\$1,033,282,52
201123-GTRC		\$15,000	\$1,044,781	RESEARCH AND DEVELOPMENT	\$1,033,282,52
301001-GTRC		\$246,167	\$1,044,781	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$195,800	\$585,279	\$1,044,781	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$109,674	\$109,674	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$68,190	\$1,246,495	N/A	ç
1607060Z4		\$134,836	\$1,246,495	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$13,406	\$1,043,469	\$1,246,495	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$2,870,195	\$21,211,407			
DCA 2017-17		\$14,324	\$56,929	N/A	\$6
15-4400-7125		-\$1,862	\$56,929	N/A	\$
16-5400-7025		-\$1,533	\$56,929	N/A	Ş
10-5400-7025		\$10,000		N/A	ر. >
			\$56,929		
	6745 014	\$36,000	\$56,929	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$745,011	\$750,982	\$750,982	N/A	ç
FY2019F25		\$2,000	\$2,000	N/A	\$
		\$20,130	\$62,083	N/A	ć
		\$41,953	\$62,083	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$1,580	\$149,039	N/A	¢1,033,202,32
		\$1,580	\$149,039	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$26,349	\$26,349	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$35,200	\$103,366		¢1 022 202 52
		\$68,166	\$103,366	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$26,128	\$26,128	N/A	ç
AQ-228977-15		\$1,054	\$209,111	N/A	\$
		\$106,780	\$209,111	N/A	Ś
		\$101,277	\$209,111	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$373	\$373	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$17,384	\$90,833	\$132,801	N/A	+ = / = = = = = = = = = = = = = = = = =
201702	Ş17,504	\$18,650	\$132,801	RESEARCH AND DEVELOPMENT	\$1,033,282,52
PO0000043115		\$1,657	\$132,801	RESEARCH AND DEVELOPMENT	\$1,033,282,52
100000045115		\$21,661	\$132,801	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		. ,			
63828383-15		\$32,862	\$71,576	N/A	Ş
		\$9,009	\$71,576	N/A	\$
		\$29,705	\$71,576	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$4,465,823	\$4,465,823	N/A	5
		\$7,213	\$15,433	N/A	Ş
		\$8,220	\$15,433	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$83,550	\$144,350 \$9,629	\$144,350 \$9,629	N/A RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$3,023	\$3,023	RESEARCH AND DEVELOPINIENT	\$1,033,262,32
	\$845,945	\$6,225,972			
479436-19C57		\$11.492	\$32,483,275	N/A	
479436-19C57		<i>\$11,492</i> \$174,952			
		\$174,952	\$32,483,275	N/A	5
479436-19C57 15-741 17-098					\$ \$ \$1,033,282,52 \$1,033,282,52

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
			BINGHAMTON UNIVERSITY, STATE UNIVERSITY OF
ENGINEERING GRANTS	47.041		NEW YORK
ENGINEERING GRANTS	47.041		BOSTON COLLEGE
ENGINEERING GRANTS	47.041		CLEMSON UNIVERSITY
ENGINEERING GRANTS	47.041		COLORADO STATE UNIVERSITY
ENGINEERING GRANTS	47.041		COLUMBIA UNIVERSITY
ENGINEERING GRANTS ENGINEERING GRANTS	47.041		FLORIDA STATE UNIVERSITY
ENGINEERING GRANTS	47.041 47.041		GEORGE WASHINGTON UNIVERSITY GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
ENGINEERING GRANTS	47.041		HARVARD UNIVERSITY
ENGINEERING GRANTS	47.041		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
ENGINEERING GRANTS	47.041		SERVICE FOUNDATION
ENGINEERING GRANTS	47.041		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
ENGINEERING GRANTS	47.041		KEPLEY BIOSYSTEMS, INC.
ENGINEERING GRANTS	47.041		LEADING EDGE CRYSTAL TECHNOLOGIES, INC.
ENGINEERING GRANTS	47.041		LEHIGH UNIVERSITY
ENGINEERING GRANTS	47.041		MASSACHUSETTS INSTITUTE OF TECHNOLOGY
ENGINEERING GRANTS	47.041		MASSACHUSETTS INSTITUTE OF TECHNOLOGY
ENGINEERING GRANTS	47.041		MICHIGAN STATE UNIVERSITY
ENGINEERING GRANTS	47.041		MOREHOUSE SCHOOL OF MEDICINE
ENGINEERING GRANTS	47.041		NORTH CAROLINA STATE UNIVERSITY
ENGINEERING GRANTS	47.041		TEACHERS COLLEGE, COLUMBIA UNIVERSITY
ENGINEERING GRANTS	47.041		TEXAS A&M UNIVERSITY
ENGINEERING GRANTS	47.041		THE CITY COLLEGE OF NEW YORK
	17.044		THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS
ENGINEERING GRANTS	47.041		
ENGINEERING GRANTS ENGINEERING GRANTS	47.041 47.041		UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA, IRVINE
ENGINEERING GRANTS	47.041		UNIVERSITY OF CALIFORNIA, INVINE
ENGINEERING GRANTS	47.041		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ENGINEERING GRANTS	47.041		UNIVERSITY OF ILLINOIS AT URBANA CHAMI AIGN
ENGINEERING GRANTS	47.041		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ENGINEERING GRANTS	47.041		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ENGINEERING GRANTS	47.041		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ENGINEERING GRANTS	47.041		UNIVERSITY OF MASSACHUSETTS
ENGINEERING GRANTS	47.041		UNIVERSITY OF MASSACHUSETTS
ENGINEERING GRANTS	47.041		UNIVERSITY OF MASSACHUSETTS
ENGINEERING GRANTS	47.041		UNIVERSITY OF MINNESOTA
ENGINEERING GRANTS	47.041		UNIVERSITY OF NEBRASKA-LINCOLN
ENGINEERING GRANTS	47.041		UNIVERSITY OF NEBRASKA-LINCOLN
ENGINEERING GRANTS	47.041		UNIVERSITY OF TEXAS AT AUSTIN
ENGINEERING GRANTS	47.041		UNIVERSITY OF WASHINGTON
ENGINEERING GRANTS	47.041		
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		MATHEMATICAL ASSOCIATION OF AMERICA
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		EMORY UNIVERSITY
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		EMORY UNIVERSITY
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
	17.010		KENNESAW STATE UNIVERSITY RESEARCH AND
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		SERVICE FOUNDATION

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
73033		¢15.000	622 402 275		\$1,033,282,522
CON010790		\$15,068 \$41,027	\$32,483,275 \$32,483,275	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
1825-206-2010995		\$41,027	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
G0097314		\$68,881	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1(GG13910)		\$251,465	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
R01706		\$41,863	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
18-510		\$58,675	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-16		\$301,154	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
124050-5104116		\$36,481	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
115-1850438		\$4,695	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1705924		\$27,682	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1741693		\$18,993	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AWD00009976		\$4,266	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AGREEMENT DATED AUG 28 2018		\$55,000	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON007045		\$18,684 \$1,179,646	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5710003968 5710003973		\$1,179,646 \$124,138	\$32,483,275 \$32,483,275	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
RC104008GTRC		\$124,138 \$5,179	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PO# P0044575		\$3,210	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2017-2662-01		\$68,387	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
513147		\$111,816	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
M1900051		\$24,567	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
40B88-B		\$1,127	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2004147329		\$1,328	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00009367		\$9,790	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#2016-3324		\$12,841	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S000677		\$51,206	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#083276-16801		\$35,024	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#083276-16803		\$73,296	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
078981-16550		\$20,353	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
083276-16293/GRANT CODE AC291		\$74,464	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
092559-17315		\$16,189	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S58000041772GT1		\$23,534	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S58000041772GT2		\$317	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
\$58000041772GT3		\$13,364	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A005261901		\$363,221	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
25-0521-0210-003 25-6221-0388-002		\$42,991 \$21,099	\$32,483,275 \$32,483,275	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
UTA15-001072		\$120,172	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UWSC10741 BPO NO. 34658		\$97,635	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$3,346,863	\$27,992,824	\$32,483,275	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1560329	1-,,	\$33,000	\$22,727,790	N/A	\$0
1800332		\$51,460	\$22,727,790	N/A	\$0
1806519		\$10,608	\$22,727,790	N/A	\$0
1820795		\$25,823	\$22,727,790	N/A	\$0
1820818		\$10,608	\$22,727,790	N/A	\$0
28184		\$4,000	\$22,727,790	N/A	\$0 \$0
20104		\$34	\$22,727,790	N/A	\$0 \$0
A022614		\$373,354	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T820709		\$6,353	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-17		\$128,142	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1464281		\$43,583	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1707201		Ç-9,909	<i>~~,, _,, ,, ,</i> , <i>,</i> , <i>,</i> , <i>,</i> , <i>,</i> , <i>,</i> ,		÷1,000,202,022

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
	47.040		KENNESAW STATE UNIVERSITY RESEARCH AND
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		SERVICE FOUNDATION KENNESAW STATE UNIVERSITY RESEARCH AND
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		SERVICE FOUNDATION
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		UNIVERSITY OF WISCONSIN - MADISON
MATHEMATICAL AND PHYSICAL SCIENCES	47.049		
GEOSCIENCES GEOSCIENCES	47.050 47.050		ARIZONA STATE UNIVERSITY BIGELOW LABORATORY FOR OCEAN SCIENCES
GEOSCIENCES	47.050		DUKE UNIVERSITY
GEOSCIENCES	47.050		DUKE UNIVERSITY
GEOSCIENCES	47.050		FLORIDA INSTITUTE OF TECHNOLOGY
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
GEOSCIENCES	47.050		SERVICE FOUNDATION, INC.
GEOSCIENCES	47.050		OPTOXENSE, INC.
GEOSCIENCES	47.050		UNIVERSITY OF CALIFORNIA, SAN DIEGO
GEOSCIENCES	47.050		UNIVERSITY OF CENTRAL FLORIDA
GEOSCIENCES	47.050		UNIVERSITY OF NEW HAMPSHIRE
GEOSCIENCES	47.050		UNIVERSITY OF NEW HAMPSHIRE
GEOSCIENCES	47.050		UNIVERSITY OF NORTH CAROLINA
GEOSCIENCES GEOSCIENCES	<i>47.050</i> 47.050		UNIVERSITY OF SOUTHERN CALIFORNIA
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		WINSTON-SALEM STATE UNIVERSITY
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		2M RESEARCH SERVICES, LLC
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		BARNARD COLLEGE
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		COMPUTING RESEARCH ASSOCIATION
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		CORNELL UNIVERSITY
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		EMORY UNIVERSITY
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		FLORIDA INTERNATIONAL UNIVERSITY
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		FLORIDA INTERNATIONAL UNIVERSITY
	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		SERVICE FOUNDATION KENNESAW STATE UNIVERSITY RESEARCH AND
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		SERVICE FOUNDATION
COMPOTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		SERVICE FOUNDATION
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		MASSACHUSETTS INSTITUTE OF TECHNOLOGY
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		PEROXYGEN SYSTEMS, INC.
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		REGENTS OF THE UNIVERSITY OF CALIFORNIA
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		SEARCH TECHNOLOGIES
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		SRI INTERNATIONAL
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		THE CONCORD CONSORTIUM
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070 47.070		UNIVERSITY OF ALABAMA UNIVERSITY OF CALIFORNIA
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA, DAVIS
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF CONNECTICUT
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF MICHIGAN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF NOTRE DAME
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070 47.070		UNIVERSITY OF PENNSYLVANIA UNIVERSITY OF TEXAS AT AUSTIN
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY OF TEXAS AT AUSTIN UNIVERSITY OF WASHINGTON

Identifying Number Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
1519606		\$23,282	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1709263		\$36,531	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1830489		\$4,104	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RG173-G3		\$63,445	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
632K273		\$63,423	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0321275	\$1,504,610	\$21,850,040	\$22,727,790	RESEARCH AND DEVELOPMENT	\$1,033,282,522
18-369	<i>Q</i> 1 ,504,010	\$4,966	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
BLOS 19-004		\$21,157	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#14-NSF-1074		\$107,538	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
14NSF1076		\$231,462	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
201984		\$67,909	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-18		\$17,776	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
F0691-01		\$64,191	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
83829300		\$28,950	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON007253		\$7,812	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#14-059		\$39,876	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
14062		\$32,452	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5779101806		\$72,532	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
91270817		\$54,121	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$627,233	\$7,670,041	\$8,420,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
566001466		\$15	\$20,078,197	N/A	\$0
2017-NSF-10020		\$42,400	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
GT-1828168		\$83,473	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CCC-GT-07012016		\$122,408	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
72954-10595		\$85,440	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T674956 800004907-02		\$13,540 \$220,244	\$20,078,197 \$20,078,197	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
CON007801		\$120,986	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00007801		\$120,980	\$20,078,197	RESEARCH AND DEVELOPINENT	¥1,033,282,322
1566170		\$48,984	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1651092		\$13,442	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1718377		\$110,196	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RB011-G10		-\$2,205	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5710004130		\$16,991	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AGR DTD 12/11/17		\$16,315	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
KK1715		\$131,982	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1645237		\$54,471	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PO28222		\$5,223	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
318.19.01		\$16,145	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A19-0027-S001		\$18,021	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
КК1926		\$25,214	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A18-0727-S001		\$14,723	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
177479		\$55,221	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2007-01077-59		-\$2,460	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
# 083276-17230		\$22,993	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#083276-17228		\$19,241	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
075958-16451 082276 16241/CRANT CODE AC201		\$24,727	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
083276-16241/GRANT CODE AC291 083842-16099		\$64,554 \$268,192	\$20,078,197 \$20,078,197	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
15832		\$268,192 \$326	\$20,078,197 \$20,078,197	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
SUBK00009143		\$320 \$26,402	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
202917GT		\$26,402 \$386,675	\$20,078,197 \$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
CON007710		\$36,170	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UTA17-001353		\$46,676	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UWSC9939		\$83,759	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
183405342/144AAC6327		\$74,695	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
			VIRGINIA POLYTECHNIC INSTITUTE AND STATE
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		UNIVERSITY
			VIRGINIA POLYTECHNIC INSTITUTE AND STATE
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	47.070		
COMPLITED AND INFORMATION SCIENCE AND ENCINEEDING	47.070		VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	<i>47.070</i> 47.070		UNIVERSITY
	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
BIOLOGICAL SCIENCES	47.074		SERVICE FOUNDATION
BIOLOGICAL SCIENCES	47.074		ARIZONA STATE UNIVERSITY
BIOLOGICAL SCIENCES	47.074		ARIZONA STATE UNIVERSITY
BIOLOGICAL SCIENCES	47.074		ARIZONA STATE UNIVERSITY
BIOLOGICAL SCIENCES	47.074		CARY INSTITUTE OF ECOSYSTEM STUDIES
BIOLOGICAL SCIENCES	47.074		COLD SPRING HARBOR LABORATORY
BIOLOGICAL SCIENCES	47.074 47.074		
BIOLOGICAL SCIENCES BIOLOGICAL SCIENCES	47.074		DUKE UNIVERSITY EMORY UNIVERSITY
BIOLOGICAL SCIENCES	47.074		EMORY UNIVERSITY
BIOLOGICAL SCIENCES	47.074		EMORY UNIVERSITY
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
BIOLOGICAL SCIENCES	47.074		SERVICE FOUNDATION, INC.
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOLOGICAL SCIENCES	47.074		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOLOGICAL SCIENCES	47.074		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOLOGICAL SCIENCES	47.074		SERVICE FOUNDATION
BIOLOGICAL SCIENCES BIOLOGICAL SCIENCES	47.074 47.074		MONTANA STATE UNIVERSITY PENNSYLVANIA STATE UNIVERSITY
BIOLOGICAL SCIENCES	47.074		PRINCETON UNIVERSITY
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF CALIFORNIA, DAVIS
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF CALIFORNIA, DAVIS
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF CALIFORNIA, DAVIS
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF CALIFORNIA, RIVERSIDE
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF CONNECTICUT
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF KENTUCKY
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF MINNESOTA
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF NORTH CAROLINA
BIOLOGICAL SCIENCES	47.074 47.074		UNIVERSITY OF PITTSBURGH UNIVERSITY OF PUERTO RICO. RÍO PIEDRAS
BIOLOGICAL SCIENCES BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF PUERTO RICO, RIO PIEDRAS
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF SOUTH FLORIDA
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF TENNESSEE
BIOLOGICAL SCIENCES	47.074		UNIVERSITY OF TEXAS AT AUSTIN
BIOLOGICAL SCIENCES	47.074		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		SERVICE FOUNDATION, INC.
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		ARIZONA STATE UNIVERSITY
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		ARIZONA STATE UNIVERSITY
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		ARIZONA STATE UNIVERSITY EMORY UNIVERSITY
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		GEORGE WASHINGTON UNIVERSITY
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		SEARCH TECHNOLOGIES
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		THE CITY COLLEGE OF NEW YORK
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		UNIVERSITY CONSORTIUM FOR GEOGRAPHIC SCIENCE
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		UNIVERSITY OF CALIFORNIA, DAVIS
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		UNIVERSITY OF TEXAS AT SAN ANTONIO
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		WAKE FOREST UNIVERSITY
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES	47.075		
EDUCATION AND HUMAN RESOURCES	47.076		CARLETON COLLEGE
	47.076		CLARK ATLANTA UNIVERSITY
EDUCATION AND HUMAN RESOURCES EDUCATION AND HUMAN RESOURCES	47.076		CLARK ATLANTA UNIVERSITY

47956933005 5650 500701197 RESEARCH AND DEVELOPMENT \$1,033,282, 47956919105A 500,000 500,078,197 RESEARCH AND DEVELOPMENT \$1,033,282, 480073-15934 537,775,656,61 500,078,197 RESEARCH AND DEVELOPMENT \$1,033,282, 480073-15934 5571,132 \$17,766,661 500,078,197 RESEARCH AND DEVELOPMENT \$1,033,282, 180046 \$10,517 \$19,828,692 RESEARCH AND DEVELOPMENT \$1,033,282, 170,1 \$1518,102 \$1,93,828,692 RESEARCH AND DEVELOPMENT \$1,033,322, 170,1 \$1518,102 \$1,93,828,692 RESEARCH AND DEVELOPMENT \$1,033,322, 170,1 \$1518,102 \$1,93,828,692 RESEARCH AND DEVELOPMENT \$1,033,322, 170,10 \$1,93,828,692 RESEARCH AND DEVELOPMENT \$1,033,322, 170,110 \$1,828,802 RESEARCH AND DEVELOPMENT \$1,033,322, 170,110 \$1,828,326 RESEARCH AND DEVELOPMENT \$1,033,322, 170,110 \$1,828,326 RESEARCH AND DEVELOPMENT \$1,033,322, 170,110 \$1,238,326,92 <th>Identifying Number Assigned By Funder Pass-Through Entity</th> <th>Total Amount Provided to Sub-Recipients</th> <th>Federal Expenditures</th> <th>Federal Program Total</th> <th>Cluster Name</th> <th>Cluster Total</th>	Identifying Number Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
47959819105A 520,075,197 RESERVEY AND DEVELOPMENT 51,033,282 480075-19034 \$57,1,32 \$57,7,6,61 \$20,075,197 RESERVEY AND DEVELOPMENT \$1,033,282 180076 \$20,075,197 RESERVEY AND DEVELOPMENT \$1,033,282 1000060 \$20,075,197 RESERVEY AND DEVELOPMENT \$1,033,282 10,1 \$1,032,027 \$1,033,282 RESERVEY AND DEVELOPMENT \$1,033,282 10,1 \$1,032,027 \$1,033,282 RESERVEY AND DEVELOPMENT \$1,033,282 10,1 \$1,033,282 RESERVEY AND DEVELOPMENT \$1,033,282 10,1 \$1,033,282 RESERVEY AND DEVELOPMENT \$1,033,282 10,030,000 \$1,033,282		Sub-Necipients	Experiances	Totul		10101
460073-19934 527/1.132 517/165.61 520078.197 RESEARCH AND DEVELOPMENT 51.033.287. 180046 510,517 515,837.607 NA 51.033.287. CON00573 51.557 515,837.607 NA 51.033.287. CON00573 51.55.61 519,837.607 NA 51.033.287. CON00573 55.54.02 519,837.607 NA 51.033.287. 335420201912 5156.093 519,832.692 RESEARCH AND DEVELOPMENT 51.033.287. 335420201912 5166.093 519,832.692 RESEARCH AND DEVELOPMENT 51.033.287. G306402 350,703 519,832.692 RESEARCH AND DEVELOPMENT 51.033.287. G306402 530,703 519,832.692 RESEARCH AND DEVELOPMENT 51.033.287. G3075819 51.7006 519,832.692 RESEARCH AND DEVELOPMENT 51.033.287. G30758319 5170,056 519,832.692 RESEARCH AND DEVELOPMENT 51.033.287. G30758319 5172,057 51,832.692 RESEARCH AND DEVELOPMENT 51.033.287. G30208319 5	47958919105		\$650	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SU71.132 \$17.765.661 \$50.078.397 RESEARCH AND DEVELOPMENT \$1.033.282. LB0066 S10.517 S19.832.662 N/A CON005703 S51.545 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. CON005703 S56.960 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. 3354270201912 S168.063 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. G6096402 S30.703 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.382. G6096402 S30.703 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.382. G6096402 S3.030 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.382. G6096402 S3.030 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. G6096402 S3.030 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. G60404 S1.03 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. J174778 S3.042.622 RESEARCH AND DEVELOPMENT S1.033.282. J15445558 S19.832.662<	47958919105A		\$40,000	\$20,078,197	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SU71.132 \$17.765.661 \$50.078.397 RESEARCH AND DEVELOPMENT \$1.033.282. LB0066 S10.517 S19.832.662 N/A CON005703 S51.545 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. CON005703 S56.960 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. 3354270201912 S168.063 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. G6096402 S30.703 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.382. G6096402 S30.703 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.382. G6096402 S3.030 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.382. G6096402 S3.030 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. G6096402 S3.030 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. G60404 S1.03 S19.832.662 RESEARCH AND DEVELOPMENT S1.033.282. J174778 S3.042.622 RESEARCH AND DEVELOPMENT S1.033.282. J15445558 S19.832.662<	180073-19031		\$3 707	\$20.078.197	RESEARCH AND DEVELOPMENT	\$1 033 282 522
CON006703 S81,564 S19,82,692 RESEARCH AND DEVELOPMENT S1,033,282 T.O. 1 S158,102 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 33540203122 S168,03 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 S2520115 PO20005XV S275,572 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G066/02 S90,03 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G066/02 S90,03 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 COM05010 S128,2562 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G066/02 S22,655 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G06305 S23,2652 RESEARCH AND DEVELOPMENT S1,033,282 G05646 S508 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G174,474 S33,622 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G174,474 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G165646 S19,832,692	400073 13034	\$671,132	. ,			\$1,033,282,522
CON006703 \$81,564 \$19,82,092 RESTARCH AND DEVELOPMENT \$1,033,282 7.0.1 \$158,102 \$19,832,092 RESERACH AND DEVELOPMENT \$1,033,282 335400201212 \$168,03 \$19,832,092 RESERACH AND DEVELOPMENT \$1,033,282 \$19,832,092 \$19,832,092 RESERACH AND DEVELOPMENT \$1,033,282 \$20,006702 \$20,832,092 RESERACH AND DEVELOPMENT \$1,033,282 \$0,006702 \$20,832,092 RESERACH AND DEVELOPMENT \$1,033,282 \$0,006703 \$19,832,692 RESERACH AND DEVELOPMENT \$1,033,282 \$0,005810 \$12,825 \$19,832,692 RESERACH AND DEVELOPMENT \$1,033,282 \$0,034,04 \$1,030 \$1,033,282 \$10,832,692 RESERACH AND DEVELOPMENT \$1,033,282 \$1056464 \$508 \$19,832,692 RESERACH AND DEVELOPMENT \$1,033,282 \$1074778 \$33,622 \$19,832,692 RESERACH AND DEVELOPMENT \$1,033,282 \$106564 \$10,832,692 RESERACH AND DEVELOPMENT \$1,033,282 \$106564 \$10,832,692 RESERACH AND DEVELOPMENT	180046		\$10 517	\$19 832 692	N/A	\$0
T.O. 1 STS 8.102 STS 8.102 STS 8.102 RESEARCH AND DEVELOPMENT ST.0.83.202 S32800115 PORODRSV \$276,572 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83.202 G906402 \$89,7572 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83.202 PEND 7(4* 33)-At10 \$360 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83.202 COMOSDIO \$12,826 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83.202 T66404 \$1,350 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83.202 1656464 \$10,83,262 RESEARCH AND DEVELOPMENT \$1,0.83,202 12656464 \$30,832,692 RESEARCH AND DEVELOPMENT \$1,0.83,202 MCB-1244250 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83,202 MCB-1244250 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83,202 MCB-1244250 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83,202 MCB-1244250 \$11,151 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,0.83,202 <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$1,033,282,522</td>						\$1,033,282,522
355200201921 5168.053 515.822.692 RESEARCH AND DEVELOPMENT 51.033.282. 0506402 \$80.703 \$15.822.692 RESEARCH AND DEVELOPMENT \$1.033.282. 0506403 \$15.826.692 RESEARCH AND DEVELOPMENT \$1.033.282. 0506403 \$15.826.692 RESEARCH AND DEVELOPMENT \$1.033.282. 0506403 \$1.836 \$15.826.692 RESEARCH AND DEVELOPMENT \$1.033.282. 0506505 \$232.665 \$19.832.692 RESEARCH AND DEVELOPMENT \$1.033.282. 0536644 \$508 \$19.832.692 RESEARCH AND DEVELOPMENT \$1.033.282. 1658664 \$508 \$19.832.692 RESEARCH AND DEVELOPMENT \$1.033.282. 1714778 \$33.622 \$19.832.692 RESEARCH AND DEVELOPMENT \$1.033.282. 1714778 \$33.622 \$19.832.692 RESEARCH AND DEVELOPMENT \$1.033.282. 1714778 \$33.622 \$19.832.692 RESEARCH AND DEVELOPMENT \$1.033.282. 10000056 \$1.341 \$10.832.692. RESEARCH AND DEVELOPMENT \$1.033.282. 10000056 \$1.341	CON010575		\$6,940	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S280115 P0320823V S276,572 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 PEND 7/F 333 2410 S300 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 PEND 7/F 333 2410 S300 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 T60300 S1,832,692 RESEARCH AND DEVELOPMENT S1,033,282 T60310 S1,832,692 RESEARCH AND DEVELOPMENT S1,033,282 T605105 S23,205 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 1656464 S508 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 171/17778 S33,622 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G124.4/44596 S11,153 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G124.4/44596 S11,153 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G124.4/44596 S11,313 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G124.4/44596 S19,832,692 RESEARCH AND DEVELOPMENT S1,033,282 G124.4/44596 S19,832,692<	T.O. 1		\$158,102	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
cosocial 580,703 513,82,622 RESEARCH AND DEVELOPMENT 51,033,22, 51,033,22, 760,0008810 COMORESID 51,826 519,822,622 RESEARCH AND DEVELOPMENT 51,033,22, 750,033,22, 780,0105 TBORIDS 523,265 519,832,692 RESEARCH AND DEVELOPMENT 51,033,22, 780,0105 6382,838-19 5170,006 519,832,692 RESEARCH AND DEVELOPMENT 51,033,22, 71,000 6382,838-19 5170,006 519,832,692 RESEARCH AND DEVELOPMENT 51,033,22, 71,000 1656464 -5508 519,832,692 RESEARCH AND DEVELOPMENT 51,033,282, 71,14778 174,778 533,622 519,832,692 RESEARCH AND DEVELOPMENT 51,033,282, 71,144,44596 174,778 533,622 519,832,692 RESEARCH AND DEVELOPMENT 51,033,282, 71,144,44596 174,778 533,622 S12,832,892 RESEARCH AND DEVELOPMENT 51,033,282, 71,032,022, 71,000,0263 174,778 533,622 S12,882,692 RESEARCH AND DEVELOPMENT 51,033,282, 71,000,0263 174,4778 533,622 S12,882,692 RESEARCH AND DEVELOPMENT 51,033,282, 71,000,0263 174,4778<	3354200201912		\$168,053	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PEND 7/4*33-3400 \$380 \$19.82,692 RESEARCH AND DEVELOPMENT \$1,033,282 CONDORSH0 \$1,286 \$1350 \$1382,692 RESEARCH AND DEVELOPMENT \$1,033,282 TR63404 \$1,350 \$1382,692 RESEARCH AND DEVELOPMENT \$1,033,282 T806105 \$23,265 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 63822838-19 \$170,096 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 1165464 \$508 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 11714778 \$33,622 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 G124-14-W3596 \$11,115 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 G124-14-W3596 \$11,315 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 G124-14-W3596 \$11,315 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 G124-14-W3596 \$11,315 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 G124-14-W3596 \$13,314 \$1,832,692 RESEARCH AND DEVELOPMENT <t< td=""><td>52580115 PO920982SV</td><td></td><td>\$276,572</td><td>\$19,832,692</td><td>RESEARCH AND DEVELOPMENT</td><td>\$1,033,282,522</td></t<>	52580115 PO920982SV		\$276,572	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CONDOSED \$1,226 \$12,822,692 RESEARCH AND DEVELOPMENT \$1,032,292 T806105 \$23,265 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 63828383-19 \$170,096 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 63828383-19 \$170,096 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 1656464 \$508 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 1714778 \$33,622 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 MCB-1244250 -\$1,341 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 6124-14-W356 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 100000263 \$12,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 2012333002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 20150377002 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 20000196219011 \$19,899 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282 2016008	G906402		\$80,703	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T663404 \$1,330 \$158,82,692 RESEARCH AND DEVELOPMENT \$1,033,282, T806105 \$23,265 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 638,2838-19 \$170,096 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1656464 .5508 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 171/4778 \$33,622 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, MCB-1244250 .51,341 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 6124-14-W4596 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 41900/GNS72742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233800 \$58,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233800 \$54,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233800 \$54,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20140352501A01 \$12,906 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282	PEND 7/1* 333-2410		\$360	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
TB06105 \$23,265 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 63828383 19 \$170,096 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1656464 \$508 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1714778 \$33,622 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, MCB-1244250 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 6124-14-W356 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233802 \$85,881 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233802 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233802 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20150377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20000196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 30000196219011 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, <t< td=""><td>CON005810</td><td></td><td>\$1,826</td><td>\$19,832,692</td><td>RESEARCH AND DEVELOPMENT</td><td>\$1,033,282,522</td></t<>	CON005810		\$1,826	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-19 \$170,096 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1656464 \$508 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1714778 \$33,622 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, MCB-1244250 \$1,1,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, G124-14W4596 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 41900/GNE2742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2012333802 \$58,681 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20103377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2000357002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2000357002 \$55,651 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20003502003 \$15,857 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2000036200136213901 \$13,399 \$13,832,692 RESEARCH AND DEVELOPMENT	T663404		\$1,350	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1656464 -5508 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1714778 \$33,622 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, MCB-1244250 -\$1,341 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, G124-14-W4596 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, G124-14-W4596 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, SUB000263 \$12,935 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20122333802 \$83,681 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20122333802 \$34,063 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 200001623001A01 \$12,290 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 30000166219011 \$19,932,692 RESEARCH AND DEVELOPMENT \$1,033,282, 30000166219011 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 30000166219011 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201608	T806105		\$23,265	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1714778 \$33,62 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, MCB-1244250 -51,341 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, G122-14-14/44596 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 41900/CNS2742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20122333802 \$88,881 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2012333802 \$86,881 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20170377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 0x000905 \$55,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 0x00196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 10045520117851 \$23,399 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$19,812,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$19,812,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20	63828383-19		\$170,096	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1714778 \$33,62 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, MCB-1244250 -51,341 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, G122-14-W4596 511,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 4190UCNS2742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2012233302 \$58,881 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201233302 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20170377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 0/0017017000642 \$15,5561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 0/00170200642 \$13,539 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 100455201178 \$12,937 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 10045520117851 \$23,399 \$18,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 10145020 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,	1656464		-\$508	\$10,827,607	RESEARCH AND DEVELOPMENT	\$1 022 282 522
MCB-1244250 S1,341 S19,832,692 RESEARCH AND DEVELOPMENT S1,032,282, S10,032,692 G124-14-W4556 S11,153 S19,932,692 RESEARCH AND DEVELOPMENT S1,033,282, S19,932,692 4190UGNS72742 \$28,653 \$19,932,692 RESEARCH AND DEVELOPMENT \$1,033,282, S19,932,692 20122333802 \$85,681 \$19,932,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,032,802 20122333802 \$85,681 \$19,932,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,032,692 20102303000 \$19,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,332,82, S10,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,332,82, S10,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,332,82, S10,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,332,82, S10,326,82 S19,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,322,22, S10,326,82 30000196;19011 \$19,373,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,3282, S10,326,92 S19,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,3282, S10,322,22, S10,326,92 S19,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,32,22, S10,326,92 S19,332,692 RESEARCH AND DEVELOPMENT \$1,033,282, S10,32,82, S10,32,82, S10				\$15,652,092	RESEARCH AND DEVELOPMENT	
G12+14-W4596 \$11,153 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 31,033,282, 4 190UGNSF2742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 31,033,282, 20122333802 \$85,681 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201037702 \$40,063 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 201037702 \$40,063 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 3000015 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 5000015 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 5000015 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 5000015 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 51,032,882, 5100018 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 51,032,882, 510,024 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,173 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,173 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,173 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016003 \$168,479 \$19,832,692 RESEARCH AND DEV	1714778		\$33,622	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
4190UGN\$F2742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$108000263 \$1,295 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2012333802 \$58,681 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20150377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, A1700325001A01 \$12,906 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$000095 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$000196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1002840 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1002840 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$100484 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1004902 \$15,81 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1019-002 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1019-002 \$5,8970	MCB-1244250		-\$1,341	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
4190uGMSF2742 \$28,653 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 20122233802 20122233802 \$55,661 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 20130377002 20150377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 20130377002 20150377002 \$55,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 5000905 5000905 \$55,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 2000915219011 3000905 \$55,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 2000915219011 300091562 \$15,867 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 200455220117851 300248 \$13,553 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 20109002 2015008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 20109002 2015008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 2010902 2015008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$10,33,282, 2010902 2016008	G124-14-W4596		\$11,153	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2012233802 \$\$6,681 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 20150377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, AIT00325001A01 \$12,906 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, S000905 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 09/01 UTA17-000642 \$155,697 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 30000196219011 \$13,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1006789902 \$33,399 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 00455220117851 \$32,305 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,173 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,176 \$19,832,692 RESEARCH AND DEVELOPMENT <	4190UGNSF2742			\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
20150377002 \$40,963 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, A170032S001A01 \$12,906 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, S000905 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 09/01 UTA17-000642 \$155,697 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 320000196219011 \$19,793 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 510248 \$15,53 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 00455220117851 \$32,305 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$16,173 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2111-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, A1001725004 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT </td <td>SUB0000263</td> <td></td> <td>\$1,295</td> <td>\$19,832,692</td> <td>RESEARCH AND DEVELOPMENT</td> <td>\$1,033,282,522</td>	SUB0000263		\$1,295	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A1700325001A01 \$12,906 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$19,832,692 09/01 UTA17-000642 \$15,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 320000196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, H006789902 \$33,399 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 0045520117851 \$52,305 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 2010-002 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, UTA17000642 \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 045328383-20 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, 63828383-20 \$7,450 \$2,689,711 N/A 514 \$9,586 \$2,689,711 <t< td=""><td>20122333802</td><td></td><td>\$85,681</td><td>\$19,832,692</td><td>RESEARCH AND DEVELOPMENT</td><td>\$1,033,282,522</td></t<>	20122333802		\$85,681	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S000905 \$5,561 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$10,33,282, \$10,33,280, \$10,33,280, \$10,33,280, \$10,832,692 09/01 UTA17-000642 \$155,697 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$10,33,282, \$10,248 320000196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$10,248 \$10,248 \$1,553 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$10,33,282, \$10,048 \$2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, \$10,0100 \$2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, \$1,031,282, \$1,031,282, \$1,031,282, \$1,11,092-00-A \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, \$1,033,282, \$1,031,282, \$1,000642 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,030,00 \$1,033,282, \$2,689,711 RESEARCH AND DEVELOPMENT \$1,033,282, \$1,033,282, \$1,033,282, \$1,033,2	20150377002		\$40,963	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
09/01 UTA17-000642 \$155,697 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 320000196219011 320000196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 406789902 \$10248 \$15,53 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 510248 00455220117851 \$32,305 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2019-002 2019-002 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2019-004 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, UTA1700642 UTA172004 \$5,970 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, UTA1700642 \$4,049,743 \$18,197,233 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, UTA1700642 \$4,049,743 \$18,197,233 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, UTA1700642 \$4,049,743 \$18,197,233 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, UTA1700642	A170032S001A01		\$12,906	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
320000196219011 \$19,799 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, (1033,282, 61034 1006789902 \$33,399 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 61034 510248 \$15,53 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 700455220117851 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 7019-002 2019-002 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 7019-002 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 71,033,282, 71,033,282, 71,033,282, 71,030,642 \$10,255 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 71,033,	\$000905		\$5,561	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
H006789902 \$33,399 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 510248 \$1,5,53 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 00455220117851 \$32,305 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 2019002 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, UTA17000642 \$5,705 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282, 63828383-20 \$7,450 \$2,689,711 N/A \$1,033,282, 14-364 \$5,896 \$2,689,711 N/A \$1,033,282, 14-364 \$5,897 \$2,689,711 N/A \$1,033,282, CON010101 \$207,332 \$2,689,711 RESEARCH AND DEVELOPMENT \$1,033,282, CON0006716 \$7,553	09/01 UTA17-000642		\$155,697	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
510248 \$1,553 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 00455220117851 \$32,305 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 2016008 \$168,178 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 2019-002 \$5,741 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 1211-1092-00-A \$14,459 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 0410725004 \$5,970 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 \$4,049,743 \$18,197,233 \$19,832,692 RESEARCH AND DEVELOPMENT \$1,033,282,200 \$1,4364 \$6,896 \$2,689,711 N/A \$1,033,282,200 \$1,033,282,200 \$1,61300 \$23,157 \$2,689,711	320000196219011		\$19,799	\$19,832,692	RESEARCH AND DEVELOPMENT	\$1,033,282,522
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17023 \$30,211 \$2,689,711 RESEARCH AND DEVELOPMENT \$1,033,282, \$229,555 \$2,188,158 \$2,689,711 RESEARCH AND DEVELOPMENT \$1,033,282, DUE1125331 -\$12 \$20,606,178 N/A CON005018 \$17,147 \$20,606,178 N/A HRD-0503372 \$6,435 \$20,606,178 N/A	CON007633		\$40,879	\$2,689,711	RESEARCH AND DEVELOPMENT	\$1,033,282,522
\$229,555 \$2,188,158 \$2,689,711 RESEARCH AND DEVELOPMENT \$1,033,282, DUE1125331 -\$12 \$20,606,178 N/A CON005018 \$17,147 \$20,606,178 N/A HRD-0503372 \$6,435 \$20,606,178 N/A	1724725		\$1,696	\$2,689,711	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DUE1125331 -\$12 \$20,606,178 N/A CON005018 \$17,147 \$20,606,178 N/A HRD-0503372 \$6,435 \$20,606,178 N/A	17023		\$30,211	\$2,689,711	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON005018 \$17,147 \$20,606,178 N/A HRD-0503372 \$6,435 \$20,606,178 N/A		\$229,555				\$1,033,282,522
HRD-0503372 \$6,435 \$20,606,178 N/A						\$0
						\$0
C4438 \$6,017 \$20,606,178 N/A						\$0
	C4438		\$6,017	\$20,606,178	N/A	\$0

Federal Awarding Agency/Program Title	Federal CFDA Number	Award Identification (Optional)	Name of Funder Pass-Through Entity
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AN
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION, INC.
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
EDUCATION AND HUMAN RESOURCES	47.076		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
EDUCATION AND HOMAN RESOURCES	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
	47.076		KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
EDUCATION AND HUMAN RESOURCES	47.076		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
EDUCATION AND HUMAN RESOURCES	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
EDUCATION AND HUMAN RESOURCES	47.076		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
UCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
EDUCATION AND HUMAN RESOURCES	47.076		ARIZONA STATE UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		AUBURN UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		CLARK ATLANTA UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		CLARK ATLANTA UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		CLARK ATLANTA UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		CLARKSON UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		FLORIDA STATE UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		INDIANA UNIVERSITY
	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
EDOCATION AND HOMAN RESOURCES	47.070		KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION AND HUMAN RESOURCES	47.076		SERVICE FOUNDATION
EDUCATION AND HUMAN RESOURCES	47.076		MICHIGAN STATE UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		NORTHWESTERN UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		STATE OF MINNESOTA
EDUCATION AND HUMAN RESOURCES EDUCATION AND HUMAN RESOURCES	47.076 47.076		TEMPLE UNIVERSITY TUFTS UNIVERSITY
EDUCATION AND HUMAN RESOURCES	47.076		UNIVERSITY OF COLORADO
EDUCATION AND HUMAN RESOURCES	47.076		UNIVERSITY OF COLORADO
EDUCATION AND HUMAN RESOURCES	47.076		UNIVERSITY OF ILLINOIS
EDUCATION AND HUMAN RESOURCES	47.076		UNIVERSITY OF NEBRASKA
EDUCATION AND HUMAN RESOURCES	47.076		UNIVERSITY OF SOUTHERN CALIFORNIA
EDUCATION AND HUMAN RESOURCES	47.076		WESTERN MICHIGAN UNIVERSITY
UCATION AND HUMAN RESOURCES	47.076		
FICE OF INTERNATIONAL SCIENCE AND ENGINEERING	47.079		
FICE OF CYBERINFRASTRUCTURE	47.080		
OFFICE OF INTEGRATIVE ACTIVITIES	47.083		UNIVERSITY OF KENTUCKY

Identifying Number Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
63828383-21		\$341,577	\$20,606,178	N/A	\$0
115-1850468		\$5,683	\$20,606,178	N/A	\$0
1548986		-\$973	\$20,606,178	N/A	\$0
1619689		\$76,939	\$20,606,178	N/A	\$0
1725940		\$22,038	\$20,606,178	N/A	\$0
180114		\$3,645	\$20,606,178	N/A	\$0
77903-119096-3		\$771	\$20,606,178	N/A	\$0
DGE-1438858		\$27,223	\$20,606,178	N/A	\$0
DUE-1035451		\$42,583	\$20,606,178	N/A	\$0
DUE-1259954		\$91,744	\$20,606,178	N/A	\$0
DUE-1340019		\$42,232	\$20,606,178	N/A	\$0
DUE-1340020		\$77,610	\$20,606,178	N/A	\$0
DUE1660736		\$37,590	\$20,606,178	N/A	\$0
RR740-019/S001595		<i>\$59,230</i> \$583,118	<i>\$20,606,178</i> \$20,606,178	N/A N/A	<i>\$0</i> \$0
17-231		\$52,655	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
30491		\$5,033	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011978		\$25,624		RESEARCH AND DEVELOPMENT	
RSP-09-13-215045-008		\$25,624 \$32,847	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
			\$20,606,178		\$1,033,282,522
RSP-2018-033-215051-008		\$10,318	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1001981		\$35,811	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON009029		\$99,292	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
BL4842404UGA		\$128,932	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0416-CS-PB-KSU		\$465	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1557285		\$8,882	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1711425		\$40,802	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1723586		\$47,266	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DUE-1356615		\$82,134	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RC103095UG		\$95,081	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SP0049508-PR0J0013883		\$15,115	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
P0032617		\$4,331	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1721041		\$41,164	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
10221400001SF0001		\$139,413	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1554503		\$123,728	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1556410		\$7,655	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
087787-16516		\$35,257	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON008822		\$21,465	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AWD00009520		\$47,066	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON006494		\$6,798	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$678,117	\$18,058,447	\$20,606,178	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$144,941	\$144,941	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$31,756	\$31,756	RESEARCH AND DEVELOPMENT	\$1,033,282,522
3200000271-16-075		\$99,857	\$99,857	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$11,107,253	\$127,115,180			

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
SMALL BUSINESS ADMINISTRATION		(optional)	,
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
SMALL BUSINESS DEVELOPMENT CENTERS	59.037		SERVICE FOUNDATION, INC.
SMALL BUSINESS DEVELOPMENT CENTERS	59.037		
SMALL BUSINESS DEVELOPMENT CENTERS	59.037		
	50.044		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
VETERANS OUTREACH PROGRAM VETERANS OUTREACH PROGRAM	<i>59.044</i> 59.044		SERVICE FOUNDATION, INC.
STATE TRADE EXPANSION	59.044		EMORY UNIVERSITY
TOTAL SMALL BUSINESS ADMINISTRATION	001001		
SMITHSONIAN INSTITUTION			
THE SEARCH FOR STANDARDS: MODERNITY, MARKETS, AND TOTAL SMITHSONIAN INSTITUTION	60.RD	17STIP190000 0376004	
DEPARTMENT OF VETERANS AFFAIRS			
VETERANS STATE NURSING HOME CARE	64.015		
POST-9/11 VETERANS EDUCATIONAL ASSISTANCE	64.028		
RESEARCH AND DEVELOPMENT	64.054		LIBERTY IT SOLUTIONS, LLC
RESEARCH AND DEVELOPMENT BURIAL EXPENSES ALLOWANCE FOR VETERANS	64.054 64.101		
POST-VIETNAM ERA VETERANS' EDUCATIONAL ASSISTANCE	64.101		
VETERANS CEMETERY GRANTS PROGRAM	64.203		
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC00244	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS	64.U12	VAMC002541	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS	64.U13	VAMC002511	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002512	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002591	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC0025013	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC0024912 VAMC0024913	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC0024913	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002491	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002499	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS	64.U22	VAMC002592	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS	64.U23	VAMC0024914	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002551	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002496	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002492 VAMC0024916	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC0024916 VAMC0024910	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAIVIC0024910 VAMC0024915	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002593	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS		VAMC002494	
CONTRACTED RESEARCH SERVICES FOR MERIT AWARDS	64.U32	VAMC002495	
		CONTRACT	
		36C24E19D00	
DEPARTMENT OF VETERANS ADMINISTRATION OTHER FINANCIAL ASSISTANCE TOTAL DEPARTMENT OF VETERANS AFFAIRS	64.U33	05	
ENVIRONMENTAL PROTECTION AGENCY			
STATE INDOOR RADON GRANTS	66.032		
SURVEYS, STUDIES, RESEARCH, INVESTIGATIONS, DEMONSTRATIONS, AND SPECIAL			
PURPOSE ACTIVITIES RELATING TO THE CLEAN AIR ACT	66.034		
NATIONAL CLEAN DIESEL EMISSIONS REDUCTION PROGRAM	66.039		
	66.040		

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

ldentifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		,			
63828383-22		\$157,230	\$4,818,177	N/A	\$0
		\$256,436	\$4,818,177	N/A	\$0
	\$90,334	\$4,404,511	\$4,818,177	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-23		-\$5,078	\$223,431	N/A	\$0
03020303 23		\$228,509	\$223,431	N/A	\$0
UL1TR002378 / A025833		\$50,970	\$50,970	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$90,334	\$5,092,578			
		\$2,613	\$2,613	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$2,613			
	\$12,195,059	\$20,418,852	\$20,418,852	N/A	\$0
		\$2,348,437	\$2,348,437	N/A	\$0
17-GTRC-0001		\$57,836	\$128,944	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$71,108	\$128,944	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$294,420 \$766,530	\$294,420 \$766,530	N/A N/A	\$0 \$0
		\$3,094,314	\$3,094,314	N/A N/A	\$0
		\$3,091,636	\$3,091,636	N/A	\$0
		\$14,149	\$14,149	N/A	\$0
		\$4,534	\$4,534	N/A	\$0
		\$6,545	\$6,545	N/A	\$0
		\$12,001	\$12,001	N/A	\$0
		\$60,634	\$60,634	N/A	\$0
		\$50,132	\$50,132	N/A	\$0
		\$53,538	\$53,538	N/A	\$0
		\$35,040	\$35,040	N/A	\$0 \$0
		\$19,699 \$29,257	\$19,699 \$29,257	N/A N/A	\$0 \$0
		\$10,305	\$10,305	N/A N/A	\$0
		\$28,674	\$28,674	N/A	\$0
		\$7,771	\$7,771	N/A	\$0
		\$42,456	\$42,456	N/A	\$0
		\$38,207	\$38,207	N/A	\$0
		\$2,065	\$2,065	N/A	\$0
		\$34,737	\$34,737	N/A	\$0
		\$18,701	\$18,701	N/A	\$0
		\$270	\$270	N/A	\$0
		\$6,074 \$23,275	\$6,074 \$23,275	N/A N/A	\$0 \$0
		\$1,365	\$1,365	N/A	\$0
	¢12 105 050		\$1,505	N/A	ŞU
	\$12,195,059	\$30,642,562			
		\$107,264	\$107,264	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$910,770	\$910,770	N/A	\$0
		\$150,000 \$382,661	\$150,000 \$382,661	N/A N/A	\$0 \$0
		\$382,661 \$228,410	\$382,661 \$228,410	N/A N/A	\$0 \$0
		7220, 4 10	7220,41U		Ş0

Image: contraining and	Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
CAPTIALIZATION GRANTS FOR CLEAN WATER STATE REVOLVING FUNDS 66.459 NONPOINT SOURCE IMPLEMENTATION GRANTS 66.460 REGIONAL WETLAND PROGRAM DEVELOPMENT GRANTS 66.461 REGIONAL WETLAND PROGRAM DEVELOPMENT GRANTS 66.500 OFFICE OF ACHIEV RESULTS (STAR) RESEARCH PROGRAM 66.500 OFFICE OF ACHIEV RESULTS (STAR) RESEARCH PROGRAM 66.514 RESEARCH / TRAINING/ELLOWSHIP PROGRAM 66.514 RESEARCH / TRAINING/ELLOWSHIP PROGRAM 66.514 RESEARCH / RAINONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCESAN STATE UNI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCESANS STATE UNI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCESANS STATE UNI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCES COMPLIANCE MONTORING COOPERATIVE AGREEMENTS 66.701 TOXIC SUBSTANCES COMPLETITION SUSTAINABILITY 66.516 REENCESANS STATE UNI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCESANS STATE UNI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCESANS STATE UNI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCES COMPLIANCE METNOSIN GRANT PROGRAM AND RELED P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 REENCES COMPLIANCE METNOSIN GRANT PROGRAM CONSTAINTS CONSTAINTS CONSTAINTS CONSTAINTS CONSTAINTS CONSTAINTS CONSTAINTS CONSTAINTS CO	ATE UNDERGROUND WATER SOURCE PROTECTION	66.433		
NONPORT SOURCE IMPLEMENTATION GRANTS 66.460 NONPORT SOURCE IMPLEMENTATION GRANTS 66.460 GEORGI SOUTHERM IN NONPORT SOURCE IMPLEMENTATION GRANTS 66.460 REGIONAL WEILAND PROGRAM DEVELOPMENT GRANTS 66.460 RUVER VALLEY REGI REGIONAL WEILAND PROGRAM DEVELOPMENT GRANTS 66.461 CAPITALIZATION GRANT SFOR DRINKING WATER STATE REVOLVING FUNDS 66.461 CAPITALIZATION GRANT SFOR DRINKING WATER STATE REVOLVING FUNDS 66.461 SERVER TO ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.509 SERVER TO ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.509 OFFICE OF ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.509 OFFICE OF ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.511 WATER ENVIRONMENT SERVEC TO ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.512 CAPITALIZATION GRANT STORE CAPITAL RESEARCH PROGRAM 66.511 WATER ENVIRONMENT SERVEC TO ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.512 CAPITALIZATION CRANTS STORE CAPITAL RESEARCH PROGRAM 66.514 WATER ENVIRONMENT SERVECT D ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.514 WATER ENVIRONMENT SERVECT D ACINEY RESULTS (STAR) RESEARCH PROGRAM 66.514 WATER ENVIRONMENT SERVECT D ACINEY RESULTS (STAR) FELLOWSHIP PROGRAM 66.514 WATER ENVIRONMENT SERVECT D ACINEY RESULTS (STAR) FELLOWSHIP PROGRAM 66.514 REVERSAW STATE LWI P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 65.516 SERVICE FO P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 SERVICE FO P3 AWARD: NATIONAL STUD	TER QUALITY MANAGEMENT PLANNING	66.454		
NONPOINT SOURCE IMPLEMENTATION GRANTS 66.460 NONPOINT SOURCE IMPLEMENTATION GRANTS 66.460 GEORGI SOUTHERN NONPOINT SOURCE IMPLEMENTATION GRANTS 66.460 SERVICE FOR SERVICE FOR SOURCE IMPLEMENTATION GRANTS 66.460 RUVER VALLEY REGI SERVICE IMPLEMENTATION GRANTS 66.461 COMMONT SOURCE INPOS COMMON PROGRAM INFERENCIATION GRANTS 66.472 SOURCE TO ACHIEVE RESULTS (STAR) RESEARCH PROGRAM 66.509 OFFICE OF RESEARCH AND DEVELOPMENT CONSOLIDATED RESEARCH TO ACHIEVE RESULTS (STAR) RESEARCH PROGRAM 66.510 OFFICE OF RESEARCH AND DEVELOPMENT CONSOLIDATED RESEARCH TO ACHIEVE RESULTS (STAR) RESEARCH PROGRAM 66.511 WATER ENVIRONMENT SOURCE TO ACHIEVE RESULTS (STAR) RESEARCH PROGRAM 66.512 OFFICE OF RESEARCH AND DEVELOPMENT CONSOLIDATED RESEARCH JOACHIEVE RESULTS (STAR) RESEARCH PROGRAM 66.514 RENERAL SOURCE RESULTS (STAR) RESEARCH PROGRAM 10.65.516 RENERAL SOURCE RESULTS (STAR) RESEARCH PROGRAM 76.516 SERVICE FO P3 AWARD. NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 SERVICE FO P3 AWARD. NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 RENERAL SOURCE RESEARCH DESIGN COMPETITION FOR SUSTAINABILITY 66.516 SERVICE FOR P3 AWARD. NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 SERVIC				
NONPOINT SQURCE IMPLEMENTATION GRANTS 66.460 COMBINE NONPOINT SQURCE IMPLEMENTATION GRANTS 66.460 SERVICE FOUL NONPOINT SQURCE IMPLEMENTATION GRANTS 66.460 REVER VALLEY REGI REGIONAL WEITAND PROGRAM DEVELOPMENT GRANTS 66.461 REVER VALLEY REGI REGIONAL WEITAND PROGRAM DEVELOPMENT GRANTS 66.463 REGIONAL WEITAND PROGRAM DEVELOPMENT GRANTS SECREC TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.509 NORTHEASTE SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.509 STOCKNOUM ENVIR SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.509 STOCKNOUM ENVIR SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.514 WATER ENVIRONMENT SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.514 WATER ENVIRONMENT SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.514 KENNESSAW STATE UNI SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.514 KENNESSAW STATE UNI SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.514 KENNESSAW STATE UNI SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PROGRAM 66.516 KENNESSAW STATE UNI SCIENCE TO ACHIEV RESULTS ISTAR RESEARCH PR	PITALIZATION GRANTS FOR CLEAN WATER STATE REVOLVING FUNDS	66.458		
Image: contrained by the second sec	NPOINT SOURCE IMPLEMENTATION GRANTS	66.460		
NOMPOINT SOURCE IMPLEMENTATION GRANTS 66.460 SERVICE FOU NOMPOINT SOURCE IMPLEMENTATION GRANTS 66.461 RIVER VALLEY FOU REGIONAL WETLAND PROGRAM DEVELOPMENT GRANTS 66.461 RIVER VALLEY FOU REGIONAL WETLAND PROGRAM DEVELOPMENT GRANTS 66.461 RIVER VALLEY FOU SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.509 NORTHEASTED SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.509 STOCKHOUN ENVIR SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.509 STOCKHOUN ENVIR SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.511 WATER ENVIRONMENT SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.511 WATER ENVIRONMENT SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.511 WATER ENVIRONMENT RESERRCH TRAINING/FELOWSHIPS 66.511 WATER ENVIRONMENT SCIENCE TO ACHIVE RESULTS (STAR) RESARCH PROGRAM 66.516 KENNESAW STATE UN P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 KENNESAW STATE UN P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION FOR SUSTAINABILITY 66.516 KENNESAW STATE UN P3 AWARD: NATIONAL STUDENT DESIGN COMPETITION	NONPOINT SOURCE IMPLEMENTATION GRANTS	66.460		CAMDEN COUNTY
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TOTAL NUCLEAR REGULATORY COMMISSION DEPARTMENT OF ENERGY		77.000		
		77.009		UNIVERSITY OF FLORIDA
	PARTMENT OF ENERGY			
INVENTIONS AND INNOVATIONS 81.036 SANDIA NATION	INVENTIONS AND INNOVATIONS	81.036		SANDIA NATIONAL LABORATORIES
				SANDIA NATIONAL LABORATORIES
STATE ENERGY PROGRAM 81.041	ATE ENERGY PROGRAM	81.041		

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
•	•	\$107,801	\$107,801	N/A	\$0
		\$357,117	\$357,117	N/A	\$0
				CLEAN WATER STATE REVOLVING FUND	
	\$27,138,000	\$27,138,000	\$27,138,000	CLUSTER	\$27,138,000
111/200000055		\$2,797,715	\$2,822,318		\$0
AWD00009355		\$9,909	\$2,822,318	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-24		\$4,114	\$2,822,318	RESEARCH AND DEVELOPMENT	\$1,033,282,522
751-170056		\$10,580	\$2,822,318	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$266,040	\$281,271	N/A	\$0
		\$15,231	\$281,271	RESEARCH AND DEVELOPMENT	\$1,033,282,522
				DRINKING WATER STATE REVOLVING FUND	
	\$26,426,859	\$27,473,859	\$27,473,859	CLUSTER	\$27,473,859
		\$264,821	\$264,821	N/A	\$0
50510978050 5546801		\$16,730 \$1,436	\$552,010 \$552,010	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
5540801	\$34,439	\$533,844	\$552,010	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	Ş5 7,7 55	Ş333,0 11	\$552,010	RESEARCH AND DEVELOP MENT	J1,033,202,322
LCASW6SG16		\$5,935	\$5,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$29,506	\$29,506	RESEARCH AND DEVELOPMENT	\$1,033,282,522
83929001		\$328	\$31,031	N/A	\$0
				_	
83935301		\$24,475	\$31,031	N/A	\$0
83679301		\$1,805	\$31,031	RESEARCH AND DEVELOPMENT	\$1,033,282,522
83079301		\$4,423	\$31,031	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$11,941,286	\$11,941,286	N/A	\$0
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		\$440,008	\$440,008	N/A	\$0
		\$113,829	\$113,829	N/A	\$0
		\$631,755	\$631,755	N/A	\$0
		\$126,707	\$126,707	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SA201729		\$21,921	\$23,687	RESEARCH AND DEVELOPMENT	\$1,033,282,522
54201725		<i>Ş</i> 21,521	<i>723,007</i>	RESEARCH AND DEVELOF MENT	<i>Ş1,033,202,322</i>
SA-2019-43		\$1,766	\$23,687	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		. ,			
		\$254,512	\$254,512	N/A	\$0
		\$718,288	\$718,288	N/A	\$0
		\$1,875,741	\$1,875,741	N/A	\$0
		\$100,696	\$100,696	N/A	\$0
		\$632,984 \$27,086	\$632,984 \$27,086	N/A N/A	\$0 \$0
		<i>\$27,</i> 080	Ş27,080	N/A	ΟÇ
	\$53,599,298	\$77,729,353			
		\$30,228	\$30,228	N/A	\$0
			,==0		ŶŸ
NRC-HQ-60-17-G-003		\$95,235	\$303,613	N/A	\$0
		\$55,000	\$303,613	N/A	\$0
		\$153,378	\$303,613	RESEARCH AND DEVELOPMENT	\$1,033,282,522
11505000012050		¢64 544	¢64 544		¢1 022 202 522
UFDSP00012059		\$64,541	\$64,541	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$398,382			
1614313		\$1,345	\$31,843	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		ć20.400	C21 012	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1764414	\$457,754	<i>\$30,498</i> \$954,767	<i>\$31,843</i> \$954,767	RESEARCH AND DEVELOPMENT	\$1,033,282,522

	Federal CFDA	Additional Award Identification	Name of Funder Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
EATHERIZATION ASSISTANCE FOR LOW-INCOME PERSONS	81.042		
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		KRELL INSTITUTE
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		KRELL INSTITUTE
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049 81.049		SANDIA NATIONAL LABORATORIES SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SANDIA NATIONAL LABORATORIES
FICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		AECOM CONSULT, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		AECOM CONSULT, INC. AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		(AICHE)
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		AMTECH SYSTEMS, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		ARGONNE NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		ARGONNE NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		AVAPCO, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		BROOKHAVEN NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		BROWN UNIVERSITY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		CONTINUUM DYNAMICS, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		FERMI RESEARCH ALLIANCE, LLC (FERMILAB)
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		FLORIDA STATE UNIVERSITY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		FLUOR MARINE PROPULSION, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		FLUOR MARINE PROPULSION, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		HIFUNDA, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		HONEYWELL INTERNATIONAL, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		HONEYWELL INTERNATIONAL, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		HONEYWELL INTERNATIONAL, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		HONEYWELL INTERNATIONAL, INC.
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OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		HONEYWELL INTERNATIONAL, INC. HONEYWELL INTERNATIONAL, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		IDAHO NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		IDAHO NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		IDAHO NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		IDAHO NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		KRELL INSTITUTE
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		KRELL INSTITUTE
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE BERKELEY NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE BERKELEY NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE BERKELEY NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE LIVERMORE NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE LIVERMORE NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE LIVERMORE NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LAWRENCE LIVERMORE NATIONAL LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LEADING EDGE CRYSTAL TECHNOLOGIES, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		LOS ALAMOS NATIONAL LABORATORY
			MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		MELE ASSOCIATES, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		NATIONAL RENEWABLE ENERGY LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		NATIONAL RENEWABLE ENERGY LABORATORY NATIONAL RENEWABLE ENERGY LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049 81.049		NATIONAL RENEWABLE ENERGY LABORATORY NATIONAL RENEWABLE ENERGY LABORATORY

Assigned By Funder Pass-Through Entity	Total Amount		Federal	Cluster Name	
	Provided to Sub-Recipients	Federal Expenditures	Program Total		Cluster Total
KRELL-01		\$50,312	\$19,911,663	N/A	\$
KRELL-03		\$47,697	\$19,911,663	N/A	\$
138662		\$9,679	\$19,911,663	N/A	\$
136772		\$15,008	\$19,911,663	N/A	\$
139827		\$20,000	\$19,911,663	N/A	\$
SANDIA-01		\$9,300	\$19,911,663	N/A	\$
SANDIA-02		\$50,000	\$19,911,663	N/A	\$
		\$65,110	\$19,911,663	N/A	5
RES15056247		\$34,509	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
RES1506246		\$29,940	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		6102 617	¢10.011.002		64 022 202 52
2		\$103,617	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGREEMENT DATED MARCH 1, 2019 8F-30135		\$88,883	\$19,911,663	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
9F-60044		\$195,270 \$28,686	\$19,911,663 \$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
1549-00-005		\$28,080 \$0	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
343172		\$108,578	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
00001289		\$108,578	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
65Q1097564		\$135,884	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
STTR: AGRMT DTD 01 APR 2015		\$104,694	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
655410		\$17,338	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
R01436		\$14,229	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
124004		\$168,650	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
131210		\$212,288	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
STTR: AGMT DTD 02 MARCH 2015		-\$528	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGR DTD 08/07/18		\$123,472	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000230924		\$0	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000250980		\$77,335	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000254510		\$58,157	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000293974		\$13,557	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000297946		\$30,907	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000300107		\$178,243	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000300454		\$59,005	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
N000314432		\$69,045	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
PO # N000249536 TASK #3		\$46,265	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0179569		\$5,160	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0207604		\$17,062	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
190986		\$96,093	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
201636		\$13,332	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
5718801 KRELL-02		\$42,750 \$48,640	\$19,911,663	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$1,033,282,52
7284683		\$34,026	\$19,911,663 \$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
7360408		\$452,484	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
7375547		\$47,562	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
B617458		\$4	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
B628150		\$39,144	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
B630765		\$29,999	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
B632619		\$41,316	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
AGREEMENT DATED JUNE 1 2018		\$55,000	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
364502		\$48,581	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
371097		\$93,211	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
389971		-\$4,685	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
421807		\$81,721	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
515443		\$12,860	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
524823		\$10,840	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
547813		\$80,511	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
7000434835		\$9,015	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
MELE AGMT 21SEPT2018		\$168,205	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
G13915W5072		\$84,318	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
XAT-6-62147-01		\$49,333	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
XDJ-9-82320-01		\$9,996	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
XEJ-7-62291-01		\$1,296	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52
XEJ-7-70103-01		\$10,882	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,52

	Additi Federal Awa CFDA Identific	rd Name of Funder cation Pass-Through
Federal Awarding Agency/Program Title	Number (Optio	nal) Entity
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	NATIONAL RENEWABLE ENERGY LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	OAK RIDGE ASSOCIATED UNIVERSITIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	OAK RIDGE ASSOCIATED UNIVERSITIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	OAK RIDGE ASSOCIATED UNIVERSITIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	OAK RIDGE ASSOCIATED UNIVERSITIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
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OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
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OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PACIFIC NORTHWEST NATIONAL LABORATOR
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	PHOSPHORTECH CORPORATION
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	SANDIA NATIONAL LABORATORIES
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OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM		SANDIA NATIONAL LABORATORIES
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OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049	SANDIA NATIONAL LABORATORIES

Identifying Number Assigned By Funder	Total Amount		Federal		
Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
XEJ-9-82336-01		\$40,900	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
4000084578		\$101	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
4000100062		\$27,392	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
LTR DTD 5/21/18		\$5,000	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
LTR DTD 5/28/18		\$6,316	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
262787		-\$28,333	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
322234		\$161,019	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
331867		\$14,493	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
392784		\$6,640	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
414670		\$90,434	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
432002		\$44,270	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
439121		\$32,792	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
449705		\$69,638	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
462860		\$25,575	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
DE-SC0018611		\$89,062	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
139668		\$15,000	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1631334		\$15,000	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1643373		\$46,605	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1719027		\$23,951	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1740727		\$17,041	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1742041		\$15,611	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1744348		\$79,155	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1755523		\$122,814	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1764531		\$28,630	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1767660		\$42,007	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1804495		\$31,338	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1807549		\$186,324	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1836843		\$42,166	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1838573		\$103,637	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1838714		\$132,605	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1840059		\$90,799	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1841736		\$41,650	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1846613		\$2,384	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1856100		\$19,801	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1856101		\$9,586	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1861841		\$30,621	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1862981		\$161,901	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1871005 1883603		\$69,442	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$21,150	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1884667		\$16,678	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1897564		\$32,538	\$19,911,663	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
1901033 1902837		\$34,176	\$19,911,663 \$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1907283		\$19,044 \$69,446	\$19,911,663	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
1920585		\$106,333	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1920644		\$100,555	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1930550		\$35,625	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1944705		\$20,000	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1952411		\$143,337	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1954355		\$151,622	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1959383		\$5,000	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1960037		\$43,090	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1960773		\$38,847	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1971768		\$53,514	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1973820		\$90,847	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1974284		\$40,215	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1975640		\$42,950	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1978929		\$22,748	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1980535		\$31,003	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1984599		\$35,706	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1991855		\$65,783	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1991833		\$31,351	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1995932		\$32,349	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		-JJZ,J45			<i>41,033,202,322</i>
1997022		\$37,277	\$19,911,663	RESEARCH AND DEVELOPMENT	\$1,033,282,522

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Ontional)	Name of Funder Pass-Through Entity
		(Optional)	,
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049 81.049		SANDIA NATIONAL LABORATORIES SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SANDIA NATIONAL LABORATORIES
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SAVANNAH RIVER NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SAVANNAH RIVER NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SAVANNAH RIVER NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SAVANNAH RIVER NATIONAL LABORATORY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		SIXPOINT MATERIALS, INC.
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		STONY BROOK UNIVERSITY, STATE UNIVERSITY (NEW YORK
			SUSTAINABLE MANUFACTURING INNOVATION
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		ALLIANCE CORPORATION
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF ARIZONA
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF CALIFORNIA, SAN DIEGO
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF DELAWARE
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF MINNESOTA
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF NORTH CAROLINA
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF WISCONSIN - MADISON
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY OF WISCONSIN - MADISON
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UT-BATTELLE, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UT-BATTELLE, LLC
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OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UT-BATTELLE, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		VANDERBILT UNIVERSITY
			VIRGINIA POLYTECHNIC INSTITUTE AND STATE
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		UNIVERSITY
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		VURONYX TECHNOLOGIES, LLC
OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		WASHINGTON STATE UNIVERSITY
ICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM	81.049		
CONSERVATION RESEARCH AND DEVELOPMENT	81.086		ELECTRIC POWER RESEARCH INSTITUTE
CONSERVATION RESEARCH AND DEVELOPMENT	81.086		POWERAMERICA INSTITUTE
CONSERVATION RESEARCH AND DEVELOPMENT	81.086		VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

2013350 \$1,399 \$19,911,663 RESEARCH 2015247 \$7,894 \$19,911,663 RESEARCH 2032371 \$28,345 \$19,911,663 RESEARCH 2041627 \$5,142 \$19,911,663 RESEARCH AGMT DTD 4/5/17 \$0 \$19,911,663 RESEARCH 0000255739 \$33,879 \$19,911,663 RESEARCH 0000342690 \$86,466 \$19,911,663 RESEARCH 000030 \$20,948 \$19,911,663 RESEARCH GT00005 \$31,797 \$19,911,663 RESEARCH AGR DTD 07/06/2017 \$17,216 \$19,911,663 RESEARCH 68856-TASK 3, PROJ. 1119493 \$173,306 \$19,911,663 RESEARCH DE-EE0007897 \$19,843 \$19,911,663 RESEARCH 90# 109150 \$41,632 \$19,911,663 RESEARCH 1916-1689 \$43,83 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH \$003127003 \$100,396 \$19,911,663 RESEARCH	Name # AND DEVELOPMENT # AND DEVELOPMENT	Total \$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282
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2015247 \$7,894 \$19,911,663 RESEARCH 2032371 \$28,345 \$19,911,663 RESEARCH 2041627 \$5,142 \$19,911,663 RESEARCH AGMT DTD 4/5/17 \$0 \$19,911,663 RESEARCH 0000265739 \$33,879 \$19,911,663 RESEARCH 0000342690 \$86,466 \$19,911,663 RESEARCH 2018-000030 \$20,948 \$19,911,663 RESEARCH GT00005 \$31,797 \$19,911,663 RESEARCH GR DTD 07/06/2017 \$17,216 \$19,911,663 RESEARCH 68856-TASK 3, PROJ. 1119493 \$17,3,306 \$19,911,663 RESEARCH DE-EE0007897 \$19,843 \$19,911,663 RESEARCH 90# 109150 \$41,632 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH \$003127003 \$100,396 \$19,911,663 RESEARCH \$628284 \$41,918 \$19,911,663 RESEARCH	HAND DEVELOPMENT HAND DEVELOPMENT HAND DEVELOPMENT HAND DEVELOPMENT HAND DEVELOPMENT	\$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282
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AGMT DTD 4/5/17 \$0 \$19,911,663 RESEARCH 0000265739 \$33,879 \$19,911,663 RESEARCH 0000342690 \$86,466 \$19,911,663 RESEARCH 2018-00030 \$20,948 \$19,911,663 RESEARCH GT00005 \$31,797 \$19,911,663 RESEARCH AGR DTD 07/06/2017 \$17,216 \$19,911,663 RESEARCH 68856-TASK 3, PROJ. 1119493 \$173,306 \$19,911,663 RESEARCH DE-EE0007897 \$19,843 \$19,911,663 RESEARCH PO# 109150 \$41,632 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 4000115351 \$48,693 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$44,853 \$19,911,663 RESEARCH 4000128095 \$48,853 \$19,911,663 RESEARCH <	HAND DEVELOPMENT HAND DEVELOPMENT	\$1,033,282
0000265739 \$33,879 \$19,911,663 RESEARCH 0000342690 \$86,466 \$19,911,663 RESEARCH 2018-000030 \$20,948 \$19,911,663 RESEARCH GT00005 \$31,797 \$19,911,663 RESEARCH AGR DTD 07/06/2017 \$17,216 \$19,911,663 RESEARCH 68856-TASK 3, PROJ. 1119493 \$173,306 \$19,911,663 RESEARCH DE-EE0007897 \$19,843 \$19,911,663 RESEARCH PO# 109150 \$41,632 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 562K284 \$41,918 \$19,911,663 RESEARCH 40001125663 \$64,654 \$19,911,663 RESEARCH 4000122663 \$64,654 \$19,911,663 RESEARCH 4000122663 \$64,654 \$19,911,663 RESEARCH 4000122663 \$64,654 \$19,911,663 RESEARCH 4000122663 \$64,654 \$19,911,663 RESEARCH	AND DEVELOPMENT	
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GT00005 \$31,797 \$19,911,663 RESEARCH AGR DTD 07/06/2017 \$17,216 \$19,911,663 RESEARCH 68856-TASK 3, PROJ. 1119493 \$173,306 \$19,911,663 RESEARCH DE-EE0007897 \$19,843 \$19,911,663 RESEARCH PO# 109150 \$41,632 \$19,911,663 RESEARCH 1916-1689 \$4,383 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 775K563 \$64,654 \$19,911,663 RESEARCH 4000115351 \$48,693 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000125663 \$37,913 \$19,911,663 RESEARCH 4000125663 \$37,913 \$19,911,663 RESEARCH <td></td> <td>\$1,033,282</td>		\$1,033,282
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68856-TASK 3, PROJ. 1119493 \$173,306 \$19,911,663 RESEARCH DE-EE0007897 \$19,843 \$19,911,663 RESEARCH PO# 109150 \$41,632 \$19,911,663 RESEARCH 1916-1689 \$4,383 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 562K284 \$41,918 \$19,911,663 RESEARCH 775K563 \$64,654 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 400012663 \$64,654 \$19,911,663 RESEARCH 4000125663 \$64,654 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 400012663 \$48,693 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 400012663 \$47,883 \$19,911,663 RESEARCH <	I AND DEVELOPMENT	\$1,033,282 \$1,033,282
DE-EE0007897 \$19,843 \$19,911,663 RESEARCH PO# 109150 \$41,632 \$19,911,663 RESEARCH 1916-1689 \$43,833 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 562K284 \$41,918 \$19,911,663 RESEARCH 775K563 \$646,54 \$19,911,663 RESEARCH 4000115351 \$48,693 \$19,911,663 RESEARCH 4000128663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPINENT	\$1,033,282
PO# 109150 \$41,632 \$19,911,663 RESEARCH 1916-1689 \$4,383 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 562K284 \$41,918 \$19,911,663 RESEARCH 775K563 \$64,654 \$19,911,663 RESEARCH 4000115351 \$48,693 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
1916-1689 \$4,383 \$19,911,663 RESEARCH 37792 \$5,244 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 562k284 \$41,918 \$19,911,663 RESEARCH 775k563 \$64,654 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
37792 \$5,244 \$19,911,663 RESEARCH A003127003 \$100,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 562k284 \$41,918 \$19,911,663 RESEARCH 775k563 \$64,654 \$19,911,663 RESEARCH 4000125663 \$36,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 \$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
A003127003 \$10,396 \$19,911,663 RESEARCH 5035981 \$42,024 \$19,911,663 RESEARCH 562K284 \$41,918 \$19,911,663 RESEARCH 775K563 \$64,654 \$19,911,663 RESEARCH 40001125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
5035981 \$42,024 \$19,911,663 RESEARCH 562K284 \$41,918 \$19,911,663 RESEARCH 775K563 \$64,654 \$19,911,663 RESEARCH 4000115351 \$48,693 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
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775K563 \$64,654 \$19,911,663 RESEARCH 4000115351 \$48,693 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000115351 \$48,693 \$19,911,663 RESEARCH 4000125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000125663 \$33,631 \$19,911,663 RESEARCH 4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000128095 \$47,883 \$19,911,663 RESEARCH 4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	I AND DEVELOPMENT	\$1,033,282
4000136270 \$4,854 \$19,911,663 RESEARCH 4000145143 \$73,913 \$19,911,663 RESEARCH 4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282 \$1,033,282
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4000150871 \$9,340 \$19,911,663 RESEARCH 4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000152624 \$1,607 \$19,911,663 RESEARCH 4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000152636 -\$13,311 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
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4000154548 \$43,028 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
	AND DEVELOPMENT	\$1,033,282
	AND DEVELOPMENT	\$1,033,282
4000158523 \$57,160 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000159194 \$28,002 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000159587 \$40,919 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000160017 \$65,064 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000160033 \$47,369 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000160093 \$53,287 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
4000160364 \$47,773 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
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	AND DEVELOPMENT	\$1,033,282
449898-19034 \$1,047 \$19,911,663 RESEARCH	AND DEVELOPMENT	\$1,033,282
	AND DEVELOPMENT	\$1,033,282
	AND DEVELOPMENT	\$1,033,282
	HAND DEVELOPMENT	
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	AND DEVELOPMENT	\$1,033,28 <i>\$1,033,28</i> 2
#429398-19034 \$7,387 \$920,472 RESEARCH	HAND DEVELOPMENT HAND DEVELOPMENT	

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
CONSERVATION RESEARCH AND DEVELOPMENT	81.086		,
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		ALGENOL BIOTECH
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		ELECTRIC POWER RESEARCH INSTITUTE
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		NORTHWESTERN UNIVERSITY
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		PURDUE UNIVERSITY
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		TEXAS A&M UNIVERSITY
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		UNIVERSITY OF DELAWARE
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		VANDERBILT UNIVERSITY
RENEWABLE ENERGY RESEARCH AND DEVELOPMENT	81.087		
FOSSIL ENERGY RESEARCH AND DEVELOPMENT	81.089		SOUTHWEST RESEARCH INSTITUTE
FOSSIL ENERGY RESEARCH AND DEVELOPMENT	81.089		SOUTHWEST RESEARCH INSTITUTE
FOSSIL ENERGY RESEARCH AND DEVELOPMENT	81.089		SOUTHWEST RESEARCH INSTITUTE
FOSSIL ENERGY RESEARCH AND DEVELOPMENT	81.089		UNIVERSITY OF CENTRAL FLORIDA
FOSSIL ENERGY RESEARCH AND DEVELOPMENT	81.089		
ENVIRONMENTAL REMEDIATION AND WASTE PROCESSING AND DISPOSAL	81.104		SRS COMMUNITY REUSE ORGANIZATION
ENVIRONMENTAL REMEDIATION AND WASTE PROCESSING AND DISPOSAL	81.104		SRS COMMUNITY REUSE ORGANIZATION
TRANSPORT OF TRANSURANIC WASTES TO THE WASTE ISOLATION PILOT PLANT:			
STATES AND TRIBAL CONCERNS, PROPOSED SOLUTIONS	81.106		SOUTHERN STATES ENERGY BOARD
STEWARDSHIP SCIENCE GRANT PROGRAM	81.112		LAWRENCE BERKELEY NATIONAL LABORATORY
STEWARDSHIP SCIENCE GRANT PROGRAM	81.112		
DEFENSE NUCLEAR NONPROLIFERATION RESEARCH	81.113		NORTH CAROLINA STATE UNIVERSITY
ENERGY EFFICIENCY AND RENEWABLE ENERGY INFORMATION DISSEMINATION, OUTREACH,			
TRAINING AND TECHNICAL ANALYSIS/ASSISTANCE	81.117		
			KENNESAW STATE UNIVERSITY RESEARCH AND
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		SERVICE FOUNDATION
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		PURDUE UNIVERSITY
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		PURDUE UNIVERSITY
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		SYRACUSE UNIVERSITY
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		SYRACUSE UNIVERSITY
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		UNIVERSITY OF NEBRASKA-LINCOLN
NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION	81.121		
ELECTRICITY DELIVERY AND ENERGY RELIABILITY, RESEARCH, DEVELOPMENT AND ANALYSIS	81.122		
NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA) MINORITY SERVING			
INSTITUTIONS (MSI) PROGRAM	81.123		FLORIDA A&M UNIVERSITY
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY	81.135		OREGON STATE UNIVERSITY
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY	81.135		PENNSYLVANIA STATE UNIVERSITY
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY	81.135		RENSSELAER POLYTECHNIC INSTITUTE
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY	81.135		SILA NANOTECHNOLOGIES, INC.
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY	81.135		
MINORITY ECONOMIC IMPACT	81.137		
ENVIRONMENTAL MONITORING/CLEANUP, CULTURAL AND RESOURCE MGMT.,			
EMERGENCY RESPONSE RESEARCH, OUTREACH, TECHNICAL ANALYSIS	81.214		
ENVIRONMENTAL MONITORING/CLEANUP, CULTURAL AND RESOURCE MGMT.,			
EMERGENCY RESPONSE RESEARCH, OUTREACH, TECHNICAL ANALYSIS	81.214		
MODAL MODELING OF ACOUSTOELASTIC SYSTEMS	81.RD	2003656	SANDIA NATIONAL LABORATORIES
HYDROGEN PROCESS IMAGING USING MAGNETIC FIELDS	81.RD	2018-000008	SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC
EXPORT CONTROL CAPACITY BUILDING AND TRAINING: ASI	81.RD	4000139452	UT-BATTELLE, LLC
ELUCIDATING THE ROLE OF RECEPTOR LIKE KINASES IN W	81.RD	4000167801	UT-BATTELLE, LLC
USDOE ASIAN FELLOWS PROGRAM	81.RD	400165132	UT-BATTELLE, LLC
2017-18 SBC-CAT PERSONNEL ASSIGNMENT FOR GERD ROSE	81.RD	7F30217	UCHICAGO ARGONNE, LLC
COMPARATIVE ANALYSIS OF BIOCONVERSION AND/OR BIOPR	81.RD	C-5011	FLORIDA A&M UNIVERSITY
		PNDG 3/1-	
THE CENTER FOR BIOENERGY INNOVATION	81.RD	6/30/20	UT-BATTELLE, LLC
SREL R&D OF CEMENTITIOUS-TYPE MATERIALS AND SOIL	81.RD	SRRA099188	SAVANNAH RIVER REMEDIATION, LLC
AQUEOUS AND SOLID PHASE CHARACTERIZATION OF POTENT	81.RD	SRRA151648	SAVANNAH RIVER REMEDIATION, LLC
		XCE-9-92013-	
EASYER: ACCELERATING A METHOD TO EVOLVE NEW ENZYME TOTAL DEPARTMENT OF ENERGY	81.RD	01	NATIONAL RENEWABLE ENERGY LABORATORY

Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
		\$879,988	\$920,472	RESEARCH AND DEVELOPMENT	\$1,033,282,
8/29/17 AGRMT		\$210,857	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,5
DE-EE0007888-06-4B		\$55,287	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,5
DE-EE0007888-09-6		\$108,971	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
DE-EE0007888-10-5		\$106,641	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
#10001646		\$93,443	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
SP0045962-PROJ0012882		\$13,592	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
14000249-006		\$77,056	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
M1900414		\$72,578	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
#53038		\$43,086	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
UNIV58977		\$283,998	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282,
		\$1,967,030	\$3,032,539	RESEARCH AND DEVELOPMENT	\$1,033,282
L99007RI		\$116,702	\$1,767,268	RESEARCH AND DEVELOPMENT	\$1,033,282,
L99069MJM		\$10,000	\$1,767,268	RESEARCH AND DEVELOPMENT	\$1,033,282,
M99005RR		\$5,569	\$1,767,268	RESEARCH AND DEVELOPMENT	\$1,033,282,
#16306016-01		\$56,546	\$1,767,268	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$321,077	\$1,578,451	\$1,767,268	RESEARCH AND DEVELOPMENT	\$1,033,282
1998F0586		\$166,775	\$332,478	N/A	
UBRECIPIENT DE-EM0004214		\$165,703	\$332,478	N/A	
00000919		\$281,129	\$281,129	N/A	
6964123		\$370,200	\$684,714	RESEARCH AND DEVELOPMENT	\$1,033,282,
		\$314,514	\$684,714	RESEARCH AND DEVELOPMENT	\$1,033,282
2014-0501-05		\$389,817	\$389,817	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$48,307	\$433,150	\$433,150	RESEARCH AND DEVELOPMENT	\$1,033,282
NCR-HQ-12-G-38-0001		-\$12,507	\$1,751,921	N/A	
		\$105,990	\$1,751,921	N/A	
14000271-002		\$82,664	\$1,751,921	RESEARCH AND DEVELOPMENT	\$1,033,282,
14000276-006.		\$76,562	\$1,751,921	RESEARCH AND DEVELOPMENT	\$1,033,282
#30308-05133-501		\$45,315	\$1,751,921	RESEARCH AND DEVELOPMENT	\$1,033,282
28643-04465-S02		\$83,912	\$1,751,921	RESEARCH AND DEVELOPMENT	\$1,033,282
25-1120-0014-004		\$37,429	\$1,751,921	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$398,698	\$1,332,556	\$1,751,921	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$104,056	\$553,112	\$553,112	RESEARCH AND DEVELOPMENT	\$1,033,282
C4964		-\$807	-\$807	RESEARCH AND DEVELOPMENT	\$1,033,282
#G0173A-A		\$111,792	\$990,280	RESEARCH AND DEVELOPMENT	\$1,033,282
5666UGRFEARPA0821		\$39,416	\$990,280	RESEARCH AND DEVELOPMENT	\$1,033,282
A12820		\$242,207	\$990,280	RESEARCH AND DEVELOPMENT	\$1,033,282
133588		-\$9,339	\$990,280	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$181,485	\$606,204	\$990,280	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$89,393	\$89,393	N/A	
		\$183,008	\$4,968,183	N/A	
		\$4,785,175	\$4,968,183	RESEARCH AND DEVELOPMENT	\$1,033,282
2003656		\$3,110	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
2018-000008		\$37,699	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
4000139452		\$64,472	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
4000167801		\$23,384	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
400165132		\$18,890	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
7F30217		\$162,708	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
C-5011		\$7,131	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
PNDG 3/1-6/30/20		\$2,375,700	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$183,394	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282
SRRA099188		41.001		RESEARCH AND DEVELOPMENT	\$1,033,282
SRRA099188 SRRA151648		\$4,281	\$2,929,354	RESEARCH AND DEVELOF MENT	<i>\$1,033,202</i> ,
		\$4,281 \$48,585	\$2,929,354	RESEARCH AND DEVELOPMENT	\$1,033,282

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
DEPARTMENT OF EDUCATION	Number	(Optional)	Linky
ADULT EDUCATION - BASIC GRANTS TO STATES	84.002		
FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS	84.007		
TITLE I GRANTS TO LOCAL EDUCATIONAL AGENCIES	84.010		
TITLE I GRANTS TO LOCAL EDUCATIONAL AGENCIES	84.010		CLARKE COUNTY SCHOOL DISTRICT
TITLE I GRANTS TO LOCAL EDUCATIONAL AGENCIES	84.010		RICHMOND COUNTY SCHOOL DISTRICT
MIGRANT EDUCATION STATE GRANT PROGRAM	84.011		
TITLE I STATE AGENCY PROGRAM FOR NEGLECTED AND DELINQUENT CHILDREN AND YOUTH	84.013		
NATIONAL RESOURCE CENTERS PROGRAM FOR FOREIGN LANGUAGE AND AREA STUDIES			
OR FOREIGN LANGUAGE AND INTERNATIONAL STUDIES PROGRAM AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP PROGRAM	84.015		
NATIONAL RESOURCE CENTERS PROGRAM FOR FOREIGN LANGUAGE AND AREA STUDIES			
OR FOREIGN LANGUAGE AND INTERNATIONAL STUDIES PROGRAM AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP PROGRAM	84.015		
UNDERGRADUATE INTERNATIONAL STUDIES AND FOREIGN LANGUAGE PROGRAMS	84.016		
INTERNATIONAL RESEARCH AND STUDIES	84.017		
OVERSEAS PROGRAMS - GROUP PROJECTS ABROAD	84.021		
OVERSEAS PROGRAMS - GROUP PROJECTS ABROAD	84.021		
SPECIAL EDUCATION GRANTS TO STATES	84.027		
HIGHER EDUCATION INSTITUTIONAL AID	84.031		
			KENNESAW STATE UNIVERSITY RESEARCH AND
HIGHER EDUCATION INSTITUTIONAL AID	84.031		SERVICE FOUNDATION
HIGHER EDUCATION INSTITUTIONAL AID	84.031		
FEDERAL WORK-STUDY PROGRAM	84.033		AMERICAN NATIONAL RED CROSS
FEDERAL WORK-STUDY PROGRAM	84.033		EAST ATLANTA KIDS CLUB
FEDERAL WORK-STUDY PROGRAM	84.033		NEWTON COUNTY
FEDERAL WORK-STUDY PROGRAM	84.033		
FEDERAL PERKINS LOAN PROGRAM FEDERAL CAPITAL CONTRIBUTIONS	84.038		
TRIO STUDENT SUPPORT SERVICES	84.042		
TRIO STUDENT SUPPORT SERVICES	84.042		
TRIO TALENT SEARCH	84.044		
TRIO TALENT SEARCH	84.044		
TRIO UPWARD BOUND	84.047		
TRIO UPWARD BOUND	84.047		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
TRIO UPWARD BOUND	84.047		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
TRIO UPWARD BOUND	84.047		SERVICE FOUNDATION
TRIO UPWARD BOUND	84.047		
CAREER AND TECHNICAL EDUCATION BASIC GRANTS TO STATES	84.048		CTAE RESOURCE NETWORK, INC.
CAREER AND TECHNICAL EDUCATION BASIC GRANTS TO STATES	84.048		
FEDERAL PELL GRANT PROGRAM	84.063		
TRIO EDUCATIONAL OPPORTUNITY CENTERS	84.066		
FUND FOR THE IMPROVEMENT OF POSTSECONDARY EDUCATION	84.116		
FUND FOR THE IMPROVEMENT OF POSTSECONDARY EDUCATION	84.116		UNIVERSITY OF MINNESOTA
FUND FOR THE IMPROVEMENT OF POSTSECONDARY EDUCATION	84.116		
REHABILITATION SERVICES VOCATIONAL REHABILITATION GRANTS TO STATES	84.126		
REHABILITATION LONG-TERM TRAINING	84.129		
MIGRANT EDUCATION HIGH SCHOOL EQUIVALENCY PROGRAM	84.141		
MIGRANT EDUCATION COORDINATION PROGRAM	84.144		
MIGRANT EDUCATION COLLEGE ASSISTANCE MIGRANT PROGRAM	84.149		
SPECIAL EDUCATION PRESCHOOL GRANTS	84.173		
REHABILITATION SERVICES INDEPENDENT LIVING SERVICES FOR OLDER INDIVIDUALS WHO ARE BLIND	84.177		
SPECIAL EDUCATION-GRANTS FOR INFANTS AND FAMILIES	84.181		
SCHOOL SAFETY NATIONAL ACTIVITIES (FORMERLY, SAFE AND DRUG-FREE SCHOOLS AND COMMUNITIES-NATIONAL PROGRAMS)	84.184		
SUPPORTED EMPLOYMENT SERVICES FOR INDIVIDUALS WITH THE MOST SIGNIFICANT			
DISABILITIES	84.187		
	84.187 84.196		
DISABILITIES			

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$19,532,371	\$19,532,371	N/A	\$0
		\$15,335,355	\$15,335,355	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
	\$516,795,655	\$530,687,573	\$530,736,722	N/A	\$0
5787401		\$37,150	\$530,736,722	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AWD00010031		\$11,999	\$530,736,722	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$5,012,794	\$7,343,675	\$7,343,675	N/A	\$0
		<i></i>	<i>64.44.504</i>		ćo
		\$1,114,594	\$1,114,594	N/A	\$0
		\$15,000	\$521,367	N/A	\$0
			1. ,		
		\$506,367	\$521,367	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$45,178	\$45,178	N/A	\$0
		\$109,625	\$109,625	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$26,965	\$123,004	N/A	\$0
	6220 424 002	\$96,039	\$123,004	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$338,424,992 \$29,186	\$360,040,314 \$16,205,136	\$360,040,314 \$16,926,539	SPECIAL EDUCATION CLUSTER (IDEA) N/A	\$369,807,105 \$0
	\$29,100	\$10,205,150	\$10,920,559	NYA	ŲÇ
P116F140432		\$602,961	\$16,926,539	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$118,442	\$16,926,539	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010138		\$1,083	\$11,866,095	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
CON011249		\$3,692	\$11,866,095	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
CON011240		\$3,659	\$11,866,095	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
		\$11,857,661	\$11,866,095	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
		\$28,625,656	\$28,625,656	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
		\$269,114	\$3,381,128	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$3,112,014	\$3,381,128	TRIO CLUSTER	\$12,525,291
		\$417,648 \$1,849,879	\$2,267,527 \$2,267,527	RESEARCH AND DEVELOPMENT TRIO CLUSTER	\$1,033,282,522 \$12,525,291
		\$1,140,778	\$7,702,824	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		<i>\\\\\\\\\\\\\</i>	<i>ψ,,,,</i> σ <u>2</u> ,σ <u>2</u> .		<i><i><i><i>ϕ</i>²³³³³³³³³</i></i></i>
P047A170751		\$298,343	\$7,702,824	TRIO CLUSTER	\$12,525,291
P047A170766		\$324,820	\$7,702,824	TRIO CLUSTER	\$12,525,291
PO47M170078		\$348,917	\$7,702,824	TRIO CLUSTER	\$12,525,291
CT45072		\$5,589,966	\$7,702,824	TRIO CLUSTER	\$12,525,291
CTAE6073	\$18,570,510	<i>\$44,950</i> \$42,307,905	<i>\$42,352,855</i> \$42,352,855	N/A N/A	<i>\$0</i> \$0
	\$18,570,510	\$755,231,809	\$755,231,809	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
		\$340,896	\$340,896	TRIO CLUSTER	\$12,525,291
		\$358,033	\$3,597,817	N/A	\$0
A004497002		\$48,927	\$3,597,817	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$2,628,785	\$3,190,857	\$3,597,817	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$93,631,362	\$93,631,362	N/A	\$0
		\$445,825	\$445,825	N/A	\$0
		\$812,628	\$812,628	N/A	\$0
		55424	\$55,424 N/		0
	\$9,661,377	\$1,385,989 \$9,766,791	\$1,385,989 \$9,766,791	N/A SPECIAL EDUCATION CLUSTER (IDEA)	\$0 \$369,807,105
	\$3,001,377	<i>\$5,700,75</i> 1	<i>Ş9,100,19</i> 1	SI EGAL EDUCATION CLUSTER (IDEA)	÷303,007,103
		\$1,161,785	\$1,161,785	N/A	\$0
		\$11,821,769	\$11,821,769	N/A	\$0
		\$58,075	\$58,075	N/A	\$0
	10 · · · - · ·	\$643,846	\$643,846	N/A	\$0
	\$2,115,169	\$2,454,097	\$2,454,097	N/A	\$0
		\$199,278 \$137,667	\$336,945	N/A RESEARCH AND DEVELOPMENT	\$0 \$1,033,282,522
		\$137,667	\$336,945	RESEARCH AND DEVELOPIVIENT	ş1,033,282,522

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
INNOVATIVE APPROACHES TO LITERACY, FULL-SERVICE COMMUNITY SCHOOLS; AND		(,
PROMISE NEIGHBORHOODS	84.215		
TRIO MCNAIR POST-BACCALAUREATE ACHIEVEMENT	84.217		
TRIO MCNAIR POST-BACCALAUREATE ACHIEVEMENT	84.217		
CENTERS FOR INTERNATIONAL BUSINESS EDUCATION	84.220		
CENTERS FOR INTERNATIONAL BUSINESS EDUCATION	84.220		
LANGUAGE RESOURCE CENTERS	84.229		
LANGUAGE RESOURCE CENTERS	84.229		
REHABILITATION SERVICES DEMONSTRATION AND TRAINING PROGRAMS	84.235		
FEDERAL DIRECT STUDENT LOANS	84.268		
CHARTER SCHOOLS	84.282		
TWENTY-FIRST CENTURY COMMUNITY LEARNING CENTERS	84.287		
TWENTY-FIRST CENTURY COMMUNITY LEARNING CENTERS	84.287		QUESTAR ASSESSMENT, INC.
TWENTY-FIRST CENTURY COMMUNITY LEARNING CENTERS	84.287		QUESTAR ASSESSMENT, INC.
READY-TO-LEARN TELEVISION	84.295		CORPORATION FOR PUBLIC BROADCASTING KENNESAW STATE UNIVERSITY RESEARCH AND
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		SERVICE FOUNDATION
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305 84.305		ARIZONA STATE UNIVERSITY
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305 84.305		ARIZONA STATE UNIVERSITY
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		CALIFORNIA STATE UNIVERSITY, LONG BEACH
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		FLORIDA STATE UNIVERSITY
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		MICHIGAN STATE UNIVERSITY
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		NORTHERN ILLINOIS UNIVERSITY
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		UNIVERSITY OF CINCINNATI
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		UNIVERSITY OF CINCINNATI
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		UNIVERSITY OF CINCINNATI
EDUCATION RESEARCH, DEVELOPMENT AND DISSEMINATION	84.305		
SPECIAL EDUCATION - STATE PERSONNEL DEVELOPMENT	84.323		
RESEARCH IN SPECIAL EDUCATION	84.324		INDIANA UNIVERSITY
RESEARCH IN SPECIAL EDUCATION	84.324		TENNESSEE STATE UNIVERSITY
RESEARCH IN SPECIAL EDUCATION	84.324		UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
RESEARCH IN SPECIAL EDUCATION	84.324		
SPECIAL EDUCATION - PERSONNEL DEVELOPMENT TO IMPROVE SERVICES AND			
RESULTS FOR CHILDREN WITH DISABILITIES	84.325		UNIVERSITY OF FLORIDA
SPECIAL EDUCATION - PERSONNEL DEVELOPMENT TO IMPROVE SERVICES AND	04 225		
RESULTS FOR CHILDREN WITH DISABILITIES	84.325		UNIVERSITY OF FLORIDA
SPECIAL EDUCATION - PERSONNEL DEVELOPMENT TO IMPROVE SERVICES AND	04 225		
RESULTS FOR CHILDREN WITH DISABILITIES SPECIAL EDUCATION - PERSONNEL DEVELOPMENT TO IMPROVE SERVICES AND	84.325		UNIVERSITY OF FLORIDA
RESULTS FOR CHILDREN WITH DISABILITIES	84.325		UNIVERSITY OF FLORIDA
SPECIAL EDUCATION - PERSONNEL DEVELOPMENT TO IMPROVE SERVICES AND	84.323		UNIVERSITY OF FLORIDA
RESULTS FOR CHILDREN WITH DISABILITIES	84.325		VANDERBILT UNIVERSITY
SPECIAL EDUCATION - PERSONNEL DEVELOPMENT TO IMPROVE SERVICES AND RESULTS	04.525		
FOR CHILDREN WITH DISABILITIES	84.325		
SPECIAL EDUCATION TECHNICAL ASSISTANCE AND DISSEMINATION TO IMPROVE SERVICES	04.525		
AND RESULTS FOR CHILDREN WITH DISABILITIES	84.326		
SPECIAL EDUCATION EDUCATIONAL TECHNOLOGY MEDIA, AND MATERIALS FOR			
INDIVIDUALS WITH DISABILITIES	84.327		
SPECIAL EDUCATION EDUCATIONAL TECHNOLOGY MEDIA, AND MATERIALS FOR			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
INDIVIDUALS WITH DISABILITIES	84.327		SERVICE FOUNDATION, INC.
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
GAINING EARLY AWARENESS AND READINESS FOR UNDERGRADUATE PROGRAMS	84.334		SERVICE FOUNDATION, INC.
			KENNESAW STATE UNIVERSITY RESEARCH AND
GAINING EARLY AWARENESS AND READINESS FOR UNDERGRADUATE PROGRAMS	84.334		SERVICE FOUNDATION
GAINING EARLY AWARENESS AND READINESS FOR UNDERGRADUATE PROGRAMS	84.334		
GAINING EARLY AWARENESS AND READINESS FOR UNDERGRADUATE PROGRAMS	84.334		UNIVERSITY OF MONTEVALLO
CHILD CARE ACCESS MEANS PARENTS IN SCHOOL	84.335		
TEACHER QUALITY PARTNERSHIP GRANTS	84.336		
RURAL EDUCATION	84.358		
ENGLISH LANGUAGE ACQUISITION STATE GRANTS	84.365		
ENGLISH LANGUAGE ACQUISITION STATE GRANTS	84.365		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
MATHEMATICS AND SCIENCE PARTNERSHIPS	84.366		SERVICE FOUNDATION, INC.
	94.200		KENNESAW STATE UNIVERSITY RESEARCH AND
MATHEMATICS AND SCIENCE PARTNERSHIPS	84.366		SERVICE FOUNDATION

Identifying Number Assigned By Funder	Total Amount		Federal		
Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$125,094	\$125,094	N/A	\$0
		\$303,327	\$963,783	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$660,456	\$963,783	TRIO CLUSTER	\$12,525,291
		\$199,215	\$630,081	N/A	\$0
		\$430,866	\$630,081	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$66,051	\$167,281	N/A	\$0
		\$101,230	\$167,281	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$1,022,317	\$1,022,317	N/A	\$0
		\$1,459,714,132	\$1,459,714,132	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
	\$4,284,365	\$4,745,353	\$4,745,353	N/A	\$0
5757404	\$36,032,143	\$39,478,786	\$39,539,949		\$0
5757101 BARKER		\$22,691	\$39,539,949	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
34824-EDU		\$38,472 \$81,881	\$39,539,949 \$81,881	N/A	\$1,033,282,522 \$0
54824-EDU		201,001	<i>Ş01,001</i>	N/A	ŲÇ
R305N160025		-\$19,783	\$2,153,508	N/A	\$0
CON009851		\$52,992	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011261		\$54,682	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011095		\$94,847	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011148		\$98,130	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON005784		\$81,123	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011542		\$35,043	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
011275002		\$60,779	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON007985		-\$17,974	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011484		\$94,790	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$797,695	\$1,618,879	\$2,153,508	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$1,719,146	\$1,719,146	N/A	\$0
CON009836		\$42,361	\$814,448	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON008400		\$21,460	\$814,448	RESEARCH AND DEVELOPMENT	\$1,033,282,522
304811261516001	\$274,946	<i>\$76,024</i> \$674,603	<i>\$814,448</i> \$814,448	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	<i>\$1,033,282,522</i> \$1,033,282,522
	<i>7274,34</i> 0	,005 ,005 ,	<i>9014,440</i>	RESEARCH AND DEVELOP MENT	J1,033,202,322
30486		\$6,248	\$951,789	N/A	\$0
			1 7	,	, -
98368		\$28,175	\$951,789	N/A	\$0
PO1800624093		\$460	\$951,789	N/A	\$0
H325A120003		\$8,118	\$951,789	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		4			4
UNIV60494		\$30,196	\$951,789	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	<u> </u>	6070 500	6054 700		64 000 000 500
	\$2,500	\$878,592	\$951,789	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$284,593	\$284,593	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$204,555	\$264,595	RESEARCH AND DEVELOPMENT	\$1,055,262,522
		\$7,311	\$26,447	N/A	\$0
		<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	Ş20, 4 7	N/N	ŶŬ
63828383-25		\$19,136	\$26,447	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-26		\$170,275	\$4,081,438	N/A	\$0
P334SI60030		\$147,786	\$4,081,438	N/A	\$0
	\$317,313	\$3,710,912	\$4,081,438	N/A	\$0
CON011827		\$52,465	\$4,081,438	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$72,116	\$72,116	N/A	\$0
	4.4	\$65,078	\$65,078	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$6,372,304	\$6,705,011	\$6,705,011	N/A	\$0
	\$14,256,513	\$15,682,610	\$16,185,793		\$0 \$1 032 282 522
		\$503,183	\$16,185,793	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-27		\$274,080	\$3,527,157	N/A	\$0
03020303-27		<i>7274,00</i> 0	<i>,527,137</i>		ŞU
S366B160011		\$138,927	\$3,527,157	N/A	\$0
		<i>, 100,01</i>	+-,-2,,20,		20

MATHEMATICS AND SECURE PARTNERSHIPS 84.366 AUSCIDE COUNT SENDED CONTINCT MATHEMATICS AND SECURE PARTNERSHIPS 84.366 ALCCORE COUNT SENDED CONTINCT MATHEMATICS AND SECURE PARTNERSHIPS 84.366 ALCCORE COUNT SENDED CONTINCT MATHEMATICS AND SECURE PARTNERSHIPS 84.366 ALCCORE COUNT SENDED CONTINCT MATHEMATICS AND SECURE PARTNERSHIPS 84.366 ALCCORE COUNT SENDED CONTINCT SUPPORTING EFFECTIVE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER TECHNOL STATE GRANTS) SUPPORTING EFFECTIVE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER TECHNE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER TECHNE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER FORMARIA INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER FORMARIA INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER FORMARIA INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TACARE QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SERVER FORMARIA INSTRUCTION STATE GRANTS (FORME	Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
MATHEMATICS AND SCIENCE PARTNERSHIPS H 3 56 ACCESSION COUNTY SCHOOL DISTINCT MATHAMATICS AND SCIENCE PARTNERSHIPS H 3 56 ACCESSION COUNTY SCHOOL DISTINCT MATHAMATICS AND SCIENCE PARTNERSHIPS H 3 56 ACCESSION COUNTY SCHOOL DISTINCT MATHAMATICS AND SCIENCE PARTNERSHIPS H 3 56 ACCESSION COUNTY SCHOOL DISTINCT MATHAMATICS AND SCIENCE PARTNERSHIPS H 3 56 ACCESSION COUNTY SCHOOL DISTINCT MATHAMATICS AND SCIENCE PARTNERSHIPS H 3 56 ACCESSION COUNTY SCHOOL DISTINCT MATHAMATICS AND SCIENCE PARTNERSHIPS H 3 57 ACCESSION COUNTY SCHOOL DISTINCT H 3 ACCESSION COUNTY SCHOOL DISTINCT CHARANTS (FORMERLY INPROVING H 3 A 3 ACCESSION COUNTY SCHOOL DISTINCT H 3 A A A A A A A A A A A A A A A A A A		84.366	., ,	,
MATHEMATICS AND SCIENCE PARTNERSINPS 84.366 ROCCAUL COUNTY SCIENCE COUNTY SCIENCE AND SCIENCE TANDING SUPPORTING EFFECTIVE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TRACKER QUINTY STATE GRANTS) 84.367 REINESSAY STATE UNIVERSITY RESEARCH AND SCIENCE AND SCIENCE PARTNERSITY RESEARCH AND SUPPORTING EFFECTIVE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING TRACKER QUINTY STATE GRANTS) 84.367 REINESSAY STATE UNIVERSITY RESEARCH AND SCIENCE TO UNITY STATE GRANTS (FORMERLY IMPROVING TRACKER QUINTY STATE GRANTS) 84.367 REINESSAY STATE UNIVERSITY RESEARCH AND SCIENCE TO UNITY STATE GRANTS (FORMERLY IMPROVING TRACKER QUINTY STATE GRANTS) 84.367 REINESSAY STATE UNIVERSITY RESEARCH AND SCIENCE TO UNITY STATE GRANTS (FORMERLY IMPROVING SUPPORTING EFFECTIVE INSTRUCTION STATE GRANTS (FORMERLY IMPROVING SUPPORTING EFFEC		84.366		
MATHUMATICS AND SCIENCE PARTNERSHIPS 84360 SUPPORTNER FETCIVE INSTRUCTION STATE GRANTS (FORMERLY INPROVING SUPPORTNE SUPPORTNE GRANTS FORMERLY INPROVING TEACHER SUPPORTNE SUPPORTNE GRANTS FORMERLY INPROVING TEACHER SUPPORTNE SUPPORTNE GRANTS SUPPORTNE INFO INFO INFO INFO INFO INFO INFO INFO	MATHEMATICS AND SCIENCE PARTNERSHIPS	84.366		JACKSON COUNTY SCHOOL DISTRICT
SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY IMPROVING TRACKER QUALITY STATE GAMPS (FORMERLY IMPROVING SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY IMPROVING TEACHEE QUALITY STATE GAMPS) SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY IMPROVING SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY IMPROVING SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY INFERSANE) SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY INFERSANE) SUPPORTING EFFECTIVE INSTRUCTION STATE GAMPS (FORMERLY INFERSANE) SUPPORTING EFFEC	MATHEMATICS AND SCIENCE PARTNERSHIPS	84.366		ROCKDALE COUNTY SCHOOL DISTRICT
TEACHER QUALITY STATE GRANTS) 84.367 SERVICE FOUNDATION SUPPORTING TERCETCUE INSTATE GRANTS (FORMERLY IMPROVING TEACHER QUALITY STATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SUPPORTING TERCETCUE INSTATE GRANTS) SUPPORTING TERCETCUE INSTATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SUPPORTING TERCETCUE INSTATE GRANTS) SUPPORTING TERCETCUE INSTATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND SUPPORTING TERCETCUE INSTATE GRANTS) SUPPORTING TERCETCUE INSTATE GRANTS) 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND TEACHER QUALITY STATE GRANTS) SUPPORTING TERCETCUE INSTATE GRANTS) RENNES FERTURE INSTANCES 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND TEACHER QUALITY STATE GRANTS) SUPPORTING TERCETCUE INSTATE GRANTS) RENNES FERTURE INSTANCES 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND TEACHER QUALITY STATE GRANTS) SUPPORTING TERCETCUE INSTATE GRANTS) RENNES FERTURE INSTANCES 84.367 KENNESAW STATE UNIVERSITY RESEARCH AND TEACHER QUALITY STATE GRANTS) SUPPORTING TERCETCUE INSTATICTION STATE GRANTS (FORMERLY IMPROVING TEACHER SUPPORTING TERCETCUE INSTALCTION STATE GRANTS (FORMERLY IMPROVING TEACHER QUALITY STATE GRANTS) 84.367 SERVICE FOUNDATION SUPPORTING TERCETCUE INSTALCTION STATE GRANTS (FORMERLY IMPROVING TEACHER QUALITY STATE GRANTS) 84.367 SERVICE FOUNDATION SUPPORTING TERCETCUE INSTALCTION STATE GRANTS (FORMERLY IMPROVING TEACHER QUALITY STATE GRANTS) 84.367 SERVICE FO	MATHEMATICS AND SCIENCE PARTNERSHIPS	84.366		
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	NATIONAL ARCHIVES & RECORDS ADMINISTRATION			
		89.003		

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
30459	•	-\$1,936	\$3,527,157	N/A	\$0
30433	\$327,386	\$1,020,679	\$3,527,157	N/A	\$0
5718401	\$327,380				
		\$48,399	\$3,527,157	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON009491		\$4,923	\$3,527,157	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$689,555	\$2,042,085	\$3,527,157	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RH216-352/S001012		-\$417	\$57,820,855	N/A	\$0
111210 332/3001012		<i>\</i> 717	<i>\$37,620,033</i>		ψŪ
RH216-352/S001013		-\$290	\$57,820,855	N/A	\$0
RH216-352/S001014		-\$882	\$57,820,855	N/A	\$0
RH216-361/S001358		-\$1,420	\$57,820,855	N/A	\$0
RH216-361/S001359		-\$808	\$57,820,855	N/A	\$0
RH216-361/S001361		\$406	\$57,820,855	N/A	\$0
RH216-361/S001362		-\$421	\$57,820,855	N/A	\$0
RH216-361-S001360		-\$728	\$57,820,855	N/A	\$0
	\$55,900,721	\$57,517,294	\$57,820,855	N/A	\$0
	\$54,226	\$308,121	\$57,820,855	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$7,044,931	\$7,044,931	N/A	\$0
	\$50,537,419	\$50,595,710	\$50,595,710	N/A	\$0
	\$6,411,746	\$7,153,346	\$7,153,346	N/A	\$0
	J0,411,740	Ţ7,133,3 4 0	J7,133,340	N/A	ÛÇ
		¢1 010 210	ć1 010 210	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
		\$1,918,310	\$1,918,310		
		\$4,087,318	\$4,087,318	N/A	\$0
63828383-28		\$65,509	\$558,999	N/A	\$0
CON010293		\$12,500	\$558,999	N/A	\$0
		¢ 480,000	¢550.000	N/A	ćo
		\$480,990	\$558,999		\$0
		\$14,800	\$14,800	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,276
CON006728		\$10,306	\$14,914	N/A	\$0
CON005884		\$4,608	\$14,914	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$388,355	\$2,636,751	\$2,636,751	N/A	\$0
		\$0	\$0	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$518,246	\$1,230,052	\$1,230,052	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$31,885,600	\$32,830,611	\$32,830,611	N/A	\$0
		\$2,699	\$2,699	N/A	\$0
		\$150,000	\$150,000	N/A	\$0
			\$130,000	IN/ A	ŞU
	\$1,102,289,501	\$3,639,405,578			
		-\$736	-\$736	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		-\$736			
		\$51,420	\$51,420	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$51,420			

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
DELTA REGIONAL AUTHORITY or DENALI COMMISSION or ELECTION ASSISTANCE	Humber	(Optional)	Linky
COMMISSION or JAPAN U.S. FRIENDSHIP COMMISSION			
HELP AMERICA VOTE ACT REQUIREMENTS PAYMENTS	90.401		
TOTAL DELTA REGIONAL AUTHORITY or DENALI COMMISSION or ELECTION ASSISTANCE COMMISSION or JAPAN U.S. FRIENDSHIP COMMISSION			
DEPARTMENT OF HEALTH AND HUMAN SERVICES			
MEDICAL RESERVE CORPS SMALL GRANT PROGRAM	93.008		ST. JUDE CHILDREN'S RESEARCH HOSPITAL
SPECIAL PROGRAMS FOR THE AGING, TITLE VII, CHAPTER 3, PROGRAMS FOR PREVENTION OF ELDER ABUSE, NEGLECT, AND EXPLOITATION	93.041		
SPECIAL PROGRAMS FOR THE AGING, TITLE VII, CHAPTER 2, LONG TERM CARE	55.041		
OMBUDSMAN SERVICES FOR OLDER INDIVIDUALS	93.042		
SPECIAL PROGRAMS FOR THE AGING, TITLE III, PART D, DISEASE PREVENTION AND HEALTH			
PROMOTION SERVICES	93.043		
SPECIAL PROGRAMS FOR THE AGING, TITLE III, PART B, GRANTS FOR SUPPORTIVE			
SERVICES AND SENIOR CENTERS	93.044		SOUTHERN GEORGIA REGIONAL COMMISSION
SPECIAL PROGRAMS FOR THE AGING, TITLE III, PART B, GRANTS FOR SUPPORTIVE SERVICES	93.044		
AND SENIOR CENTERS SPECIAL PROGRAMS FOR THE AGING, TITLE III, PART C, NUTRITION SERVICES	93.044		
SPECIAL PROGRAMS FOR THE AGING, TITLE IV, AND TITLE II, DISCRETIONARY PROJECTS	93.045		
SPECIAL PROGRAMS FOR THE AGING, TITLE IV, AND TITLE II, DISCRETIONARY PROJECTS	93.048		
ALZHEIMER'S DISEASE DEMONSTRATION GRANTS TO STATES	93.051		
NATIONAL FAMILY CAREGIVER SUPPORT, TITLE III, PART E	93.052		CSRA AREA AGENCY ON AGING
NATIONAL FAMILY CAREGIVER SUPPORT, TITLE III, PART E	93.052		SOUTHERN GEORGIA REGIONAL COMMISSION
NATIONAL FAMILY CAREGIVER SUPPORT, TITLE III, PART E	93.052		
NUTRITION SERVICES INCENTIVE PROGRAM	93.053		
TRAINING IN GENERAL, PEDIATRIC, AND PUBLIC HEALTH DENTISTRY	93.059		
GLOBAL AIDS	93.067		EMORY UNIVERSITY
GLOBAL AIDS GLOBAL AIDS	93.067 93.067		EMORY UNIVERSITY EMORY UNIVERSITY
GLOBAL AIDS	93.067		EMORY UNIVERSITY
GLOBAL AIDS	93.067		EMORY UNIVERSITY
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
GLOBAL AIDS	93.067		SERVICE FOUNDATION, INC.
CHRONIC DISEASES: RESEARCH, CONTROL, AND PREVENTION	93.068		NORTHROP GRUMMAN CORPORATION
PUBLIC HEALTH EMERGENCY PREPAREDNESS	93.069		
ENVIRONMENTAL PUBLIC HEALTH AND EMERGENCY RESPONSE	93.070		
ENVIRONMENTAL PUBLIC HEALTH AND EMERGENCY RESPONSE	93.070		SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
MEDICARE ENROLLMENT ASSISTANCE PROGRAM	93.070		ENVIRONMENTAL CONTROL
	55.071		
BIRTH DEFECTS AND DEVELOPMENTAL DISABILITIES - PREVENTION AND SURVEILLANCE	93.073		
BIRTH DEFECTS AND DEVELOPMENTAL DISABILITIES - PREVENTION AND	93.073		UNIVERSITY OF SOUTH CAROLINA
HOSPITAL PREPAREDNESS PROGRAM (HPP) AND PUBLIC HEALTH EMERGENCY			
PREPAREDNESS (PHEP) ALIGNED COOPERATIVE AGREEMENTS FAMILY SMOKING PREVENTION AND TOBACCO CONTROL ACT REGULATORY	93.074		
RESEARCH	93.077		AMERICAN HEART ASSOCIATION
FAMILY SMOKING PREVENTION AND TOBACCO CONTROL ACT REGULATORY RESEARCH	93.077		AWENCAN HEAT ASSOCIATION
COOPERATIVE AGREEMENTS TO PROMOTE ADOLESCENT HEALTH THROUGH SCHOOL-	551077		
BASED HIV/STD PREVENTION AND SCHOOL-BASED SURVEILLANCE	93.079		
BLOOD DISORDER PROGRAM: PREVENTION, SURVEILLANCE, AND RESEARCH	93.080		HEMOPHILIA OF GEORGIA
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
PREVENTION OF DISEASE, DISABILITY, AND DEATH BY INFECTIOUS DISEASES	93.084		SERVICE FOUNDATION, INC.
PREVENTION OF DISEASE, DISABILITY, AND DEATH BY INFECTIOUS DISEASES	93.084		EMORY UNIVERSITY
PREVENTION OF DISEASE, DISABILITY, AND DEATH BY INFECTIOUS DISEASES	93.084		UNIVERSITY OF PENNSYLVANIA
HEALTHY MARRIAGE PROMOTION AND RESPONSIBLE FATHERHOOD GRANTS	93.086		CENTER FOR POLICY RESEARCH
HEALTHY MARRIAGE PROMOTION AND RESPONSIBLE FATHERHOOD GRANTS ENHANCE SAFETY OF CHILDREN AFFECTED BY SUBSTANCE ABUSE	93.086 93.087		
ADVANCING SYSTEM IMPROVEMENTS FOR KEY ISSUES IN WOMEN'S HEALTH	93.087		GEORGIA INDEPENDENT COLLEGE ASSOCIATION
AFFORDABLE CARE ACT (ACA) PERSONAL RESPONSIBILITY EDUCATION PROGRAM	93.092		
FOOD AND DRUG ADMINISTRATION RESEARCH	93.103		

Entity		Federal	Program	Cluster	Cluster
	Sub-Recipients	Expenditures	Total	Name	Total
		\$203,884	\$203,884	N/A	
		\$203,884			
1119780517813993		\$273,554	\$273,554	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
		\$138,930	\$138,930	N/A	
	\$186,106	\$427,267	\$427,267	N/A	
	\$401,766	\$457,153	\$457,153	N/A	
AAA 2010 11	9401,700				¢22,170,7
AAA-2019-11		\$5,740	\$9,799,068	AGING CLUSTER	\$33,179,7
	\$6,510,283	\$9,793,328	\$9,799,068	AGING CLUSTER	\$33,179,
	\$17,458,386	\$20,236,002	\$20,236,002	AGING CLUSTER	\$33,179,7
		\$220,991	\$339,416	N/A	
	\$2,915	\$118,425	\$339,416	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$36,987	\$40,470	\$40,470	N/A	
CONTRACT #:19-08-2158		\$14,684	\$3,935,505	N/A	
AAA-2019-07	40.000.000	\$38,486	\$3,935,505	N/A	
	\$2,933,652	\$3,882,335	\$3,935,505	N/A	622.470.7
	\$2,884,530	\$3,144,652	\$3,144,652	AGING CLUSTER	\$33,179,3
4426270		\$32,963	\$32,963		¢1 022 202 1
A126270 A126281		\$19,324	\$1,127,490	RESEARCH AND DEVELOPMENT	\$1,033,282,5
HHSN272201400004C		\$23,430 \$40,208	\$1,127,490	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5
T5999021		\$734,497	\$1,127,490	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T848250		\$734,497 \$250,900	\$1,127,490 \$1,127,490	RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
1040230		\$250,500	<i>Ş1,127,430</i>		<i>\$1,000,202,0</i>
63828383-29		\$59,131	\$1,127,490	RESEARCH AND DEVELOPMENT	\$1,033,282,5
7500131662		\$37,207	\$37,207	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$14,968,412	\$14,968,412	N/A	
		\$685,235	\$685,477	N/A	
PH7556		\$242	\$685,477	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$353,551	\$424,973	\$424,973	N/A	
		6246 261	6414 242	NI/A	
CON010604		\$346,361	\$411,342		¢1 022 202 0
CON010604		\$64,981	\$411,342	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$212,659	\$212,659	N/A	
CON008272		\$843	\$3,312,063	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$972,894	\$3,311,220	\$3,312,063	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$51,856	\$51,856	N/A	
1NU27DD001155-01-00		\$38,971	\$38,971	N/A	
63828383-30		\$4,158	\$1,529,345	N/A	
CON011769		\$82,206	\$1,529,345	RESEARCH AND DEVELOPMENT	\$1,033,282,5
72796296750010043564		\$1,442,981	\$1,529,345	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON010756		\$19,874	\$1,769,919	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$190	\$1,750,045	\$1,769,919	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$78,913	\$266,173	\$266,173	RESEARCH AND DEVELOPMENT	\$1,033,282,5
26971		\$1,513	\$1,513	N/A	
	\$1,430,307	\$1,669,303	\$1,669,303	N/A	
		\$92,391	\$3,737,450	N/A	

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
FOOD AND DRUG ADMINISTRATION RESEARCH	93.103		
COMPREHENSIVE COMMUNITY MENTAL HEALTH SERVICES FOR CHILDREN WITH SERIOUS			
EMOTIONAL DISTURBANCES (SED)	93.104		
AREA HEALTH EDUCATION CENTERS	93.107		
MATERNAL AND CHILD HEALTH FEDERAL CONSOLIDATED PROGRAMS	93.110		EMORY UNIVERSITY
MATERNAL AND CHILD HEALTH FEDERAL CONSOLIDATED PROGRAMS	93.110		HEMOPHILIA OF GEORGIA
MATERNAL AND CHILD HEALTH FEDERAL CONSOLIDATED PROGRAMS	93.110		UNIVERSITY OF NORTH CAROLINA
MATERNAL AND CHILD HEALTH FEDERAL CONSOLIDATED PROGRAMS	93.110		
MATERNAL AND CHILD HEALTH FEDERAL CONSOLIDATED PROGRAMS	93.110		UNIVERSITY OF NORTH CAROLINA
ENVIRONMENTAL HEALTH ENVIRONMENTAL HEALTH	93.113 93.113		EMORY UNIVERSITY EMORY UNIVERSITY
			FOUNDATION FOR APPLIED MOLECULAR EVOLUTION
ENVIRONMENTAL HEALTH	93.113		(FFAME)
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
ENVIRONMENTAL HEALTH	93.113		SERVICE FOUNDATION, INC.
ENVIRONMENTAL HEALTH	93.113		NORTHEASTERN UNIVERSITY
	93.113		NORTHEASTERN UNIVERSITY
ENVIRONMENTAL HEALTH	93.113 93.113		NORTHEASTERN UNIVERSITY REPROTOX. LLC
ENVIRONMENTAL HEALTH ENVIRONMENTAL HEALTH	93.113 93.113		UNIVERSITY OF NORTH CAROLINA
ENVIRONMENTAL HEALTH ENVIRONMENTAL HEALTH	93.113		WASHINGTON STATE UNIVERSITY
ENVIRONMENTAL HEALTH	93.113		WASHINGTON STATE UNIVERSITY
PROJECT GRANTS AND COOPERATIVE AGREEMENTS FOR TUBERCULOSIS CONTROL	55.115		
PROGRAMS	93.116		
ORAL DISEASES AND DISORDERS RESEARCH	93.121		EMORY UNIVERSITY
ORAL DISEASES AND DISORDERS RESEARCH	93.121		UNIVERSITY OF ALABAMA AT BIRMINGHAM
ORAL DISEASES AND DISORDERS RESEARCH	93.121		
NURSE ANESTHETIST TRAINEESHIP	93.124		
EMERGENCY MEDICAL SERVICES FOR CHILDREN	93.127		
COOPERATIVE AGREEMENTS TO STATES/TERRITORIES FOR THE COORDINATION AND			
DEVELOPMENT OF PRIMARY CARE OFFICES	93.130		
CENTERS FOR RESEARCH AND DEMONSTRATION FOR HEALTH PROMOTION AND DISEASE PREVENTION	93.135		
INJURY PREVENTION AND CONTROL RESEARCH AND STATE AND COMMUNITY BASED	501200		
PROGRAMS	93.136		
INJURY PREVENTION AND CONTROL RESEARCH AND STATE AND COMMUNITY BASED			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
PROGRAMS	93.136		SERVICE FOUNDATION, INC.
NIEHS SUPERFUND HAZARDOUS SUBSTANCES_BASIC RESEARCH AND EDUCATION	93.143		NORTHEASTERN UNIVERSITY
NIEHS SUPERFUND HAZARDOUS SUBSTANCES_BASIC RESEARCH AND EDUCATION	93.143		TEXAS A&M RESEARCH FOUNDATION
HIV-RELATED TRAINING AND TECHNICAL ASSISTANCE	93.145		
PROJECTS FOR ASSISTANCE IN TRANSITION FROM HOMELESSNESS (PATH)	93.150		
CENTERS OF EXCELLENCE	93.157		MEHARRY MEDICAL COLLEGE
HEALTH PROGRAM FOR TOXIC SUBSTANCES AND DISEASE REGISTRY	93.161		
GRANTS TO STATES FOR LOAN REPAYMENT PROGRAM	93.165		
HUMAN GENOME RESEARCH	93.172		BROAD INSTITUTE INC.
HUMAN GENOME RESEARCH	93.172		
RESEARCH RELATED TO DEAFNESS AND COMMUNICATION DISORDERS	93.173		EMORY UNIVERSITY
RESEARCH RELATED TO DEAFNESS AND COMMUNICATION DISORDERS	93.173		
NURSING WORKFORCE DIVERSITY	93.178		
	02 404		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
DISABILITIES PREVENTION	93.184		SERVICE FOUNDATION, INC.
DISABILITIES PREVENTION	93.184		
GRADUATE PSYCHOLOGY EDUCATION CHILDHOOD LEAD POISONING PREVENTION PROJECTS, STATE AND LOCAL CHILDHOOD LEAD	93.191		
POISONING PREVENTION AND SURVEILLANCE OF BLOOD LEAD LOCAL CHILDHOOD LEAD	93.197		
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH	93.213		HGG RESEARCH, LLC
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH	<i>93.213</i> <i>93.213</i>		VIRGINIA COMMONWEALTH UNIVERSITY
	20.210		VIRGINIA POLYTECHNIC INSTITUTE AND STATE
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEAI TH	93,213		UNIVERSITY
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH	<i>93.213</i> 93.213		UNIVERSITY
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH	<i>93.213</i> 93.213		UNIVERSITY
			UNIVERSITY
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH HEALTH CENTER PROGRAM (COMMUNITY HEALTH CENTERS, MIGRANT HEALTH CENTERS,	93.213		UNIVERSITY
RESEARCH AND TRAINING IN COMPLEMENTARY AND INTEGRATIVE HEALTH HEALTH CENTER PROGRAM (COMMUNITY HEALTH CENTERS, MIGRANT HEALTH CENTERS, HEALTH CARE FOR THE HOMELESS, AND PUBLIC HOUSING PRIMARY CARE)	93.213 93.224		UNIVERSITY WILLIAM BEAUMONT HOSPITAL RESEARCH INSTITUTE

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
	\$413,020	\$3,642,169	\$3,737,450	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	6472.057	6207.044	6207.044	N/A	Ċ.
	\$172,057	\$207,641	\$207,641	N/A	\$i
CON006648	\$677,372	\$816,441	\$816,441	N/A N/A	\$1 \$0
17H30MC24046		-\$1,438 \$16,252	\$857,623 \$857,623	N/A N/A	\$C \$C
CON009950		\$9,075	\$857,623	N/A N/A	\$(
2011003330	\$80,448	\$763,398	\$857,623	N/A	\$0
CON011278	+	\$70,336	\$857,623	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T779501		\$38,087	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T811860		\$171,413	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010760		\$115,021	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
63828383-31		\$5,941	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
50054678050		-\$12,912	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
500612-78050		\$106,472	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
500635-78050		\$21,490	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PA-15-269		\$74,651	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5106555		\$18,283	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010993		\$1,564	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$69,488	\$905,756	\$1,445,766	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$2,579,387	\$2,579,387	N/A	\$0
T825580		\$253,724	\$1,973,417	RESEARCH AND DEVELOPMENT	\$1,033,282,522
000412838-103		\$119,033	\$1,973,417	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$230,069	\$1,600,660	\$1,973,417	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$69,922	\$69,922	N/A	\$(
		\$144,798	\$144,798	N/A	\$(
		\$170,077	\$170,077	N/A	\$0
		\$2,806	\$2,806	N/A	\$0
		\$2,565,223	\$2,608,661	N/A	\$(
63828383-32		\$43,438	\$2,608,661	RESEARCH AND DEVELOPMENT	\$1,033,282,522
50058578050		\$281,353	\$309,276	RESEARCH AND DEVELOPMENT	\$1,033,282,522
02M1801169		\$27,923	\$309,276	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		-\$20	-\$20	N/A	\$(
	\$1,242,289	\$1,778,749	\$1,778,749	N/A	\$(
NTEE		\$4,037	\$4,037	N/A	\$0
		\$10,483	\$10,483	N/A	\$(
6500245722		\$43,750	\$43,750	N/A	\$1 000 000 500
6500215732	¢220.100	\$14,114	\$637,163	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A004096	\$220,190	\$623,049 <i>\$29,788</i>	\$637,163 <i>\$3,096,965</i>	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
A004090	\$803,546	\$3,067,177	\$3,096,965	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$439,593	\$439,593	N/A	\$1,033,202,32
63828383-33		¢17 172	\$527 727	RESEARCH AND DEVELOPMENT	\$1 022 282 F2
63828383-33	\$136 159	\$ <i>12,473</i> \$520,264	\$532,737 \$532,737	RESEARCH AND DEVELOPMENT	
63828383-33	\$136,159	<i>\$12,473</i> \$520,264 \$323,952	<i>\$532,737</i> \$532,737 \$323,952	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT N/A	\$1,033,282,522
63828383-33	\$136,159	\$520,264 \$323,952	\$532,737 \$323,952	RESEARCH AND DEVELOPMENT N/A	\$1,033,282,52 \$(
63828383-33 AWD00007003	\$136,159	\$520,264 \$323,952 \$336,541	\$532,737 \$323,952 \$336,541	RESEARCH AND DEVELOPMENT N/A N/A	\$1,033,282,52 \$6 \$6
	\$136,159	\$520,264 \$323,952	\$532,737 \$323,952	RESEARCH AND DEVELOPMENT N/A	\$1,033,282,52 \$1 \$1 \$1,033,282,522
AWD00007003 PT112083-SC107082	\$136,159	\$520,264 \$323,952 \$336,541 <i>\$12,152 \$24,273</i>	\$532,737 \$323,952 \$336,541 <i>\$855,256</i> <i>\$855,256</i>	RESEARCH AND DEVELOPMENT N/A N/A RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52: \$(\$1,033,282,522 \$1,033,282,522
AWD00007003	\$136,159 \$285,804	\$520,264 \$323,952 \$336,541 <i>\$12,152</i>	\$532,737 \$323,952 \$336,541 <i>\$855,256</i>	RESEARCH AND DEVELOPMENT N/A N/A RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$(\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AWD00007003 PT112083-SC107082	\$285,804	\$520,264 \$323,952 \$336,541 \$12,152 \$24,273 \$156,277 \$662,554	\$532,737 \$323,952 \$336,541 \$855,256 \$855,256 \$855,256 \$855,256	RESEARCH AND DEVELOPMENT N/A N/A RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52 \$ \$ \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522
AWD00007003 PT112083-SC107082		\$520,264 \$323,952 \$336,541 <i>\$12,152</i> <i>\$24,273</i> <i>\$156,277</i> \$662,554 \$4,850,447	\$532,737 \$323,952 \$336,541 \$855,256 \$855,256 \$855,256 \$855,256 \$855,256 \$4,850,447	RESEARCH AND DEVELOPMENT N/A N/A RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT HEALTH CENTER PROGRAM CLUSTER	\$1,033,282,52 \$ \$ \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$4,850,44
AWD00007003 PT112083-SC107082	\$285,804	\$520,264 \$323,952 \$336,541 \$12,152 \$24,273 \$156,277 \$662,554	\$532,737 \$323,952 \$336,541 \$855,256 \$855,256 \$855,256 \$855,256	RESEARCH AND DEVELOPMENT N/A N/A RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522 \$(\$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$1,033,282,522 \$4,850,447 \$(\$1,033,282,522

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
		(Optional)	Entity
TRAUMATIC BRAIN INJURY STATE DEMONSTRATION GRANT PROGRAM	93.234		
TITLE V STATE SEXUAL RISK AVOIDANCE EDUCATION (TITLE V STATE SRAE) PROGRAM	93.235		
GRANTS TO STATES TO SUPPORT ORAL HEALTH WORKFORCE ACTIVITIES	93.236		
STATE CAPACITY BUILDING	93.240		
STATE RURAL HOSPITAL FLEXIBILITY PROGRAM	93.241		
STATE RURAL HOSPITAL FLEXIBILITY PROGRAM	93.241		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
MENTAL HEALTH RESEARCH GRANTS	93.242		
MENTAL HEALTH RESEARCH GRANTS	93.242		BOSTON COLLEGE
MENTAL HEALTH RESEARCH GRANTS	93.242		CENTRE FOR ADDICTION AND MENTAL HEALTH
MENTAL HEALTH RESEARCH GRANTS	93.242		EMORY UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		EMORY UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		EMORY UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
MENTAL HEALTH RESEARCH GRANTS	93.242		KAISER FOUNDATION RESEARCH INSTITUTE
MENTAL HEALTH RESEARCH GRANTS	93.242		KAISER PERMANENTE
MENTAL HEALTH RESEARCH GRANTS	93.242		KAISER PERMANENTE
MENTAL HEALTH RESEARCH GRANTS	93.242		KAISER PERMANENTE
MENTAL HEALTH RESEARCH GRANTS	93.242		KAISER PERMANENTE
MENTAL HEALTH RESEARCH GRANTS	93.242		KAISER PERMANENTE
MENTAL HEALTH RESEARCH GRANTS	93.242		
			MIND RESEARCH NETWORK
MENTAL HEALTH RESEARCH GRANTS	93.242		MIND RESEARCH NETWORK
MENTAL HEALTH RESEARCH GRANTS	93.242		MIND RESEARCH NETWORK
MENTAL HEALTH RESEARCH GRANTS	93.242		NEW YORK UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		RAND CORPORATION THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS
MENTAL HEALTH RESEARCH GRANTS	93.242		LABORATORY, LLC
MENTAL HEALTH RESEARCH GRANTS	93.242		TULANE UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
MENTAL HEALTH RESEARCH GRANTS	93.242		UNIVERSITY OF SOUTHERN CALIFORNIA
MENTAL HEALTH RESEARCH GRANTS	93.242		UNIVERSITY OF SOUTHERN CALIFORNIA
MENTAL HEALTH RESEARCH GRANTS	93.242		UNIVERSITY OF TEXAS AT SAN ANTONIO
MENTAL HEALTH RESEARCH GRANTS	93.242		UNIVERSITY OF WASHINGTON
MENTAL HEALTH RESEARCH GRANTS	93.242		WAKE FOREST UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		YALE UNIVERSITY
MENTAL HEALTH RESEARCH GRANTS	93.242		
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND	55.242		
NATIONAL SIGNIFICANCE	93.243		JOHNS HOPKINS UNIVERSITY
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND			
NATIONAL SIGNIFICANCE	93.243		JOHNS HOPKINS UNIVERSITY
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND NATIONAL SIGNIFICANCE	93.243		MOREHOUSE SCHOOL OF MEDICINE
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND			
NATIONAL SIGNIFICANCE	93.243		POSITIVE IMPACT HEALTH CENTERS, INC.
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND NATIONAL SIGNIFICANCE	93.243		
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND	23.2.3		COBB AND DOUGLAS COUNTIES COMMUNITY
NATIONAL SIGNIFICANCE	93.243		SERVICES BOARD
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND	55.245		
	02 242		
NATIONAL SIGNIFICANCE	93.243		HIGHLAND RIVERS COMMUNITY SERVICE BOARD
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND NATIONAL SIGNIFICANCE	02 242		KENNESAW STATE UNIVERSITY RESEARCH AND
	93.243		SERVICE FOUNDATION
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROJECTS OF REGIONAL AND NATIONAL SIGNIFICANCE	93.243		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
ADVANCED NURSING EDUCATION WORKFORCE GRANT PROGRAM	93.247		SERVICE FOUNDATION, INC.
ADVANCED NURSING EDUCATION WORKFORCE GRANT PROGRAM	93.247		
UNIVERSAL NEWBORN HEARING SCREENING	93.251		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
OCCUPATIONAL SAFETY AND HEALTH PROGRAM	93.262		SERVICE FOUNDATION, INC.
OCCUPATIONAL SAFETY AND HEALTH PROGRAM	93.262		
OCCUPATIONAL SAFETY AND HEALTH PROGRAM	93.262		UNIVERSITY OF SOUTH FLORIDA
OCCUPATIONAL SAFETY AND HEALTH PROGRAM	93.262		
NURSE FACULTY LOAN PROGRAM (NFLP)	93.264		
NURSE FACULI I LUAIN PRUGRAINI (INFLP)	93.264		

Assigned By Funder	Total Amount		Federal		
Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$72,616	\$72,616	N/A	:
	\$1,496,279	\$3,279,854	\$3,279,854	N/A	
	\$67,500	\$399,370	\$399,370	N/A	
		\$237,709	\$237,709	N/A	
		\$523,318	\$564,772	N/A	
63828383-34		\$41,454	\$564,772	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	\$15,466	\$18,701	\$4,258,949	N/A	
51056221		\$49,468	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON004907		\$6,279	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
#A027182		\$88,692	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON008255		\$26,710	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T923072		\$2,835	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SUBAWARD NO. 0255-3351-4609		\$47,013	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON011918		\$2,304	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON006965 CON006966		\$0 -\$715	\$4,258,949	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
CON006968		-\$29,666	\$4,258,949 \$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON008988 CON010730		-\$29,000 \$11,581	\$4,258,949 \$4,258,949	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON011640		\$7,117	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON011040		\$47,138	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON007941		\$103,849	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON011506		\$19,427	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
F875209S		\$28,488	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
9920180024		\$27,951	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		1 /	1 //		
#145278		\$67,760	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON012252		\$5,918	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON005300		\$2,152	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON009483		\$17,144	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON012130		\$7,956	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON008169		\$51,401	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SUB AWARD # UWSC8592		\$5,156	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SUB WFUHS 558548		\$22,013	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
GR101130		\$19,998	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$713,779	\$3,602,279	\$4,258,949	RESEARCH AND DEVELOPMENT	\$1,033,282,
BIRT NURSING CURRICULA AND ED		\$6,954	\$6,843,223	N/A	
SUBAWARD NO. 2004173466		\$2,195	\$6,843,223	N/A	
		46.000			
HBCUCFE16-17/20		\$6,877	\$6,843,223	N/A	
LOA TRANSFORM PROJECT		\$21,995	\$6,843,223	N/A	
	\$1,708,740	\$6,451,621	\$6,843,223	N/A	
CON008807		\$21,320	\$6,843,223	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON008806		\$21,320	\$6,843,223	RESEARCH AND DEVELOPMENT	\$1,033,282,5
00008800		\$21,320	<i>\$0,643,223</i>		<i>Ş1,033,202,3</i>
1H79T1026010-01		\$7,240	\$6,843,223	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$303,701	\$6,843,223	RESEARCH AND DEVELOPMENT	\$1,033,282,5
63828383-35		\$702,430	\$2,385,198	N/A	
		\$1,682,768	\$2,385,198	N/A	
		\$252,173	\$252,173	N/A	
63828383-36		\$7,075	\$154,340	N/A	
03020303-30		\$135,802	\$154,340	N/A N/A	
6402-1095-03-C		\$135,802	\$154,340	RESEARCH AND DEVELOPMENT	\$1,033,282,5
0.02 1000 00 0		\$9,540	\$154,340	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$2,155,708	\$2,155,708	STUDENT FINANCIAL ASSISTANCE	\$2,277,088,2

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
HEALTH SYSTEMS STRENGTHENING AND HIV/AIDS PREVENTION, CARE AND			•
TREATMENT UNDER THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF	93.266		UNIVERSITY OF CHICAGO
MMUNIZATION COOPERATIVE AGREEMENTS	93.268		
/IRAL HEPATITIS PREVENTION AND CONTROL	93.270		
ALCOHOL RESEARCH PROGRAMS	93.273		BEHAVIORAL SCIENCE TECHNOLOGIES, LLC
ALCOHOL RESEARCH PROGRAMS	93.273		INLIGHTA BIOSCIENCES, LLC
ALCOHOL RESEARCH PROGRAMS	93.273		YALE UNIVERSITY
ALCOHOL RESEARCH PROGRAMS	93.273		
DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS	93.279		BUTLER HOSPITAL
DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS	93.279		EMORY UNIVERSITY NATIONAL BUREAU OF ECONOMIC RESEARCH
DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS	93.279 93.279		NORTHWESTERN UNIVERSITY
DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS	93.279		UNIVERSITY OF CONNECTICUT
DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS	93.279		UNIVERSITY OF WISCONSIN - MADISON
DRUG ABUSE AND ADDICTION RESEARCH PROGRAMS	93.279		UNIVERSITI OF WISCONSIN - MADISON
ENTERS FOR DISEASE CONTROL AND PREVENTION INVESTIGATIONS AND TECHNICAL	55.275		
SSISTANCE	93.283		
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO	55.205		
IMPROVE HUMAN HEALTH	93.286		CASE WESTERN RESERVE UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO	10.200		
IMPROVE HUMAN HEALTH	93.286		CORNELL UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		EMORY UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		EMORY UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		EMORY UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		EMORY UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		MICHIGAN STATE UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		NORTHEASTERN UNIVERSITY
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO			
IMPROVE HUMAN HEALTH	93.286		UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO	02.200		
IMPROVE HUMAN HEALTH	93.286		UNIVERSITY OF MEMPHIS
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO IMPROVE HUMAN HEALTH	93.286		UNIVERSITY OF TEXAS AT AUSTIN
DISCOVERY AND APPLIED RESEARCH FOR TECHNOLOGICAL INNOVATIONS TO IMPROVE	95.200		UNIVERSITI OF TEXAS AT AUSTIN
JUMAN HEALTH	93.286		
TATE PARTNERSHIP GRANT PROGRAM TO IMPROVE MINORITY HEALTH	93.296		
EENAGE PREGNANCY PREVENTION PROGRAM	93.297		
MALL RURAL HOSPITAL IMPROVEMENT GRANT PROGRAM	93.301		
PHF 2018: OFFICE OF SMOKING AND HEALTH-NATIONAL STATE-BASED TOBACCO	50.001		
CONTROL PROGRAMS-FINANCED IN PART BY 2018 PREVENTION AND PUBLIC HEALTH			
UNDS (PPHF)	93.305		
			KENNESAW STATE UNIVERSITY RESEARCH AND
MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH	93.307		SERVICE FOUNDATION
MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH	93.307		EMORY UNIVERSITY
MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH	93.307		HAMPTON UNIVERSITY
/INORITY HEALTH AND HEALTH DISPARITIES RESEARCH	93.307		
TRANS-NIH RESEARCH SUPPORT	93.310		CASE WESTERN RESERVE UNIVERSITY
TRANS-NIH RESEARCH SUPPORT	93.310		EMORY UNIVERSITY
TRANS-NIH RESEARCH SUPPORT	93.310		EMORY UNIVERSITY
TRANS-NIH RESEARCH SUPPORT	93.310		EMORY UNIVERSITY
TRANS-NIH RESEARCH SUPPORT	93.310		EMORY UNIVERSITY
TRANS-NIH RESEARCH SUPPORT	93.310		NORTHEASTERN UNIVERSITY
	93.310		NORTHEASTERN UNIVERSITY
TRANS-NIH RESEARCH SUPPORT	93.310		UNIVERSITY OF CALIFORNIA, DAVIS
TRANS-NIH RESEARCH SUPPORT			
TRANS-NIH RESEARCH SUPPORT TRANS-NIH RESEARCH SUPPORT	93.310		UNIVERSITY OF CALIFORNIA, DAVIS
TRANS-NIH RESEARCH SUPPORT TRANS-NIH RESEARCH SUPPORT TRANS-NIH RESEARCH SUPPORT	93.310		UNIVERSITY OF CALIFORNIA, DAVIS
TRANS-NIH RESEARCH SUPPORT TRANS-NIH RESEARCH SUPPORT			

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
CON009064		\$22,733	\$22.733	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0000004		\$152,552,265	\$152,552,265	N/A	\$1,000,202,022
		\$550,807	\$152,552,205	N/A	\$
CON007683		\$216,080	\$1,849,603	RESEARCH AND DEVELOPMENT	ډ \$1,033,282,522
CON007083		\$128,457	\$1,849,603 \$1,849,603	RESEARCH AND DEVELOPMENT	\$1,033,282,522
GR104576				RESEARCH AND DEVELOPMENT	
GR104576	\$113,245	\$109,030	\$1,849,603	RESEARCH AND DEVELOPMENT	\$1,033,282,522
92408302	\$113,245	\$1,396,036	\$1,849,603		\$1,033,282,52
		\$46,670	\$2,369,606	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
T808933		\$15,931	\$2,369,606		\$1,033,282,52
CON010369		\$30,571	\$2,369,606	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011979		\$33,481	\$2,369,606	RESEARCH AND DEVELOPMENT	\$1,033,282,522
69979 6110 // 044/704		\$154,812	\$2,369,606	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB # 844K701	4	\$11,236	\$2,369,606	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$399,680	\$2,076,905	\$2,369,606	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$566,452	\$566,452	N/A	\$
		\$300,432	\$300,432	NA	اپ
CON011087		\$80,184	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
16111826-GEORGIA		\$40,999	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A066666		\$39,462	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		6450			<i>61</i> 022 202 52
A066738 (CORE 4)		\$156	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A073523		\$79,497	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A084034		\$84,715	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RC104170GT		\$128,669	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
500396-78050		\$7,925	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
500350-78050			\$3,040,080	RESEARCH AND DEVELOPMENT	\$1,033,262,322
10547SC		\$156,241	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
5-40708		\$74,277	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UTA17-000428		\$44,425	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$643,438	\$4,904,136	\$5,640,686	RESEARCH AND DEVELOPMENT	\$1,033,282,52
	2043,430	\$138,008	\$138,008	N/A	\$1,055,282,52
				N/A N/A	\$
		\$104	\$104 \$559,350		\$
		\$559,350	\$559,350	N/A	Ş
		\$837,010	\$837,010	N/A	\$
		<i>\$667,616</i>	<i>\$667,610</i>		
HHSS280200600029C		\$205	\$107,255	N/A	\$1
SUBAWARD#: T864540		\$4,977	\$107,255	RESEARCH AND DEVELOPMENT	\$1,033,282,522
HU150002		\$36,142	\$107,255	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$65,931	\$107,255	RESEARCH AND DEVELOPMENT	\$1,033,282,52
RES512662		\$79,658	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,522
S699823		\$116,044	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52.
T491511		\$25,021	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
T662893		-\$11,820	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
T951414		\$240,877	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
50055978052 P1803156		\$267,953	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
500626-78050		\$429,410	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
CON008957		\$132,375	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
CON011366		\$208,584	\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
0011000			\$8,012,928	RESEARCH AND DEVELOPMENT	\$1,033,282,52
CON011300		\$211,836	20,012,520		
		\$6,462	\$8,012,928	RESEARCH AND DEVELOPMENT	
CON011397	\$1,713,513				\$1,033,282,522 \$1,033,282,522

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a.3.14 3.3.14 3.3.17 3.3.17 3.3.17 3.3.23 3.3.23 3.3.23 3.323 3.324 3.331 3.336 3.342 3.336 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.351 3.351	-	Entity FLORIDA DEPARTMENT OF HEALTH FULTON COUNTY EMORY UNIVERSITY EMORY UNIVERSITY
3.314 3.317 3.319 3.323 3.324 3.331 3.336 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.350 3.351 3.351		FLORIDA DEPARTMENT OF HEALTH FULTON COUNTY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY EMORY UNIVERSITY
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3.351		PURDUE UNIVERSITY
5.555		UNIVERSITY OF ALABAMA
		UNIVERSITI OF ALABAMA
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3.359		
3.361		EMORY UNIVERSITY
3.361		
3.364		
3.365		ATRIUM HEALTH
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5.500		
3.367		
3.369		
3.387		UNIVERSITY OF PENNSYLVANIA
3.389		UNIVERSITY OF CALIFORNIA, SAN DIEGO
3.393		IONIC PHARMACEUTICALS
3.393	T	EXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
		UNIVERSITY OF CONNECTICUT
		UNIVERSITY OF TOLEDO UNIVERSITY OF UTAH
		UNIVERSITI OF UTAIT
3.394		INLIGHTA BIOSCIENCES, LLC
3.394		UNIVERSITY OF ARKANSAS
3.394		UNIVERSITY OF PENNSYLVANIA
3.394		UNIVERSITY OF PITTSBURGH
3.394		
3.395		BOSTON UNIVERSITY
		ECOG-ACRIN CANCER RESEARCH GROUP
		EMORY UNIVERSITY EMORY UNIVERSITY
3.395		EMORY UNIVERSITY
3.395		LEIDOS, INC.
3.395		PRODA BIOTECH, LLC
3.395		PRODA BIOTECH, LLC
3.395		UNIVERSITY OF MICHIGAN
3.395		
3.396		EMORY UNIVERSITY
		EMORY UNIVERSITY HENRY FORD HEALTH SYSTEM
	.353 .353 .353 .354 .359 .361 .361 .364 .365 .366 .367 .368 .363 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .393 .394 .394 .395 .395 .395 .395 .395 .395 .395 .395 .395 .395 .395	3.353 3.354 3.359 3.361 3.361 3.361 3.361 3.361 3.361 3.365 3.366 3.367 3.368 3.369 3.363 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.393 3.394 3.394 3.394 3.394 3.394 3.395 3.395 3.395 3.395 3.395 3.395 3.395 3.395 3.395 3.396

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$202,694	\$202,694	N/A	
		\$7,601,764	\$7,601,764	N/A	
		\$595,907	\$595,907	RESEARCH AND DEVELOPMENT	\$1,033,28
2021/2		\$108,332	\$174,573	N/A	41,000,00
CODNR	¢ 481 100	\$66,241	\$174,573	RESEARCH AND DEVELOPMENT	\$1,033,28
CON008794	\$481,109	\$1,102,552 - <i>\$1,633</i>	\$1,102,552 <i>-\$1,633</i>	N/A RESEARCH AND DEVELOPMENT	\$1,033,28
CUN008794		\$235,396	\$235,396	N/A	\$1,033,28
		<i>\$</i> 200,000	<i>\$</i> 200,000		
		\$66,180	\$66,180	STUDENT FINANCIAL ASSISTANCE	\$2,277,08
A004409		\$20,895	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
A007319		\$282,479	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
A053611		\$13,082	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
A053681		\$39,351	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
CON010797 CON011096		\$8,054	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
PEND 7/1 T916186		\$27,016 \$1,240,846	\$1,726,944 \$1,726,944	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,28 \$1,033,28
PEND A01 7/1 A155067		\$1,240,840	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
T920808		\$104	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
T920868		\$35,828	\$1,726,944	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$83,886	\$2,337,197	N/A	
<i>T620910</i>		\$252,547	\$2,337,197	RESEARCH AND DEVELOPMENT	\$1,033,28
4102-86208		\$812	\$2,337,197	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$1,999,952	\$2,337,197	RESEARCH AND DEVELOPMENT	\$1,033,28
000516421001		\$46,066	\$46,066	RESEARCH AND DEVELOPMENT	\$1,033,28
		¢1 695 010	\$1 69E 010	N/A	
		\$1,685,010 \$211,039	\$1,685,010 \$211,039	N/A N/A	
CON010115		\$1,816	\$186,162	RESEARCH AND DEVELOPMENT	\$1,033,28
201010113		\$184,346	\$186,162	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$736,471	\$736,471	STUDENT FINANCIAL ASSISTANCE	\$2,277,08
SUBAWARD NO. 3000301054		\$47,471	\$47,471	N/A	
		\$117,790	\$117,790	N/A	
			4		
		\$211,735	\$211,735	N/A	
1RO1HL147256-01		\$577,041	\$577,041	N/A RESEARCH AND DEVELOPMENT	61 022 20
10319666		\$701 -\$15,991	\$701 -\$15,991	RESEARCH AND DEVELOPMENT	\$1,033,28 \$1,033,28
RCA224739A		\$28,000	\$1,683,546	RESEARCH AND DEVELOPMENT	\$1,033,28
15LMF0178NLS/RCA190710		\$17,009	\$1,683,546	RESEARCH AND DEVELOPMENT	\$1,033,28
324639		\$32,377	\$1,683,546	RESEARCH AND DEVELOPMENT	\$1,033,28
CON011331		\$8,444	\$1,683,546	RESEARCH AND DEVELOPMENT	\$1,033,28
10044693-02		\$29,609	\$1,683,546	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$80,000	\$1,568,107	\$1,683,546	RESEARCH AND DEVELOPMENT	\$1,033,28
CON008621		\$260,665	\$2,135,853	RESEARCH AND DEVELOPMENT	\$1,033,28
52313		\$155,625	\$2,135,853	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,28
3760691/569205 SUB:0035722(129643-1)		-\$2 \$21,042	\$2,135,853	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,28 \$1,033,28
308.0033722(129043-1)	\$14,937	\$1,698,523	\$ <i>2,135,853</i> \$2,135,853	RESEARCH AND DEVELOPMENT	\$1,033,28
SUBAWARD#: 4500002673	φ <u>1</u> -1,557	\$113,837	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
5UG1CA189828-03-MCG1		\$22,364	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
T692510		\$9,739	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
T692521		\$45,030	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
T692799		\$159,824	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
		\$84,901	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
AGREEMENT #: 16X106		\$49,411	\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
AGREEMENT #: 16X106 CON009122			\$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28
AGREEMENT #: 16X106 CON009122 CON010395		\$237,583			61 000 00
AGREEMENT #: 16X106 CON009122	¢672 222	\$16,102	\$4,321,254	RESEARCH AND DEVELOPMENT	
AGREEMENT #: 16X106 CON009122 CON010395 SUBK00008227	\$672,332	<i>\$16,102</i> \$3,582,463	<i>\$4,321,254</i> \$4,321,254	RESEARCH AND DEVELOPMENT	\$1,033,28 \$1,033,28 \$1,033,28
AGREEMENT #: 16X106 CON009122 CON010395	\$672,332	\$16,102	\$4,321,254		

		Additional	
	Federal	Award	Name of Funder
	CFDA	Identification	Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
CANCER BIOLOGY RESEARCH CANCER BIOLOGY RESEARCH	93.396 93.396		UNIVERSITY OF ALABAMA UNIVERSITY OF FLORIDA
CANCER BIOLOGY RESEARCH	93.396		UNIVERSITY OF FLORIDA
CANCER BIOLOGY RESEARCH	93.396		UNIVERSITY OF NORTH TEXAS HEALTH SCIENCE
CANCER BIOLOGY RESEARCH	93.396		UNIVERSITY OF TEXAS MD ANDERSON CANCER
CANCER BIOLOGY RESEARCH	93.396		UNIVERSITY OF TEXAS MD ANDERSON CANCER
CANCER BIOLOGY RESEARCH	93.396		
CANCER CENTERS SUPPORT GRANTS	93.397		MOFFITT CANCER CENTER
CANCER RESEARCH MANPOWER	93.398		UNIVERSITY OF ARIZONA
CANCER RESEARCH MANPOWER	93.398		
CANCER CONTROL STRENGTHENING PUBLIC HEALTH SYSTEMS AND SERVICES THROUGH NATIONAL	93.399		KAISER PERMANENTE
PARTNERSHIPS TO IMPROVE AND PROTECT THE NATIONS HEALTH	93.421		
NON-ACA/PPHF - BUILDING CAPACITY OF THE PUBLIC HEALTH SYSTEM TO IMPROVE	55.421		ASSOCIATION OF UNIVERSITY CENTERS ON
POPULATION HEALTH THROUGH NATIONAL NONPROFIT ORGANIZATIONS	93.424		DISABILITIES
NON-ACA/PPHF - BUILDING CAPACITY OF THE PUBLIC HEALTH SYSTEM TO IMPROVE			
POPULATION HEALTH THROUGH NATIONAL NONPROFIT ORGANIZATIONS	93.424		
NON-ACA/PPHF - BUILDING CAPACITY OF THE PUBLIC HEALTH SYSTEM TO IMPROVE POPULATION HEALTH THROUGH NATIONAL NONPROFIT ORGANIZATIONS	93.424		NATIONAL NETWORK OF PUBLIC HEALTH INSTITUTES
NON-ACA/PPHF - BUILDING CAPACITY OF THE PUBLIC HEALTH SYSTEM TO IMPROVE			
POPULATION HEALTH THROUGH NATIONAL NONPROFIT ORGANIZATIONS	93.424		NATIONAL NETWORK OF PUBLIC HEALTH INSTITUTES
IMPROVING THE HEALTH OF AMERICANS THROUGH PREVENTION AND MANAGEMENT OF	02.426		
	93.426		
ACL NATIONAL INSTITUTE ON DISABILITY, INDEPENDENT LIVING, AND REHABILITATION RESEARCH	93.433		UNIVERSITY OF PENNSYLVANIA
ACL NATIONAL INSTITUTE ON DISABILITY, INDEPENDENT LIVING, AND REHABILITATION	55.455		UNIVERSITI OF LEMISTEVANIA
RESEARCH	93.433		
EVERY STUDENT SUCCEEDS ACT/PRESCHOOL DEVELOPMENT GRANTS	93.434		
INNOVATIVE STATE AND LOCAL PUBLIC HEALTH STRATEGIES TO PREVENT AND MANAGE			
DIABETES AND HEART DISEASE AND STROKE-	93.435		
CDC UNDERGRADUATE PUBLIC HEALTH SCHOLARS PROGRAM (CUPS): A PUBLIC HEALTH			
EXPERIENCE TO EXPOSE UNDERGRADUATES INTERESTED IN MINORITY HEALTH TO PUBLIC			
HEALTH AND THE PUBLIC HEALTH PROFESSIONS ACL ASSISTIVE TECHNOLOGY	93.456 93.464		
AFFORDABLE CARE ACT (ACA) MATERNAL, INFANT, AND EARLY CHILDHOOD HOME VISITING	95.404		
PROGRAM	93.505		
AFFORDABLE CARE ACT (ACA) MATERNAL, INFANT, AND EARLY CHILDHOOD HOME			
VISITING PROGRAM	93.505		MDRC
ACA NATIONWIDE PROGRAM FOR NATIONAL AND STATE BACKGROUND CHECKS FOR			
DIRECT PATIENT ACCESS EMPLOYEES OF LONG TERM CARE FACILITIES AND PROVIDERS	93.506		
PUBLIC HEALTH TRAINING CENTERS PROGRAM	93.516		EMORY UNIVERSITY
THE AFFORDABLE CARE ACT: BUILDING EPIDEMIOLOGY, LABORATORY, AND HEALTH			
INFORMATION SYSTEMS CAPACITY IN THE EPIDEMIOLOGY AND LABORATORY CAPACITY			
FOR INFECTIOUS DISEASE (ELC) AND EMERGING INFECTIONS PROGRAM (EIP) COOPERATIVE AGREEMENTS; PPHF	93.521		
BUILDING CAPACITY OF THE PUBLIC HEALTH SYSTEM TO IMPROVE POPULATION HEALTH	55.521		
THROUGH NATIONAL, NON-PROFIT ORGANIZATIONS- FINANCED IN PART BY PREVENTION			
AND PUBLIC HEALTH FUNDS (PPHF)	93.524		
PPHF CAPACITY BUILDING ASSISTANCE TO STRENGTHEN PUBLIC HEALTH IMMUNIZATION			
INFRASTRUCTURE AND PERFORMANCE FINANCED IN PART BY PREVENTION AND PUBLIC			
HEALTH FUNDS	93.539		
PROMOTING SAFE AND STABLE FAMILIES	93.556		
TEMPORARY ASSISTANCE FOR NEEDY FAMILIES	93.558		
CHILD SUPPORT ENFORCEMENT CHILD SUPPORT ENFORCEMENT RESEARCH	93.563 93.564		
REFUGEE AND ENTRANT ASSISTANCE STATE/REPLACEMENT DESIGNEE ADMINISTERED	55.504		
PROGRAMS	93.566		
LOW-INCOME HOME ENERGY ASSISTANCE	93.568		
COMMUNITY SERVICES BLOCK GRANT	93.569		
CHILD CARE AND DEVELOPMENT BLOCK GRANT	93.575		
REFUGEE AND ENTRANT ASSISTANCE DISCRETIONARY GRANTS	93.576		
U.S. REPATRIATION	93.579		
REFUGEE AND ENTRANT ASSISTANCE TARGETED ASSISTANCE GRANTS	93.584		
STATE COURT IMPROVEMENT PROGRAM	93.586		
COMMUNITY-BASED CHILD ABUSE PREVENTION GRANTS	93.590		

ldentifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
000519805-001		\$45,639	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD: UFDSP00011398		\$59,250	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
3004589137		\$88,624	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON008964		\$21,210	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
3001155211		\$319	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PO3001155211		\$154,664	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$993,503	\$5,834,957	\$6,314,935	RESEARCH AND DEVELOPMENT	\$1,033,282,522
10-18722-20-42-G8/P30CA076292-2054		\$5,764	\$5,764	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010918		\$35,011	\$250,798	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$5,700	\$215,787	\$250,798	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010489		\$3,630	\$3,630	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$246	\$246	N/A	\$0
CON009432		\$2,280	\$61,108	N/A	\$0
		\$45,621	\$61,108	N/A	\$0
CON010309		\$765	\$61,108	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010473		\$12,442	\$61,108	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$1,050,658	\$1,050,658	N/A	\$0
0058440 (130293-1)		\$90,143	\$2,510,262	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	4050.400	40.400.440	4		44 000 000 500
	\$260,429	\$2,420,119	\$2,510,262	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$32,759	\$32,759	N/A	\$0
		\$76,181	\$76,181	N/A	\$0
		\$57,701	\$57,701	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$156,730	\$726,963	\$726,963	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$150,750	\$720,905	\$720,903	RESEARCH AND DEVELOPINENT	
		\$0	\$14,715	N/A	\$0
MIHOPE II		\$14,715	\$14,715	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$15,648	\$15,648	N/A	\$0
T983760		\$49,999	\$49,999	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$3,189,367	\$3,189,367	N/A	\$0
		\$16,001	\$16,001	N/A	\$0
		-\$349	-\$349	N/A	\$0
		\$12,941,240	\$12,941,240	N/A	\$0
	\$46,941,266	\$318,732,679	\$318,732,679	TANF CLUSTER	\$318,732,679
	\$13,456,844	\$83,487,286 \$856,997	\$83,487,286 \$856,997	N/A N/A	\$0 \$0
	¢062.844				
	\$963,841	\$5,535,515	\$5,535,515	N/A	\$0 \$0
	\$60,136,915	\$65,081,243	\$65,081,243	N/A	\$0 \$0
	\$19,173,269	\$21,103,145	\$21,103,145		
	\$33,966,681	\$187,063,587	\$187,063,587	CCDF CLUSTER	\$276,853,899
		\$85,176	\$85,176	N/A	\$0
		\$372	\$372	N/A	\$0
	\$505,494	\$505,494	\$505,494	N/A	\$0
	61C 000	\$898,446	\$898,446	N/A	\$0 \$0
	\$16,000	\$816,580	\$816,580	N/A	\$0

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
CHILD CARE MANDATORY AND MATCHING FUNDS OF THE CHILD CARE AND DEVELOPMENT		(optional)	,
FUND	93.596		
GRANTS TO STATES FOR ACCESS AND VISITATION PROGRAMS	93.597		
CHAFEE EDUCATION AND TRAINING VOUCHERS PROGRAM (ETV)	93.599		
HEAD START	93.600		YMCA EARLY CHILD DEVELOPMENT CO, LLC
HEAD START	93.600		YMCA EARLY CHILD DEVELOPMENT CO, LLC
HEAD START	93.600		YMCA EARLY CHILD DEVELOPMENT CO, LLC
HEAD START	93.600		
ADOPTION AND LEGAL GUARDIANSHIP INCENTIVE PAYMENTS	93.603		
AFFORDABLE CARE ACT: TESTING EXPERIENCE AND FUNCTIONAL ASSESSMENT TOOLS	93.627		
			KENNESAW STATE UNIVERSITY RESEARCH AND
DEVELOPMENTAL DISABILITIES BASIC SUPPORT AND ADVOCACY GRANTS	93.630		SERVICE FOUNDATION
DEVELOPMENTAL DISABILITIES BASIC SUPPORT AND ADVOCACY GRANTS	93.630		
DEVELOPMENTAL DISABILITIES PROJECTS OF NATIONAL SIGNIFICANCE	93.631		QUALITY TRUST
DEVELOPMENTAL DISABILITIES PROJECTS OF NATIONAL SIGNIFICANCE	93.631		
UNIVERSITY CENTERS FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES			
EDUCATION, RESEARCH, AND SERVICE	93.632		GEORGETOWN UNIVERSITY
UNIVERSITY CENTERS FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES EDUCATION,	02 622		
RESEARCH, AND SERVICE UNIVERSITY CENTERS FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES EDUCATION,	93.632		
RESEARCH. AND SERVICE	93.632		
CHILDREN'S JUSTICE GRANTS TO STATES	93.632		
STEPHANIE TUBBS JONES CHILD WELFARE SERVICES PROGRAM	93.645		
	55.045		THE RESEARCH FOUNDATION FOR THE STATE
CHILD WELFARE RESEARCH TRAINING OR DEMONSTRATION	93.648		UNIVERSITY OF NEW YORK
	55.040		KENNESAW STATE UNIVERSITY RESEARCH AND
FOSTER CARE TITLE IV-E	93.658		SERVICE FOUNDATION
FOSTER CARE TITLE IV-E	93.658		
ADOPTION ASSISTANCE	93.659		
EXTRAMURAL RESEARCH FACILITIES RESTORATION PROGRAM: HURRICANES HARVEY,			
MARIA, AND IRMA CONSTRUCTION	93.662		
SOCIAL SERVICES BLOCK GRANT	93.667		SOUTHERN GEORGIA REGIONAL COMMISSION
SOCIAL SERVICES BLOCK GRANT	93.667		
CHILD ABUSE AND NEGLECT STATE GRANTS	93.669		
FAMILY VIOLENCE PREVENTION AND SERVICES/DOMESTIC VIOLENCE SHELTER AND			
SUPPORTIVE SERVICES	93.671		
JOHN H. CHAFEE FOSTER CARE PROGRAM FOR SUCCESSFUL TRANSITION TO ADULTHOOD	93.674		
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
MENTAL AND BEHAVIORAL HEALTH EDUCATION AND TRAINING GRANTS	93.732		SERVICE FOUNDATION, INC.
MENTAL AND BEHAVIORAL HEALTH EDUCATION AND TRAINING GRANTS	93.732		
MENTAL AND BEHAVIORAL HEALTH EDUCATION AND TRAINING GRANTS	93.732		
CAPACITY BUILDING ASSISTANCE TO STRENGTHEN PUBLIC HEALTH IMMUNIZATION			
INFRASTRUCTURE AND PERFORMANCE - FINANCED IN PART BY THE PREVENTION AND PUBLIC HEALTH FUND (PPHF)	93.733		
STATE PUBLIC HEALTH APPROACHES FOR ENSURING QUITLINE CAPACITY - FUNDED IN PART	93./33		
BY PREVENTION AND PUBLIC HEALTH FUNDS (PPHF)	93.735		
PPHF: RACIAL AND ETHNIC APPROACHES TO COMMUNITY HEALTH PROGRAM	55.755		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
FINANCED SOLELY BY PUBLIC PREVENTION AND HEALTH FUNDS	93.738		SERVICE FOUNDATION, INC.
PPHF: BREAST AND CERVICAL CANCER SCREENING OPPORTUNITIES FOR STATES, TRIBES	50.700		
AND TERRITORIES SOLELY FINANCED BY PREVENTION AND PUBLIC HEALTH FUNDS	93.744		
PPHF: HEALTH CARE SURVEILLANCE/HEALTH STATISTICS SURVEILLANCE PROGRAM			
ANNOUNCEMENT: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM FINANCED IN PART			
BY PREVENTION AND PUBLIC HEALTH FUND	93.745		
CANCER PREVENTION AND CONTROL PROGRAMS FOR STATE, TERRITORIAL AND TRIBAL			
ORGANIZATIONS FINANCED IN PART BY PREVENTION AND PUBLIC HEALTH FUNDS	93.752		
CHILD LEAD POISONING PREVENTION SURVEILLANCE FINANCED IN PART BY PREVENTION			
AND PUBLIC HEALTH (PPHF) PROGRAM	93.753		
STATE AND LOCAL PUBLIC HEALTH ACTIONS TO PREVENT OBESITY, DIABETES, HEART			
DISEASE AND STROKE (PPHF)	93.757		
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT FUNDED SOLELY WITH			
PREVENTION AND PUBLIC HEALTH FUNDS (PPHF)	93.758		
ALZHEIMER¿S DISEASE INITIATIVE: SPECIALIZED SUPPORTIVE SERVICES PROJECT (ADI-SSS)			
ALZHEIMER¿S DISEASE INITIATIVE: SPECIALIZED SUPPORTIVE SERVICES PROJECT (ADI-SSS) THRU PREVENTION AND PUBLIC HEALTH FUNDS (PPHF)	93.763		
ALZHEIMER¿S DISEASE INITIATIVE: SPECIALIZED SUPPORTIVE SERVICES PROJECT (ADI-SSS)			

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

ldentifying Number Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
	\$2,263,803	\$89,790,312	\$89,790,312	CCDF CLUSTER	\$276,853,899
		\$235,592	\$235,592	N/A	\$0
		\$816,206	\$816,206	N/A	\$0
1150_54		-\$119	\$14,039,910	N/A	\$0
1160_54		\$75,409	\$14,039,910	N/A	\$0
1176_54		\$19,696	\$14,039,910	N/A	\$0
	\$6,887,451	\$13,944,924	\$14,039,910	N/A	\$0
		\$762,151	\$762,151	N/A	\$0
		\$910,029	\$910,029	N/A	\$0
		672 525	¢2.204.004	A1/A	ćo
KSU/GCDDFY19		<i>\$73,535</i> \$2,211,426	<i>\$2,284,961</i> \$2,284,961	N/A N/A	<i>\$0</i> \$0
LANIER		\$2,211,420		N/A RESEARCH AND DEVELOPMENT	\$0 \$1,033,282,522
LAIVIER	\$1,845	\$3,864 \$390,181	<i>\$394,045</i> \$394,045	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	Ş1,04J	\$350,101	\$354,045	RESEARCH AND DEVELOPINENT	\$1,035,262,522
CON009167		-\$181	\$1,010,984	N/A	\$0
		\$478,074	\$1,010,984	N/A	\$0
	6242.046	\$533,091	\$1,010,984	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$213,816	\$413,253	\$413,253	N/A	\$0
		\$10,325,198	\$10,325,198	N/A	\$0
982905		\$900	\$900	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SP00012480-06		\$185,539	\$93,640,119	N/A	\$0
	\$7,096	\$93,454,580	\$93,640,119	N/A	\$0
		\$52,332,603	\$52,332,603	N/A	\$0
		\$286,751	\$286,751	N/A	\$0
AAA-2019-07A	400 400 704	\$13,754	\$56,193,609	N/A	\$0
	\$28,403,724	\$56,179,855	\$56,193,609	N/A	\$0 \$0
		\$155,483	\$155,483	N/A	ŞU
	\$2,574,229	\$2,650,859	\$2,650,859	N/A	\$0
		\$3,408,695	\$3,408,695	N/A	\$0
63828383-37		\$305,881	\$937,062	N/A	\$0
		\$282,700	\$937,062	N/A	\$0
		\$348,481	\$937,062	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$163,535	\$163,535	N/A	\$0
		\$552,818	\$552,818	N/A	\$0
		<i>\$002,010</i>	<i>\$002,010</i>	.,,,,	
63828383-38		\$6,270	\$6,270	N/A	\$0
		-\$34	-\$34	N/A	\$0
		\$165	\$165	N/A	\$0
		\$389	\$389	N/A	\$0
		\$15,669	\$15,669	N/A	\$0
		\$411,982	\$411,982	N/A	\$0
	\$196,871	\$5,015,218	\$5,015,218	N/A	\$0
	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>				
		\$343,690 \$2,990	\$343,690 \$2,990	N/A RESEARCH AND DEVELOPMENT	\$0 \$1,033,282,522
		\$448,432,613	\$448,432,613	N/A	\$1,035,282,522
		÷++0,+32,013	J++0,+J2,013	170	γu

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
MEDICARE SUPPLEMENTARY MEDICAL INSURANCE	93.774		
STATE MEDICAID FRAUD CONTROL UNITS	93.775		
STATE SURVEY AND CERTIFICATION OF HEALTH CARE PROVIDERS AND SUPPLIERS (TITLE XVIII) MEDICARE	93.777		
MEDICAL ASSISTANCE PROGRAM	93.778		
CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS) RESEARCH, DEMONSTRATIONS AND EVALUATIONS	93.779		SECOND WIND DREAMS, INC.
OPIOID STR	93.788		
MONEY FOLLOWS THE PERSON REBALANCING DEMONSTRATION PAUL COVERDELL NATIONAL ACUTE STROKE PROGRAM NATIONAL CENTER FOR CHRONIC	93.791		
DISEASE PREVENTION AND HEALTH PROMOTION DOMESTIC EBOLA SUPPLEMENT TO THE EPIDEMIOLOGY AND LABORATORY CAPACITY FOR	93.810		
INFECTIOUS DISEASES (ELC).	93.815		
HOSPITAL PREPAREDNESS PROGRAM (HPP) EBOLA PREPAREDNESS AND RESPONSE			
ACTIVITIES	93.817		
HEALTH CAREERS OPPORTUNITY PROGRAM	93.822		INFECTIOUS DISEASE RESEARCH INSTITUTE
EBOLA SUPPORT: TRANSMISSION AND PREVENTION CONTROL, PUBLIC HEALTH			
PREPAREDNESS, VACCINE DEVELOPMENT EBOLA SUPPORT: TRANSMISSION AND PREVENTION CONTROL, PUBLIC HEALTH	93.823		EMORY UNIVERSITY
PREPAREDNESS, VACCINE DEVELOPMENT	93.823		EMORY UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		BAYLOR COLLEGE OF MEDICINE
CARDIOVASCULAR DISEASES RESEARCH	93.837		BOSTON CHILDREN'S HOSPITAL
CARDIOVASCULAR DISEASES RESEARCH	93.837		COLORADO STATE UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		EMORY UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		EMORY UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH CARDIOVASCULAR DISEASES RESEARCH	93.837 93.837		EMORY UNIVERSITY EMORY UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		EMORY UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		EMORY UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		MASSACHUSETTS GENERAL HOSPITAL
CARDIOVASCOLAR DISLASES RESEARCH	93.837		SUTTER HEALTH
CARDIOVASCULAR DISEASES RESEARCH	93.837		TEMPLE UNIVERSITY
CARDIOVASCULAR DISEASES RESEARCH	93.837		UNIVERSITY OF IOWA
CARDIOVASCULAR DISEASES RESEARCH	93.837		UNIVERSITY OF PITTSBURGH
CARDIOVASCULAR DISEASES RESEARCH	93.837		UNIVERSITY OF SOUTH CAROLINA
CARDIOVASCULAR DISEASES RESEARCH	93.837		UNIVERSITY OF TEXAS AT AUSTIN
CARDIOVASCULAR DISEASES RESEARCH	93.837		UNIVERSITY OF VIRGINIA
CARDIOVASCULAR DISEASES RESEARCH	93.837		UT-BATTELLE, LLC
CARDIOVASCULAR DISEASES RESEARCH	93.837		WEILL CORNELL MEDICINE
CARDIOVASCULAR DISEASES RESEARCH	93.837		
LUNG DISEASES RESEARCH	93.838		EMORY UNIVERSITY
LUNG DISEASES RESEARCH	93.838		JOHNS HOPKINS UNIVERSITY
LUNG DISEASES RESEARCH	93.838		UNIVERSITY OF PITTSBURGH
LUNG DISEASES RESEARCH	93.838		UNIVERSITY OF PITTSBURGH
UNG DISEASES RESEARCH	93.838		
BLOOD DISEASES AND RESOURCES RESEARCH	93.839		EMORY UNIVERSITY
BLOOD DISEASES AND RESOURCES RESEARCH	93.839		EMORY UNIVERSITY GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
BLOOD DISEASES AND RESOURCES RESEARCH	93.839		SERVICE FOUNDATION, INC.
BLOOD DISEASES AND RESOURCES RESEARCH	93.839		
BLOOD DISEASES AND RESOURCES RESEARCH	93.839		
BLOOD DISEASES AND RESOURCES RESEARCH	93.839		THE NATIONAL MARROW DONOR PROGRAM
BLOOD DISEASES AND RESOURCES RESEARCH	93.839 <i>93.846</i>		COLUMBIA UNIVERSITY
ARTHRITIS, MUSCULOSKELETAL AND SKIN DISEASES RESEARCH ARTHRITIS, MUSCULOSKELETAL AND SKIN DISEASES RESEARCH	93.846 93.846		EMORY UNIVERSITY
ARTHRITIS, MUSCULOSKELETAL AND SKIN DISEASES RESEARCH ARTHRITIS. MUSCULOSKELETAL AND SKIN DISEASES RESEARCH	93.846 93.846		PRINCETON UNIVERSITY
RTHRITIS, MUSCULOSKELETAL AND SKIN DISEASES RESEARCH	93.846		
DIABETES, DIGESTIVE, AND KIDNEY DISEASES RESEARCH	93.840		BAYLOR COLLEGE OF MEDICINE
DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH	93.847		EMORY UNIVERSITY
DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMORAL RESEARCH	93.847		EMORY UNIVERSITY
DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH	93.847		EMORY UNIVERSITY
DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH	93.847		EMORY UNIVERSITY
DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH	93.847		EMORY UNIVERSITY
DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH	93.847		INFRARED RX, INC.

ldentifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$2,076,708	\$2,076,708	N/A	\$(
		\$3,615,757	\$3,615,757	MEDICAID CLUSTER	\$7,847,124,737
		\$3,013,737	\$3,013,737	MEDICAD CLOSTER	J7,047,124,737
		\$9,636,673	\$9,636,673	MEDICAID CLUSTER	\$7,847,124,737
	\$37,050,228	\$7,833,872,307	\$7,833,872,307	MEDICAID CLUSTER	\$7,847,124,737
	+,,	+ · / • • • / • • • - / • • •	\$7,000,072,007		+ · /= · · /== · /· = ·
5482401		\$59,194	\$59,194	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$3,676,401	\$11,281,276	\$11,281,276	N/A	\$(
		\$9,138,627	\$9,138,627	N/A	\$(
		.,,,			
		\$708,053	\$708,053	N/A	\$0
		\$828,168	\$828,168	N/A	\$(
		\$2,030,864	\$2,030,864	N/A	\$1
SB1022UGARF2018		\$48,588	\$48,588	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON006903		\$126,464	\$187,383	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T562794		\$60,919	\$187,383	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#P.O. 700000129		\$1,885	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
GENFD0001475301		\$113,687	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
G6518101		\$19,957	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A022924		\$79,543	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A092263		\$146,396	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A101267		\$37,884	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD #: T549620		\$9,293	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD #: T657728		\$1,000	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T586137		\$17,933	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
PROTOCOL #: A5332		\$7,946	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
280201017-5249		\$24,928	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBAWARD NO. 260382-AURI		\$12,825	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011476		\$70,130	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011106		\$3,150	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
142608		\$1,099	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,52.
UTA13-000981		\$174,376	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
GB10347 2133564		\$75,214	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
4000128353		\$91	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON011280		\$43,738	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$2,345,183	\$23,595,458	\$24,436,533	RESEARCH AND DEVELOPMENT	\$1,033,282,52
T863524/A029070/A191373		\$219,547	\$4,474,827	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2002969514		\$0	\$4,474,827	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0056302 1301791		\$29,774	\$4,474,827	RESEARCH AND DEVELOPMENT	\$1,033,282,522
7/1/19 PNDG PER CAC	4050.000	\$286,346	\$4,474,827	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$856,879	\$3,939,160	\$4,474,827	RESEARCH AND DEVELOPMENT	\$1,033,282,52
A035610		\$71,263	\$2,524,623	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010315		\$32,301	\$2,524,623	RESEARCH AND DEVELOPMENT	\$1,033,282,522
62828282.20		664.000	62 524 622		¢1 022 202 52
63828383-39 CON009692		\$61,936	\$2,524,623	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		\$223,024	\$2,524,623	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON012093		\$65,818	\$2,524,623		\$1,033,282,522
PROTOCOL BMT CTN1506-2215-0304	61C4 F04	\$14,208	\$2,524,623	RESEARCH AND DEVELOPMENT	\$1,033,282,522
2/66014622.01	\$164,504	\$2,056,073	\$2,524,623	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
2(GG014632-01)		\$31,560	\$2,416,378		\$1,033,282,522
T684328		\$0 \$01.205	\$2,416,378	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,52
SUB0000252	CO1 453	\$91,295	\$2,416,378		\$1,033,282,522
700000344	\$91,452	\$2,293,523	\$2,416,378	RESEARCH AND DEVELOPMENT	\$1,033,282,52
700000244		\$39,131	\$13,946,726		\$1,033,282,522
#T663443		\$104,585	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,52
A054794		\$23,739	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010461		\$36,338	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
7701369		\$5,048	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
		-\$515	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T701372 SUB00001001		\$11,898	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522

DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 PENNSYLVANIA STATE UNIVERSITY SEATTLE INSTITUTE FOR BIOMEDICAL AND CLINIC DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 RESEARCH (SIBCR) DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF IOWA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF NORTH CAROLINA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF NORTH CAROLINA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF NORTH CAROLINA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF JOE OUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF JOE OUTH FLORIDA DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH 93.847 EXTRAMURAL RESEARCH PROGRAMS IN THE NEUROSCIENCES AND NEUROLOGICAL	Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
SATTLE INSTITUE FOR BLOKEDICAL MAD CLINIC DIABETES, DIGESTIVE, AND KILDNEY DISEASES EXTRAMURAL RESEARCH DIABETES, DIGESTIVE, AND KILDNEY DISEASES EXTRAMURAL RESEARCH DISCORDERS DIS			(optional)	•
DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 92.847 UNIVERSITY OF ROBINA DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF ROBING ADDINIA DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF SOUTH CARDINA DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF SOUTH FORMA DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF SOUTH FORMA DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF UTAH DIABETES, DICESTING, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF SOUTH FORMA DISCONCEV, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF UTAH DISCONCEV, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.847 UNIVERSITY OF UTAH DISCONCEV, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.853 ADVINCED BIOMEDICAL INFORMATICS GROUP, L DISCONCEV, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.853 ADVINCED BIOMEDICAL INFORMATICS GROUP, L DISCONCEV, AND UDINFY DISCASSE SETVINAUMAL RESEARCH 93.853 ADVINCED BIOMEDICAL INFORMATICS GROUP, L DISCONCEV, AND UDINFY DISCASSE SETVINAUMAL RESEARCH		55.047		SEATTLE INSTITUTE FOR BIOMEDICAL AND CLINICAL
DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF ROMEN CANDUMA DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF ROMEN CANDUMA DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH ECORDA DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH ECORDA DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH ECORDA DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 UNIVERSITY OF UTAM DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.847 ADVANCED BIOMEDICAL INFORMATICS GROUP, L DIABETES, DIGESTIVE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.853 ADVANCED BIOMEDICAL INFORMATICS GROUP, L DISTIDUTE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.853 ADVANCED BIOMEDICAL INFORMATICS GROUP, L DISTIDUTE, AND KUMEY DISASSES EXTRAMURAL RESEARCH 93.853 ADVANCED BIOMEDICAL INFORMATICS GROUP, L DISTIDUTE, AND KUMEY DISASSE EXTRAMURAL RESEARCH 93.853 ADVANCED BIOMEDICAL INFORMATICS GROUP, L DISTIDUTE, AND KUMER, RESEARCH PROGRAMS IN THE NEUROSCIENCES AND NEUROLOGICAL 93.853 CASE WESTERN RESERVE UNIVERSITY <td< td=""><td>DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH</td><td>93.847</td><td></td><td>RESEARCH (SIBCR)</td></td<>	DIABETES, DIGESTIVE, AND KIDNEY DISEASES EXTRAMURAL RESEARCH	93.847		RESEARCH (SIBCR)
Dialetts, DickSTIVE, AND UDIEY DISASSES COTAMURAL RESEARCH 93.847 UNIVERSITY OF NORTH CARDINA DIAL CARDING PROCESSING, AND UDIEY DISASSES COTAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FCRIDA DIAL CONTH FCRIDA DIAL CONTENT OF SOUTH FCRIDA DISCOURCES ARCH PROGRAMS IN THE REUROSCIENCES AND NEUROLOGICAL DISCOURCES DIAL CONTENT OF SOUTH FCRIDA DISCOURCE DIAL CONTENT OF SOUTH				
DIABETES, DIGESTUR, AND KONEY DISASSE SERMANURAL RESEARCH 93.847 UNIVERSITY OF NORTH ORDERING SENSOR DIABETES, DIGESTUR, AND KONEY DISASSE SERMANURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTUR, AND KONEY DISASSE SERMANURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTUR, AND KONEY DISASES ESTRAMURAL RESEARCH 93.847 UNIVERSITY OF SOUTH FLORIDA DIABETES, DIGESTUR, AND KONEY DISASES ESTRAMURAL RESEARCH 93.853 ADVANCED BIOMEDICAL INFORMATICS GROUP, L DISORDERS DISORDERS STAMMURAL RESEARCH PROGRAMS IN THE NURDSCENCES AND NEUROLOGICAL 93.853 CASE WESTERN RESERVE UNIVERSITY DISORDERS DISORDERS DISORDERS STAMMURAL RESEARCH PROGRAMS IN THE NURDSCENCES AND NEUROLOGICAL 93.853 CASE WESTERN RESERVE UNIVERSITY DISORDERS DETIMANURAL RESEARCH PROGRAMS IN THE NEUROSCENCES AND NEUROLOGICAL 93.853 EMMES COMPORATION DISORDERS DETIMANURAL RESEARCH PROGRAMS IN THE NEUROSCENCES AND NEUROLOGICAL 93.853 EMMES COMPORATION DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS DISORDERS <td></td> <td></td> <td></td> <td></td>				
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	DISORDERS	93.853		WASHINGTON UNIVERSITY
EXTRAMURAL RESEARCH PROGRAMS IN THE NEUROSCIENCES AND NEUROLOGICAL DISORDERS 93.853 WRIGHT STATE UNIVERSITY		93.853		WRIGHT STATE UNIVERSITY

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

Identifying Number	Total Amount		Federal		
Assigned By Funder Pass-Through	Provided to	Federal	Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
UGRFDK088244		\$106,411	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON0222C2		¢C 424	¢12 046 726		61 000 000 500
CON009962 CON007686		\$6,134 \$72,325	\$13,946,726	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON007688		\$72,325 \$38,405	\$13,946,726	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD # 5111860		\$193,711	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD # 5111860 SUB AWARD #: 5104850		\$193,711 \$20,910	\$13,946,726 \$13,946,726	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,522 \$1,033,282,522
SUBAWARD NO: 6163-1042 TEDDY UC4-4		\$614,442	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBAWARD NO. 0105-1042 TEDDT 0C4-4 SUBAWARD: 6163-1007-00-E		\$269,687	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
10040500		\$209,087 \$9,724	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
10040300	\$3,121,220	\$12,371,641	\$13,946,726	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	<i><i><i><i>ϕ</i>𝔅𝔅𝔅𝔅𝔅𝔅𝔅𝔅𝔅</i></i></i>	<i>\\\\\\\\\\\\\</i>	<i>913,340,720</i>		<i><i><i></i></i></i>
CON012269		\$64,724	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AWD00007783		\$58,160	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBAWARD NO RES513170		\$211,308	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBAWARD NO. RES512991		\$7,712	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
POINT STUDY		\$1,950	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
A041130		\$5,353	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBAWARD NO S980284		-\$8,009	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RNS086882A		-\$1,597	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
0255-A441-4609		\$140,734	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
1R15NS100632-01		\$79,697	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
232958		\$18,384	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
#64620		\$279,304	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
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MUSC19-031-8D835		\$21,177	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD #: MUSC		\$13,936	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB AWARD #: MUSC16-067-8A171		\$2,542	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
<i>T990147</i>		\$47,346	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
T990238		\$46,152	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB #61854954-125439		\$7,177	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON006977		\$22,498	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00008936		\$122,170	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
00008937		\$171,929	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUB8445 (U54 ND065705)		\$10,523	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RNS079077A		\$5,100	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON010330		\$38,375	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
SUBCON GC12107-143858		\$51,800	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
WU-19-100		\$138,075	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AGMT DTD 9/18/15		\$50,693	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,522

Endoral Awarding Anangu/Brogram Titla	Federal CFDA Number	Additional Award Identification	Name of Funder Pass-Through Entity
	Number	(Optional)	Entity
TRAMURAL RESEARCH PROGRAMS IN THE NEUROSCIENCES AND NEUROLOGICAL SORDERS	93.853		
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		BAYLOR COLLEGE OF MEDICINE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		BOSTON UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		BOSTON UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		BOSTON UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		BRIGHAM AND WOMEN'S HOSPITAL
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		CAMELLIX, LLC
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		CINCINNATI CHILDREN'S HOSPITAL MEDICAL CENTER
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		DUKE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		DUKE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		DUKE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855 93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EMORY UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		EPIVAX, INC.
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		GEORGE WASHINGTON UNIVERSITY
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		SERVICE FOUNDATION, INC.
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		HEALTH RESEARCH, INC.
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		HENRY FORD HEALTH SYSTEM
			IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		MEDICINE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		MEDISYNERGICS, LLC
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		MICROBIOTIX, INC.
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		MICROBIOTIX, INC.
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		NEW YORK UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		NORTHEASTERN UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855 93.855		PENNSYLVANIA STATE UNIVERSITY REGENTS OF THE UNIVERSITY OF MICHIGAN
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		ROSS UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		STANFORD UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		TEXAS A&M UNIVERSITY
	55.655		THE RESEARCH FOUNDATION FOR THE STATE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF NEW YORK
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		THE SCRIPPS RESEARCH INSTITUTE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		THE SCRIPPS RESEARCH INSTITUTE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		THOMAS JEFFERSON UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF ALABAMA AT BIRMINGHAM
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF ALABAMA AT BIRMINGHAM
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF ARIZONA
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF CHICAGO
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF LOUISIANA AT LAFAYETTE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF LOUISVILLE
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF MARYLAND
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF MICHIGAN
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF MINNESOTA
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF NORTH CAROLINA
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF PENNSYLVANIA
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF PENNSYLVANIA
	93.855		UNIVERSITY OF PENNSYLVANIA
ALLERGY AND INFECTIOUS DISEASES RESEARCH	02.055		
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		UNIVERSITY OF RHODE ISLAND
	93.855 93.855		UNIVERSITY OF RHODE ISLAND UNIVERSITY OF TEXAS AT AUSTIN VIRGINIA POLYTECHNIC INSTITUTE AND STATE

	Sub-Recipients	Expenditures	Program Total	Name	Cluster Total
	\$788,574	\$8,704,452	\$10,311,665	RESEARCH AND DEVELOPMENT	\$1,033,282,5
R01AI130065	Ç700,574	\$46,212	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
#-4500002698		\$20,547	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
4500001690		-\$40,137	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
4500002639		\$21,776	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
RAI123001A		\$1,437	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SUBAWARD #: 33371-1		\$86,876	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
139397		\$226	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PROTOCOL NO. 17-0002 PROPEL		\$8,000	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
OTOCOL NO. CD-ID-MEDI4893- 1139		\$4,000	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PROTOCOL NO. D5470C00004		\$25,782	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
A007606		\$9,115	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
A016182		\$86,865	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
A085091		\$160,064	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
A175705		\$163,180	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON009540		\$38,797	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON010706		\$11,194	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PEND THRU 6/1/19- T715255		\$145,989	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T253685		\$118,168	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T365272		\$89,775	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T939590		\$115,185	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T966688		\$138,818	\$28,379,753	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5
T970397 PEND 8/1* ROSS		\$227,994 \$796,540	\$28,379,753 \$28,379,753	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
CON008860		\$790,540	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
2011008800		77,122	220,373,733	RESEARCH AND DEVELOPMENT	<i>¥1,033,282,</i> 3
63828383-40		\$33,122	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
313-01		\$35,597	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
P01 AI089473-01A1		\$20,052	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
P53441GEORGIA		\$50,057	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
5653301		\$29,588	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON009022		\$95,109	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON009947		\$55,418	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
F880208		\$8,422	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
50049178050		\$152,890	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
5288UGRFDHHSO793		\$118,363	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
3003627287		\$146,434	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
12162016		\$35,548	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
61989439-131451		\$89,807	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
M1802379		\$4,516	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
R1061806		\$48,005	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
5-53830		\$106,237	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
700000308		\$181,249	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON007819		\$321,420	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
000521324-002		\$26,467	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
PROTOCOL #: MSG-13		\$2,000	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,5
RBP 7/1* 409281		\$115,058	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
FP063328B		\$1,798	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
87100-01		\$95,273	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
#330136		\$195,848	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
ULRF-17-0481-01		\$128,032	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON007536		\$42,506	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
3004744318		\$195,015	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CONTRACT M73-GA-113-1611-7		\$17,800	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON009497		\$265,693	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
571380		\$45,474	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON010719		\$183,225	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON011900		\$214,512	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON010045		\$54,388	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
UTA16000613		\$29,033	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855	., ,	WASHINGTON STATE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		WASHINGTON STATE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		WASHINGTON STATE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		WASHINGTON UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		YALE UNIVERSITY
ALLERGY AND INFECTIOUS DISEASES RESEARCH	93.855		
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EAST CAROLINA UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EMORY UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EMORY UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EMORY UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EMORY UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EMORY UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		EMORY UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		FRED HUTCHINSON CANCER RESEARCH CENTER
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		FRED HUTCHINSON CANCER RESEARCH CENTER
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		FRED HUTCHINSON CANCER RESEARCH CENTER
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		GEORGETOWN UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		HARVARD UNIVERSITY
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
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BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
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BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
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BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
			KENNESAW STATE UNIVERSITY RESEARCH AND
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		SERVICE FOUNDATION
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		NEW YORK UNIVERSITY
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		THE SCRIPPS RESEARCH INSTITUTE
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		UNIVERSITY OF ALASKA
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		UNIVERSITY OF MISSISSIPPI
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		UNIVERSITY OF TEXAS MD ANDERSON CANCER
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		UNIVERSITY OF WISCONSIN - MADISON
BIOMEDICAL RESEARCH AND RESEARCH TRAINING	93.859		
			KENNESAW STATE UNIVERSITY RESEARCH AND
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		SERVICE FOUNDATION
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		DREXEL UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		EMORY UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		EMORY UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		EMORY UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		GEORGE WASHINGTON UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		MEDICAL UNIVERSITY OF SOUTH CAROLINA
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		NORTHWESTERN UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		RESEARCH FOUNDATION FOR MENTAL HYGIENE, INC
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		TEXAS A&M UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		UNIVERSITY OF CONNECTICUT
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		UNIVERSITY OF FLORIDA
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		UNIVERSITY OF FLORIDA
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		UNIVERSITY OF PITTSBURGH
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		UNIVERSITY OF PITTSBURGH
CHIED HEALTH AND HOMAN DEVELOPMENT EXTRAMORAE RESEARCH	55.005		

ldentifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
CON008089		\$129,466	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON008403		\$10,698	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON008509		\$296,170	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282
CON011131		\$30,352	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282
GR100385 CON80000804		\$37,990	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282
	\$5,321,564	\$22,448,035	\$28,379,753	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$134,966	\$27,573,980	N/A	
CON008205		\$1,541	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
A003475		\$55,975	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
A019860		\$42,664	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
T546559		-\$3,898	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
T648908 T379665		\$22,732	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
T674760		\$77,011	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
T720873		-\$72,234	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
0000909144		-\$1,213	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
0000909148		\$45,648	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
0000947463		\$120,785	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
AWD7772899GR205576		\$133,393	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
133233-5068506		\$97,796	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
100200 0000000		<i>\$31,130</i>	<i>\(\black\)</i>		\$1,000,202
1R01GM102336-01A1		-\$3,589	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
1R15GM102826-01A1		\$2,191	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
1R15GM104833-01		-\$1,700	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
1R15GM11063-01S1		\$162,694	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
1R15GM120691-01		\$109,979	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
1R15GM129771-01		\$72,386	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
5R01GM116889-02		\$24,103	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
5R25GM111565-02		\$160,505	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
R15GM110678		\$90,017	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
R43GM128494		\$59,254	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
		. ,			
RC104888KS		-\$568	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
17-A1-00-007405-01		\$103,231	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,28
553332		\$446	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
PO516272		\$88,222	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,28
1909020		\$37,376	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,28
3001093383		\$72,234	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,282
#856K520		\$73,074	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,28
	\$3,004,456	\$25,868,959	\$27,573,980	RESEARCH AND DEVELOPMENT	\$1,033,28
7R01HD087411-03		\$22,640	\$9,824,127	N/A	
CON005387		\$54,355	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,28
A081027		\$30,146	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
T696074		\$37,019	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
T949806		\$61,985	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
CON007696		\$131,055	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
CON010470		\$10,242	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
SP0042891PROJ0012059		\$10,242	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
0. 00420011 11000012000		\$118,862	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
4985004		\$118,802	\$9,824,127 \$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,28.
4985004 06\$160616			\$9,824,127 \$9,824,127	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282
065160616				NESLANCI AND DEVELOPIVIEIN	21,033,284
065160616 CON011175		\$6,702 \$35,484			
06S160616 CON011175 UFDSP00011586		\$35,484	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282
065160616 CON011175 UFDSP00011586 UFDSP00012163		\$35,484 \$23,639	\$9,824,127 \$9,824,127	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282
06S160616 CON011175 UFDSP00011586		\$35,484	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282 \$1,033,282

	Federal CFDA	Additional Award Identification	Name of Funder Pass-Through
Federal Awarding Agency/Program Title	Number	(Optional)	Entity
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865	., ,	YALE UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		YALE UNIVERSITY
CHILD HEALTH AND HUMAN DEVELOPMENT EXTRAMURAL RESEARCH	93.865		
			KENNESAW STATE UNIVERSITY RESEARCH AND
AGING RESEARCH	93.866		SERVICE FOUNDATION
AGING RESEARCH	93.866		APPLIED UNIVERSAL DYNAMICS CORPORATION
AGING RESEARCH	93.866		EMORY UNIVERSITY
AGING RESEARCH	93.866		EMORY UNIVERSITY
AGING RESEARCH	93.866		EMORY UNIVERSITY
AGING RESEARCH	93.866		EMORY UNIVERSITY
AGING RESEARCH	93.866		EMORY UNIVERSITY
AGING RESEARCH	93.866		MAYO CLINIC, ROCHESTER
AGING RESEARCH	93.866		OREGON HEALTH AND SCIENCE UNIVERSITY
AGING RESEARCH	93.866		SAN FRANCISCO STATE UNIVERSITY
AGING RESEARCH	93.866		STONY BROOK UNIVERSITY, STATE UNIVERSITY OF NEW YORK
AGING RESEARCH	93.866		TENNESSEE STATE UNIVERSITY
AGING RESEARCH	93.866		UNIVERSITY OF ARIZONA
AGING RESEARCH	93.866		UNIVERSITY OF ARIZONA
AGING RESEARCH	93.866		UNIVERSITY OF MIAMI MEDICAL SCHOOL
AGING RESEARCH	93.866		UNIVERSITY OF MICHIGAN
AGING RESEARCH	93.866		UNIVERSITY OF MINNESOTA
AGING RESEARCH	93.866		UNIVERSITY OF NORTH CAROLINA
AGING RESEARCH	93.866		WAKE FOREST UNIVERSITY
AGING RESEARCH	93.866		WEILL CORNELL MEDICINE
AGING RESEARCH	93.866		
VISION RESEARCH	93.867		EMORY UNIVERSITY
VISION RESEARCH	93.867		EMORY UNIVERSITY
VISION RESEARCH	93.867		EMORY UNIVERSITY
VISION RESEARCH	93.867		EMORY UNIVERSITY
VISION RESEARCH	93.867		
VISION RESEARCH	93.867 93.867		EMORY UNIVERSITY
VISION RESEARCH VISION RESEARCH	93.867		MASSACHUSETTS INSTITUTE OF TECHNOLOGY NEW YORK UNIVERSITY
VISION RESEARCH	93.807 93.867		NORTHWESTERN UNIVERSITY
VISION RESEARCH	93.867		SIGNABLOK, INC.
VISION RESEARCH	93.867		UNIVERSITY OF ARIZONA
VISION RESEARCH	93.867		UNIVERSITY OF COLORADO
VISION RESEARCH	93.867		
			MONTANA DEPARTMENT OF PUBLIC HEALTH AND
MATERNAL, INFANT AND EARLY CHILDHOOD HOME VISITING GRANT PROGRAM	93.870		HUMAN SERVICES
MATERNAL, INFANT AND EARLY CHILDHOOD HOME VISITING GRANT PROGRAM	93.870		
ASSISTANCE FOR ORAL DISEASE PREVENTION AND CONTROL	93.875		
ANTIMICROBIAL RESISTANCE SURVEILLANCE IN RETAIL FOOD SPECIMENS AUTISM COLLABORATION, ACCOUNTABILITY, RESEARCH, EDUCATION, AND SUPPORT	93.876		ENAORY LINUVERSITY
MEDICAL LIBRARY ASSISTANCE	93.877		EMORY UNIVERSITY UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
MEDICAL LIBRARY ASSISTANCE	93.879 93.879		UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
MEDICAL LIBRARY ASSISTANCE MEDICAL LIBRARY ASSISTANCE	93.879 93.879		UNIVERSITY OF MARYLAND
MEDICAL LIBRARY ASSISTANCE MEDICAL LIBRARY ASSISTANCE	93.879		UNIVERSITY OF MARYLAND, BALTIMORE COUNTY
MEDICAL LIBRARY ASSISTANCE	93.879		CARLENSITY OF MARTEAND, BALTIMORE COUNT
GRANTS FOR PRIMARY CARE TRAINING AND ENHANCEMENT	93.879		
NATIONAL BIOTERRORISM HOSPITAL PREPAREDNESS PROGRAM	93.889		
CANCER PREVENTION AND CONTROL PROGRAMS FOR STATE, TERRITORIAL AND TRIBAL			
ORGANIZATIONS	93.898 93.913		
GRANTS TO STATES FOR OPERATION OF STATE OFFICES OF RURAL HEALTH HIV CARE FORMULA GRANTS			RICHMOND COUNTY HEALTH DEDADTA SAIT
HIV CARE FORMULA GRANTS HIV CARE FORMULA GRANTS	<i>93.917</i> 93.917		RICHMOND COUNTY HEALTH DEPARTMENT
GRANTS TO PROVIDE OUTPATIENT EARLY INTERVENTION SERVICES WITH RESPECT TO HIV			
DISEASE	93.918		
RYAN WHITE HIV/AIDS DENTAL REIMBURSEMENT AND COMMUNITY BASED DENTAL			
PARTNERSHIP GRANTS	93.924		
SCHOLARSHIPS FOR HEALTH PROFESSIONS STUDENTS FROM DISADVANTAGED BACKGROUNDS	93.925		
	93.925 93.926		

Indented and italicized award lines indicate pass-through funding.

The accompanying notes are an integral part of this schedule.

Identifying Number Assigned By Funder Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
M14A12034 (A10949)		\$42,696	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
SUB AWARD #: M14A12034 A10541		\$129,681	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
	\$2,438,531	\$8,851,771	\$9,824,127	RESEARCH AND DEVELOPMENT	\$1,033,282,5
1R15AG059210-01A1		\$22,339	\$9,316,829	N/A	;
AWD00009714		\$74,061	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
A007350		\$39,177	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
A054728		\$15,965	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
CON005226		\$63,466	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON009607		\$132,279	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON010145		\$291,467	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
GEO-233617/PO#65936217		\$221,734	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
1007456UGRF		\$280,993	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON011347		\$40,544	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
RAG049795A		-\$111	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON011196		\$12,760	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
420569		\$250,921	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
PO 486746		\$50,771	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SPC-000552 GR000165		-\$4,911	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SUBK00008360		\$73,531	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON004875		\$41,831	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
#5111414		\$118,665	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
WFUHS553283		\$23,140	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,
ADV PROJECT- SUB W/WCM		\$82,735	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$1,391,570	\$7,485,472	\$9,316,829	RESEARCH AND DEVELOPMENT	\$1,033,282,
#A043837		\$31,936	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
A051015		\$39,230	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON009883		\$53,962	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON012177		\$12,046	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON012379		\$10,946	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
T806043		\$501	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
#5710003266		\$659	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
17-A0-00-006701-01		\$67,252	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
SP0028943-PROJ0007598		\$107,582	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUB AWARD NO. 33962-1		\$28,670	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUBAWARD#: 441920		\$15,152	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
FY17.558.004_AMD5		\$99	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$345,762	\$5,885,842	\$6,253,877	RESEARCH AND DEVELOPMENT	\$1,033,282
CON005449		\$24,622	\$7,463,183	N/A	
		\$7,438,561	\$7,463,183	N/A	
		\$77,754	\$77,754	N/A	
		\$115,712	\$115,712	N/A	
T652508		\$29,518	\$29,518	RESEARCH AND DEVELOPMENT	\$1,033,282,
CON007679		\$54,159	\$165,823	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUB AWARD #: 1600679		\$7,829	\$165,823	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUBAWARD NO. 1600679		\$1,186	\$165,823	RESEARCH AND DEVELOPMENT	\$1,033,282,
SUB AWARD NO. 1600679		\$14,070	\$165,823	RESEARCH AND DEVELOPMENT	\$1,033,282,
	\$15,405	\$88,579	\$165,823	RESEARCH AND DEVELOPMENT	\$1,033,282
		\$115,863	\$115,863	N/A	
		\$8,247,503	\$8,247,503	N/A	
		¢C 274 C2C	¢C 274 C2C	A1/A	
		\$6,371,636	\$6,371,636	N/A	
		\$182,459	\$182,459	N/A	
RYAN WHITE PART B PROGRAM		<i>\$260,984</i> \$80,651,462	<i>\$80,912,446</i> \$80,912,446	N/A N/A	
		900,001,40Z	900,912, 44 0		
		\$3,694,404	\$3,694,404	N/A	
		\$45,188	\$45,188	N/A	
		\$1,423,760	\$1,423,760	STUDENT FINANCIAL ASSISTANCE	\$2,277,088
					72,211,088
		\$534,481	\$534,481	N/A	

Schedule of Expenditures of Federal Awards For the Fiscal Year Ended June 30, 2019

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
IUMAN IMMUNODEFICIENCY VIRUS (HIV)/ACQUIRED IMMUNODEFICIENCY VIRUS		., ,	•
YNDROME (AIDS) SURVEILLANCE	93.944		
ASSISTANCE PROGRAMS FOR CHRONIC DISEASE PREVENTION AND CONTROL	93.945		
COOPERATIVE AGREEMENTS TO SUPPORT STATE-BASED SAFE MOTHERHOOD AND INFANT			
IEALTH INITIATIVE PROGRAMS	93.946		
BLOCK GRANTS FOR COMMUNITY MENTAL HEALTH SERVICES	93.958		
BLOCK GRANTS FOR PREVENTION AND TREATMENT OF SUBSTANCE ABUSE	93.959		
CDC'S COLLABORATION WITH ACADEMIA TO STRENGTHEN PUBLIC HEALTH	93.967		EMORY UNIVERSITY
CDC'S COLLABORATION WITH ACADEMIA TO STRENGTHEN PUBLIC HEALTH	93.967		EMORY UNIVERSITY
EXUALLY TRANSMITTED DISEASES (STD) PREVENTION AND CONTROL GRANTS	93.977		
INTERNATIONAL RESEARCH AND RESEARCH TRAINING	93.989		EMORY UNIVERSITY
INTERNATIONAL RESEARCH AND RESEARCH TRAINING	93.989		EMORY UNIVERSITY
NTERNATIONAL RESEARCH AND RESEARCH TRAINING	93.989		
JATIONAL HEALTH PROMOTION	93.990		
REVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		BOSTON CHILDREN'S HOSPITAL
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		DANA-FARBER CANCER INSTITUTE
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		EMORY UNIVERSITY
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		EMORY UNIVERSITY
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		EMORY UNIVERSITY
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		EMORY UNIVERSITY
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		IMS GOVERNMENT SOLUTIONS, INC.
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		IMS GOVERNMENT SOLUTIONS, INC.
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		NATIONWIDE CHILDREN'S HOSPITAL
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		NORTHROP GRUMMAN CORPORATION
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		NORTHWESTERN UNIVERSITY
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		PHOTOSOUND TECHNOLOGIES. INC.
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		PHOTOSOUND TECHNOLOGIES, INC.
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		THRUST INTERACTIVE, INC.
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		THRUST INTERACTIVE, INC.
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		UNIVERSITY OF ALABAMA AT BIRMINGHAM
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		UNIVERSITY OF LOUISVILLE
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		UNIVERSITY OF OREGON
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		W-Z BIOTECH, LLC
REVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	93.991		W-2 DIOTECH, LEC
ATERNAL AND CHILD HEALTH SERVICES BLOCK GRANT TO THE STATES	93.991		
NATERINAL AND CHIED HEALTH SERVICES BLOCK GRANT TO THE STATES	55.554	112187041-	
INNOVATION GATEWAY ST JUDE: NIAID CENTERS OF EXCEL	93.RD	7839847	ST. JUDE CHILDREN'S RESEARCH HOSPITAL
INNOVATION GATEWAT ST JODE. MAID CENTERS OF EACLE	93.RD	1199959	ST. JODE CHILDREN S RESEARCH HOSPITAL
INTAKWI ENVIKONIVIENTAE SAWIPEING FOK OKOANIC SIVIALET	55.ND	1920-152-	
	93.RD	0103-A9	
ISCOVER SOURCES, GENES AND DEVELOP U.S. ADAPTED G SBIR PHASE 1: ADJUVANT DEVELOPMENT FOR THERMOSTABL	93.RD 93.RD	2722-S1	UNIVERSAL STABILIZATION TECHNOLOGIES, INC.
PA AGREEMENT	93.RD	3967566	UNIVERSAL STABILIZATION TECHNOLOGIES, INC.
THERMOSTABLE LIVE ATTENUATED INFLUENZA VACCINE FOR	93.RD 93.RD	9585551	UNIVERSAL STABILIZATION TECHNOLOGIES. INC.
THERMOSTABLE LIVE ATTENDATED INFLOENZA VACCINE FOR	93.KD	AGREEMENT	UNIVERSAL STABILIZATION TECHNOLOGIES, INC.
PATIENT DERIVED MODELS TISSUE PROCUREMENT PROTOCOL FOR NCI	93.RD	#: 17X150	LEIDOS, INC.
		CTSU WORK	
		ORDER FOR	
		N02-CM-	
CTSU PHASE II SUP PMTS (N02-CM	93.RD	62212	CHILDREN'S HOSPITAL OF PHILADELPHIA
		HHSN267200	
TNCC SITE #780	93.RD	800019C	UNIVERSITY OF SOUTH FLORIDA
		HHSN272000	
RE-CLINICAL MODELS OF INFECTIOUS DISEASES - ALTER	93.RD	03	
		HHSN272201	
NIAID CEIRS - ANIMAL INFLUENZA SURVEILLANCE IN ARG	93.RD	400008C	ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
SOUTHEAST REGIONAL COLLABORATIVE ACCESS TEAM (SER-	93.RD	P18001	LEIDOS, INC.
STTR PHASE I: EVALUATING THE SOFTWARE NAVIGATION S	93.RD	UGA20190401	3T TECHNOLOGIES, LLC
			GEORGIA SOUTHERN UNIVERSITY RESEARCH AND

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

State of Georgia

Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
		\$1,298,150	\$1,298,150	N/A	
		\$40,412	\$40,412	N/A	
		\$407,389	\$407,389	N/A	:
	\$10,034,146	\$23,647,008	\$23,647,008	N/A	
	\$35,808,181	\$58,595,297	\$58,595,297	N/A	
T674525		\$158,511	\$203,138	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
T807472 5P01AI125180-02		\$44,627	\$203,138	RESEARCH AND DEVELOPMENT	\$1,033,282,5
CON010053		\$3,733,532 <i>\$372</i>	\$3,733,532 <i>\$1,797,369</i>	N/A RESEARCH AND DEVELOPMENT	\$1,033,282,5
T846281 / A019177		\$20,244	\$1,797,369	RESEARCH AND DEVELOPMENT	\$1,033,282,5
1010201711010177	\$536,931	\$1,776,753	\$1,797,369	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$104,537	\$104,537	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		-\$668	\$4,230,743	N/A	
GENFD0001493133		\$35,844	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
1242101		\$39,275	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
A031295 T783523		\$168,006 \$90,418	\$4,230,743 \$4,230,743	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
T846705		\$141,893	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
T935644		\$52,785	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
2017-IMS-SC-GT001		\$49,887	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
2017-IMS-SC-GT002		\$86,577	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
700090-0519-00		\$32,390	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
7500152764		\$91,456	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
60047538 GIT		\$56,280	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGR DTD 04/20/18		\$39,630	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGR DTD 10/01/2017 9R44GM130282-02		\$14,747 \$34,308	\$4,230,743 \$4,230,743	RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOPMENT	\$1,033,282,5 \$1,033,282,5
AGR DTD 03/20/2017		\$10,944	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
000508606-016		\$42,104	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
ULRF 17-0029-01		\$203,483	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
215830A		\$256,131	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGR DTD 02/15/2017		\$94,576	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$348,245	\$2,690,677	\$4,230,743	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$26,254,056	\$26,254,056	N/A	
112187041-7839847		\$146,236	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$75,653	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$0	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
2722-S1		\$37,841	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$33,947	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
9585551		\$228,917	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
AGREEMENT #: 17X150		\$112,000	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
TSU PHASE II SUP PMTS (N02-CM		\$0	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
HHSN267200800019C		\$28,305	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$451,701	\$1,215,001	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
HHSN272201400008C		\$140,006	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
P18001		\$140,008	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
		\$24,052	\$2,333,860	RESEARCH AND DEVELOPMENT	\$1,033,282,5
UGA20190401					
		4	A	• 1 / -	
63828383-44		\$17,391	\$17,391	N/A	

Schedule of Expenditures of Federal Awards For the Fiscal Year Ended June 30, 2019

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
STATE COMMISSIONS	94.003		
AMERICORPS	94.006		JUMPSTART FOR YOUNG CHILDREN, INC.
AMERICORPS	94.006		
AMERICORPS	94.006		CLARKE COUNTY SCHOOL DISTRICT
AMERICORPS	94.006		
TRAINING AND TECHNICAL ASSISTANCE	94.009		
	04.046		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND
SENIOR COMPANION PROGRAM	94.016		SERVICE FOUNDATION, INC.
NATIONAL SERVICE AND CIVIC ENGAGEMENT RESEARCH COMPETITION TOTAL CORPORATION FOR NATIONAL AND COMMUNITY SERVICE	94.026		
EXECUTIVE OFFICE OF THE PRESIDENT			
HIGH INTENSITY DRUG TRAFFICKING AREAS PROGRAM	95.001		ATLANTA-CAROLINAS HIDTA PROGRAM
HIGH INTENSITY DRUG TRAFFICKING AREAS PROGRAM	95.001		CITY OF ATLANTA
HIGH INTENSITY DRUG TRAFFICKING AREAS PROGRAM	95.001		
TOTAL EXECUTIVE OFFICE OF THE PRESIDENT			
SOCIAL SECURITY ADMINISTRATION			
SOCIAL SECURITY DISABILITY INSURANCE	96.001		
SOCIAL SECURITY DISABILITY INSURAINCE SOCIAL SECURITY - WORK INCENTIVES PLANNING AND ASSISTANCE PROGRAM	96.001		
TOTAL SOCIAL SECURITY ADMINISTRATION	50.008		
DEPARTMENT OF HOMELAND SECURITY STATE AND LOCAL HOMELAND SECURITY NATIONAL TRAINING PROGRAM	97.005		BERRIEHILL RESEARCH CORPORATION
STATE AND LOCAL HOMELAND SECURITY NATIONAL TRAINING PROGRAM	97.005		SCIENTIFIC RESEARCH CORPORATION THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS
STATE AND LOCAL HOMELAND SECURITY NATIONAL TRAINING PROGRAM STATE AND LOCAL HOMELAND SECURITY NATIONAL TRAINING PROGRAM	97.005 97.005		LABORATORY, LLC UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
STATE AND LOCAL HOMELAND SECONT I NATIONAL TRAINING PROGRAM	97.005		ZETA ASSOCIATES, INC.
STATE AND LOCAL HOMELAND SECURITY NATIONAL TRAINING PROGRAM	97.005		22 // // 6500 6// // 26/ /// 61
NON-PROFIT SECURITY PROGRAM	97.008		
BOATING SAFETY FINANCIAL ASSISTANCE	97.012		
COMMUNITY ASSISTANCE PROGRAM STATE SUPPORT SERVICES ELEMENT (CAP-SSSE)	97.023		
FLOOD MITIGATION ASSISTANCE	97.029		
CRISIS COUNSELING	97.032		
DISASTER UNEMPLOYMENT ASSISTANCE	97.034		
DISASTER GRANTS - PUBLIC ASSISTANCE (PRESIDENTIALLY DECLARED DISASTERS)	97.036		
HAZARD MITIGATION GRANT	97.039		
NATIONAL DAM SAFETY PROGRAM	97.041		
EMERGENCY MANAGEMENT PERFORMANCE GRANTS	97.042		
STATE FIRE TRAINING SYSTEMS GRANTS	97.043		
COOPERATING TECHNICAL PARTNERS	97.045 97.046		
FIRE MANAGEMENT ASSISTANCE GRANT PRE-DISASTER MITIGATION	97.046 97.047		
PRE-DISASTER MITIGATION PORT SECURITY GRANT PROGRAM	97.047		
CENTERS FOR HOMELAND SECURITY	97.050		ARIZONA STATE UNIVERSITY
CENTERS FOR HOMELAND SECONTY	97.061		ARIZONA STATE UNIVERSITY
CENTERS FOR HOMELAND SECONTY	97.061		ARIZONA STATE UNIVERSITY
CENTERS FOR HOMELAND SECURITY	97.061		ARIZONA STATE UNIVERSITY
HOMELAND SECURITY GRANT PROGRAM	97.067		GEORGIA SOUTHERN UNIVERSITY RESEARCH AND SERVICE FOUNDATION, INC.
HOMELAND SECURITY GRANT PROGRAM	97.067		KENNESAW STATE UNIVERSITY RESEARCH AND SERVICE FOUNDATION
	07.007		KENNESAW STATE UNIVERSITY RESEARCH AND
HOMELAND SECURITY GRANT PROGRAM	97.067		SERVICE FOUNDATION
HOMELAND SECURITY GRANT PROGRAM HOMELAND SECURITY RESEARCH, DEVELOPMENT, TESTING, EVALUATION, AND	97.067		
DEMONSTRATION OF TECHNOLOGIES RELATED TO NUCLEAR THREAT DETECTION	97.077		
EARTHQUAKE CONSORTIUM	97.082		
	57.002		

Indented and italicized award lines indicate pass-through funding. The accompanying notes are an integral part of this schedule.

State of Georgia

Pass-Through	Total Amount Provided to	Federal	Federal Program	Cluster	Cluster
Entity	Sub-Recipients	Expenditures	Total	Name	Total
		\$280,413	\$280,413	N/A	<u> </u>
CON010186		\$3,780	\$2,851,372	N/A	;
	\$2,468,894	\$2,791,712	\$2,851,372	N/A	
5425401		\$45,687	\$2,851,372	RESEARCH AND DEVELOPMENT	\$1,033,282,52
		\$10,193	\$2,851,372	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$5,574	\$101,078	\$101,078	N/A	
				OSTER GRANDPARENT/SENIOR COMPANION	
63828383-41		\$171,775	\$171,775	CLUSTER	\$171,7
	\$30,849	\$117,140	\$117,140	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$2,505,317	\$3,521,778			
FS 30408		\$89,342	\$218,016	N/A	
G15GA003A		\$103,289	\$218,016	N/A	
0100,1000,1		\$25,385	\$218,016	N/A	
		\$218,016	\$210,010		
		\$70,372,535	\$70,372,535	DISABILITY INSURANCE/SSI CLUSTER	\$70,372,5
		\$300,180	\$300,180	N/A	
		\$70,672,715			
AQUA_S2212_GTARC		\$70	\$776,850	RESEARCH AND DEVELOPMENT	\$1,033,282,5
SR20180956		\$128,958	\$776,850	RESEARCH AND DEVELOPMENT	\$1,033,282,5
141999		\$5,760	\$776,850	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
077083-16371		\$121,324	\$776,850	RESEARCH AND DEVELOPMENT	\$1,033,282,5.
173118LS-GTARC-01		\$256,668	\$776,850	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$241,155	\$264,070	\$776,850	RESEARCH AND DEVELOPMENT	\$1,033,282,5
	\$595,313	\$595,313	\$595,313	N/A	
	222,223				
	,515,515	\$4,313,198	\$4,313,198	N/A	
	616,666¢		\$4,313,198 \$374,070	N/A N/A	
	\$1,440,723	\$4,313,198			
		\$4,313,198 \$374,070	\$374,070	N/A	
		\$4,313,198 \$374,070 \$1,461,158	\$374,070 \$1,461,158	N/A N/A N/A N/A	
		\$4,313,198 \$374,070 \$1,461,158 \$223,070	\$374,070 \$1,461,158 \$223,070	N/A N/A N/A N/A N/A	
	\$1,440,723	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481	N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773 \$3,027,232	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996	N/A N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945	N/A N/A N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773 \$3,027,232	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
18-310	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 <i>\$780,428</i>	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
18-341	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428 \$780,428	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
18-341 ASUB00000018	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524 \$9,000	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428 \$780,428	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	
18-341 ASUB00000018 18-340	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524 \$9,000 \$369,890	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428 \$780,428 \$780,428	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	\$1,033,282,5.
18-341 ASUB00000018 18-340 63828383-42	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524 \$9,000 \$369,890 \$1,352	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428 \$780,428 \$780,428 \$780,428 \$780,428	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	\$1,033,282,5
18-341 ASUB00000018 18-340 63828383-42 EMW-2017-SS-0015-S01	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524 \$9,000 \$369,890 \$1,352 \$5,841	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428 \$780,428 \$780,428 \$780,428 \$780,428 \$780,428 \$780,428 \$780,428	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	\$1,033,282,5
18-341 ASUB00000018 18-340 63828383-42 EMW-2017-SS-0015-S01	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524 \$9,000 \$369,890 \$1,352	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428 \$780,428 \$780,428 \$780,428 \$780,428	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	\$1,033,282,5
18-341 ASUB00000018 18-340	\$1,440,723 \$70,854,773 \$3,027,232 \$2,857,231 \$32,817 \$351,911 \$94,852	\$4,313,198 \$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$119,014 \$282,524 \$9,000 \$369,890 \$1,352 \$5,841 \$2,118	\$374,070 \$1,461,158 \$223,070 \$14,195 \$88,773,164 \$3,993,481 \$121,996 \$8,823,945 \$27,671 \$2,795,051 \$6,926,884 \$542,160 \$1,547,742 \$780,428	N/A N/A	

Schedule of Expenditures of Federal Awards For the Fiscal Year Ended June 30, 2019

Federal Awarding Agency/Program Title	Federal CFDA Number	Additional Award Identification (Optional)	Name of Funder Pass-Through Entity
DISASTER ASSISTANCE PROJECTS	97.088		
CE OVERTIME AGREEMENTS	97.U37	15200	
DHS SLOT OR ICE OT	97.U38	FS 13401	
TOTAL DEPARTMENT OF HOMELAND SECURITY			
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT			
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		FHI 360
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		MICHIGAN STATE UNIVERSITY
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		MICHIGAN STATE UNIVERSITY
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		TUFTS UNIVERSITY
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		TUFTS UNIVERSITY
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		TUFTS UNIVERSITY
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		UNIVERSITY OF FLORIDA
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		UNIVERSITY OF FLORIDA
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		WORLD VISION
USAID FOREIGN ASSISTANCE FOR PROGRAMS OVERSEAS	98.001		
USAID DEVELOPMENT PARTNERSHIPS FOR UNIVERSITY COOPERATION AND			
DEVELOPMENT	98.012		MICHIGAN STATE UNIVERSITY
TOTAL U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT			
MISCELLANEOUS			
VA ADMIN & REPORTING FEES	99.U39	11000111	
TOTAL MISCELLANEOUS			
TOTAL EXPENDITURE OF FEDERAL AWARDS			

State of Georgia

Identifying Number Assigned By Funder Pass-Through Entity	Total Amount Provided to Sub-Recipients	Federal Expenditures	Federal Program Total	Cluster Name	Cluster Total
		\$32,970	\$32,970	N/A	\$0
		\$8,136	\$8,136	N/A	\$0
		\$17,736	\$17,736	N/A	\$0
	\$85,615,749	\$132,377,886			
#PO16003387	\$52,552	\$824,153	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RC102095		\$37,396	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RC102095GHANA		\$15,150	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
AIDOAAL1000006		\$292,969	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
IN RBP-AID18		\$8,640	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
TUFTS WANG-AID 916		\$118,229	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UFDSP00011518		\$31,976	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
UFDSP00012175		\$23,625	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
CON002806		\$4,840	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$493,719	\$2,454,946	\$3,811,924	RESEARCH AND DEVELOPMENT	\$1,033,282,522
RC104292		\$62,701	\$62,701	RESEARCH AND DEVELOPMENT	\$1,033,282,522
	\$546,271	\$3,874,625			
		\$673	\$673	N/A	\$0
	_	\$673			
	\$3,058,929,395	\$21,142,702,723			

NOTE 1. SIGNIFICANT ACCOUNTING POLICIES

The accompanying Schedule of Expenditures of Federal Awards (Schedule) is a supplementary schedule to the State's basic financial statements presented in the State of Georgia *Comprehensive Annual Financial Report (CAFR)* for the fiscal year ended June 30, 2019.

A. Basis of Presentation

The information in the Schedule is presented in accordance with Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of the State, it is not intended to and does not present the financial position, changes in net position, or cash flows of the State.

- 1. Federal Financial Assistance The Uniform Guidance defines federal financial assistance as assistance that non-federal entities receive or administer in the form of grants, loans, loan guarantees, non-cash contributions or donations of property (including donated surplus property), cooperative agreements, interest subsidies, insurance, food commodities, direct appropriations, and other financial assistance.
- 2. Catalog of Federal Domestic Assistance (CFDA) Number The Schedule presents total expenditures for each federal financial assistance program and the CFDA number assigned to the program. For programs that have not been assigned a CFDA number, the number shown in the Schedule is the federal agency's 2-digit prefix followed by "U" and a two digit number or by "RD" if the program is part of the Research and Development (R&D) cluster.
- 3. Cluster of Programs A grouping of closely related programs with different CFDA numbers that share common compliance requirements is considered a cluster of programs. The Schedule presents the total federal awards expended for the R&D cluster, Student Financial Assistance cluster, and other clusters that are mandated by OMB in the most recent Compliance Supplement.
- 4. Direct and Pass-through Federal Financial Assistance The State receives federal financial assistance directly from federal awarding agencies or indirectly from pass-through entities. A pass-through entity (PTE) is a non-federal entity that provides a subaward to a subrecipient to carry out part of a federal program. For federal assistance that the State received as a subrecipient, the name of the PTE and the identifying number assigned by the PTE are identified in the Schedule.
- 5. Amount Provided to Subrecipients The amount of federal assistance that the State provided to subrecipients under each federal program is presented in a separate column in the Schedule. A subrecipient is an entity that receives a subaward from a PTE to carry out part of a federal program.
- 6. Transactions Between State Organizations When federal financial assistance is received by one State organization and passed through to another State organization, the federal financial assistance is reflected as expenditures in the Schedule by only the primary recipient (i.e., the State organization that received the federal assistance directly from the federal government). This method avoids the overstatement of federal financial assistance at the aggregate level.

NOTE 1. <u>SIGNIFICANT ACCOUNTING POLICIES</u> (continued)

B. <u>Reporting Entity</u>

The Schedule includes all federal financial assistance programs administered by the State for the fiscal year ended June 30, 2019. Refer to Appendix "A" for a comprehensive listing of organizations that comprise the State of Georgia Reporting Entity.

C. Basis of Accounting

The State's CAFR and this supplemental schedule are presented in accordance with generally accepted accounting principles, following the accrual or modified accrual basis of accounting, as appropriate for the fund structure. The basis of accounting used for each fund is described in Note 1 to the State's financial statements. Negative amounts shown in the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years.

NOTE 2. INDIRECT COST RATE

In addition to other procedures detailed in the Uniform Guidance, State organizations may elect to charge a de minimis cost rate of 10% of modified total direct costs which may be used indefinitely. There are seven State organizations within the State of Georgia Reporting Entity, as identified in Appendix "A," that have elected to use the 10% de minimis cost rate.

NOTE 3. LOAN PROGRAMS

The State participates in various federal loan programs. The Schedule includes the value of new loans made or received during the fiscal year, the balance of loans from previous years for which the federal government imposes continuing compliance requirements, and any administrative cost allowances. For loans made to students of an Institution of Higher Education (IHE), where the IHE does not make the loans, the amounts in the Schedule only include the value of loans made during the fiscal year and are not included in the following table.

Outstanding balance of federal loans and loan guarantees:

CFDA No.	Program Name	 Ending Balance at June 30, 2019
10.766	Community Facilities Loans and Grants Cluster	\$ 40,500,000
20.223	Transportation Infrastructure Finance and Innovation Act (TIFIA) Program	248,165,625
84.038	Federal Perkins Loan Program - Federal Capital Contributions	24,375,564
93.264	Nurse Faculty Loan Program (NFLP)	1,999,778
93.342	Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students	66,180
93.364	Nursing Student Loans	 604,069
Tot	al Outstanding Balance	\$ 315,711,216

NOTE 4. <u>NON-CASH ASSISTANCE</u>

Although most federal financial assistance is in the form of cash assistance, the State participates in several programs that provide non-cash assistance through the State to eligible participants. The total value of federal financial non-cash assistance that the State reported for the fiscal year ended June 30, 2019 is presented in the table below.

Non-Cash Assistance:

CFDA No.	Program Name	 Non-Cash Value
10.178	Trade Mitigation Program Eligible Recipient Agency Operational Funds ¹	\$ 18,430,669
10.551	Supplemental Nutrition Assistance Program ¹	2,175,440,585
10.555	National School Lunch Program ¹	48,338,368
10.565	Commodity Supplemental Food Program ¹	1,159,672
10.569	Emergency Food Assistance Program (Food Commodities) ¹	22,490,285
39.003	Donation of Federal Surplus Personal Property	7,388,169
93.268	Immunization Cooperative Agreements ¹	 143,575,615
Tota	al Non-Cash Assistance	\$ 2,416,823,363

¹ The amount reported in the Schedule for this program includes both cash and non-cash assistance expenditures.

NOTE 5. UNEMPLOYMENT INSURANCE (UI) (CFDA No. 17.225)

The UI program serves workers who are unemployed through no fault of their own and are seeking reemployment. To receive benefits, claimants must be able to work, available for work, and actively seeking work. State unemployment insurance funds (State UI funds) must be deposited to the Unemployment Trust Fund (UTF) in the U.S. Treasury, primarily to be used to pay UI program benefits under the federally approved State unemployment law. Accordingly, expenditures of both State and federal unemployment insurance funds are included in the total expenditures for the UI program as reported in the Schedule, and for the fiscal year ended June 30, 2019 are \$297,170,288 and \$47,848,181, respectively.

Summary Schedule of Prior Audit Findings





Brian P. Kemp Governor

Thomas Alan Skelton, CPA State Accounting Officer

February 17, 2020

Mr. Greg S. Griffin, State Auditor Georgia Department of Audits and Accounts 270 Washington Street, S.W., Room 1-156 Atlanta, Georgia 30334-8400

Dear Mr. Griffin,

Enclosed with this letter is the State of Georgia's "Summary Schedule of Prior Audit Findings" (Schedule) for reporting in the Single Audit for fiscal year ending June 30, 2019. This Schedule is compiled by the State Accounting Office (SAO) based on answers provided by the respective State Organization. The State's Schedule reports the current status of all audit findings reported in the 2018 fiscal year Single Audit's "Schedule of Findings and Questioned Costs" and "Summary Schedule of Prior Audit Findings" that were not corrected. The findings are organized by finding type (financial statement and federal award), Federal Agency (if applicable), State Organization, and finding number (the finding number corresponds to the reference number that was reported in the prior fiscal year).

The State's Schedule satisfies the requirements as detailed in Title 2 U.S. Code of Federal Regulations, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), Subpart F, Section 511 – Audit findings follow-up.

If you have any questions regarding this Schedule, please contact our Office.

Sincerely,

Thomas Alan Skelton, CPA State Accounting Officer

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FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

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¹ The entity number represents the control number that was assigned to each State entity.

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NUMBER ¹	STATE AGENCY	NUMBER

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928	Georgia Environmental Finance Authority	D-25
VARIOU	S FEDERAL AGENCIES	
427	Department of Human Services	D-26

¹ The entity number represents the control number that was assigned to each State entity.

PRIOR FINANCIAL STATEMENT FINDINGS REPORTED UNDER GOVERNMENT AUDITING STANDARDS

2018-001 Continue to Improve Financial Statement PreparationState Entity:Statewide FindingRepeat of Prior Year Finding:2017-001, 2016-001, 2015-041, 2014-054

Finding Status: Partially Resolved

State Accounting Office (SAO) continues to provide education and communication to all State Organizations, through the release of Accounting Policies, meeting and training events, working groups for more complex new standards, and detailed instructions on each year-end annual form. In particular during FY2019, SAO again offered two open house sessions where organizations could come ask questions about their year-end forms. SAO continues to provide routine training to all internal staff relating to various financial accounting and reporting topics. Additionally, SAO will work with high risk data to ensure the integrity of information submitted by the organizations. We will continue to leverage automation where possible, and will also add in additional analytical procedures where applicable. We will continue to leverage automation where possible, and will also add in additional analytical review procedures where applicable.

2017-001 Continue to Improve Financial Statement Preparation

State Entity:	Statewide Finding
Repeat of Prior Year Finding:	2016-001, 2015-041, 2014-054

Finding Status: Partially Resolved

See response to finding number 2018-001.

2016-001 Improve Financial Reporting and Communication with AgenciesState Entity:Statewide FindingRepeat of Prior Year Finding:2015-041, 2014-054

Finding Status: Partially Resolved

See response to finding number 2018-001.

2015-041 Financial Statement PreparationState Entity:Statewide FindingRepeat of Prior Year Finding:2014-054

Finding Status: Partially Resolved

See response to finding number 2018-001.

2014-054 Controls over Financial Statement PreparationState Entity:Statewide Finding

Finding Status: Partially Resolved

See response to finding number 2018-001.

2018-002 Improve the Accounting and Reporting of Refunded General Obligation Bonds'Outstanding PremiumsState Entity:Statewide Finding

Finding Status: Previously Reported Corrective Action Implemented

2017-002 Strengthen Federal Award Expenditure Reporting ControlsState Entity:Statewide FindingRepeat of Prior Year Finding:2016-002

Finding Status: Previously Reported Corrective Action Implemented

2016-002 Strengthen Federal Award Expenditure Reporting ControlsState Entity:Statewide Finding

Finding Status: Previously Reported Corrective Action Implemented

2018-003 Improve Financial Reporting ControlsState Entity:Department of Public Health

Finding Status: Unresolved

This finding is unresolved mainly due to high turnover of both management and staff in the finance section. New management is beginning to implement revised procedures, more frequent data reviews, and better communication to improve accounting operations and internal controls.

In addition, enhanced training and job tools will be provided to staff to ensure accuracy and result in timelier and more streamlined processing and reporting. These improvements should largely be in place by fiscal year-end financial close.

2017-003 Strengthen Bank Reconciliation ProceduresState Entity:Department of Public Health

Finding Status: Partially Resolved

The finding is only partially corrected. The planned corrective action that was implemented only partially corrected the deficiency. The Department has obtained additional resources to assist with resolving the prior year reconciling items. We have entered and prepared correcting entries to resolve reconciling items from fiscal year 2016. Correcting entries to resolve reconciling items from fiscal year 2016. Correcting entries to resolve reconciling items from fiscal year 2017 will correct the deficiency.

2017-004 Develop and Implement Budgetary ControlsState Entity:Department of Insurance

Finding Status: Previously Reported Corrective Action Implemented

2018-004 Improve Internal Controls over Claims ProcessingState Entity:Department of Community Health

Finding Status: Partially Resolved

SHBP has completed the first of a three-year claim audit of the current Third-party Administrators (TPA). SHBP has historically conducted audits to review TPAs' payment of claims. SHBP previously contracted with a third party vendor to conduct pre-implementation audits of the current TPAs to ensure their systems were programmed to pay medical claims correctly. SHBP currently has controls in place that examines the accuracy of claim payments. The Plan conducts an annual internal Readiness Review, whereby the TPAs must provide documentation of claims testing scenarios that demonstrate claims are processing correctly. During the Readiness Review, claims data is provided by the TPAs with the supporting documentation. SHBP and Aon executed a contract to conduct a three-year claims audit of the current TPAs. A third party vendor will use a stratified, random sampling methodology based on an error-rate driven formula to examine claims paid during Plan Years 2017, 2018, and 2019. Each year, we perform user acceptance testing prior to Open Enrollment on selected areas to ensure the system is processing transactions accurately. Additionally, the TPA has in place Dependent Verification to ensure the dependents added to the plan are eligible.

This finding is partially resolved as the three-year claims audit review is ongoing and SHBP will continue to review the eligibility process and determine any necessary changes appropriate to ensure our process mitigates the risk of mis-payments.

2018-005 Strengthen Financial Reporting ControlsState Entity:Department of Community Health

Finding Status: Partially Resolved

The corrective actions for this finding that were previously reported were implemented as designed. DCH conducted an annual engagement meeting with its contracted actuary to prepare a timeline of key dates for data sharing, to discuss methodologies and assumptions and reporting requirements to ensure schedules and calculations were accurate and complete. DCH documented accounting policies and procedures for year-end accrual journal entries and provided training to DCH staff. DCH ensured Financial Reporting staff received additional hours of training in GASB, GAAP and governmental financial reporting. DCH hired additional staff in the area of Financial Reporting with higher technical accounting skills to help oversee the preparation of financial statements.

This finding is partially resolved, although DCH implemented several controls to improve financial reporting, additional analyses will need to be implemented in the year-end process to aid in the prevention or timely detection and correction of errors. DCH will also continue training on the new state-wide reporting system to ensure transactions are posted according to State requirements and will continue to provide training on GASB, GAAP and governmental financial reporting for the Financial Reporting staff.

2018-006 Continue to Strengthen Application Risk Management ProgramState Entity:Department of Community Health

Finding Status: Partially Resolved

DCH OIT is continuing to make progress toward the completion of identified organizational goals, objectives and tasks required to fully remediate this finding by March 31, 2020. Updates include the following:

- Facilitated the successful completion of three Independent Security and Privacy Assessment Engagement Projects to strengthen the organizations controls over its Application Risk Management Program. Those are:
 - Independent NIST 800-53 Federal Computer Security Standards Based Assessment of the State's Technology Hosting Platform and Data Center along with State Service Organization Controls.
 - Independent NIST 800-53 Federal Computer Security Standards Based Assessment of the organizations Third-Party Hosted Medicaid Management Information System.
 - Independent HHS/OCR Audit Protocol Criteria Assessment of the organization's compliance status pertaining to privacy, security, and breach notification laws, regulations, and standards.

2018-006 Continue to Strengthen Application Risk Management Program (continued)

- Working with State Auditors to provide artifacts and supporting documentation that demonstrates the organization's commitment to tighten application risk management controls by addressing organizational oversight procedures known as Complimentary User Entity Controls (CUEC's) necessary to continuously monitor service delivery management and service organization transaction processing systems and services.
- Requiring healthcare service providers to provide System Security Plans and periodic security metrics reports that demonstrate the service organizations compliance status with Federal computer security standards.
- Reviewing and approving service organization contingency plans and disaster recovery exercise reports to ensure that Medicaid transaction processing systems meet the organizations data confidentiality, integrity, and availability standards and requirements.
- Continuing to work with organizational leadership to address budgetary and security resource requirements to grow the security program staff to an appropriate level.
- Working closely with CMS and Social Security Administration Federal business partners to certify planned Medicaid Transaction Processing Systems and Services to ensure that they meet applicable Federal and State Security and Privacy Laws, Regulations, and Standards.

2018-007 Continue to Strengthen Logical Access ControlsState Entity:Department of Human ServicesRepeat of Prior Year Finding:2017-007, 2016-004

Finding Status: Previously Reported Corrective Action Implemented

2017-007 Continue to Strengthen Change Management and Logical Access ControlsState Entity:Department of Human ServicesRepeat of Prior Year Finding:2016-004

Finding Status: Previously Reported Corrective Action Implemented

2016-004 Strengthen Change Management and Logical Access ControlsState Entity:Department of Human Services

Finding Status: Previously Reported Corrective Action Implemented

2018-008 Continue to Strengthen Logical Access Controls

State Entity:Department of Human ServicesRepeat of Prior Year Finding:2017-008

Finding Status: Previously Reported Corrective Action Implemented

2017-008 Strengthen Logical Access ControlsState Entity:Department of Human Services

Finding Status: Previously Reported Corrective Action Implemented

2018-009 Implement Controls over SNAP Benefits ReportingState Entity:Department of Human Services

Finding Status: Unresolved

As previously reported, the monthly reconciliation of the SNAP Benefits paid per the federal reports and the summary report produced by the DHS Electronic Benefits Transfer (EBT) function was instituted in January of 2019. The final review of the non-monetary amount to be reported in the SFY 2019 SEFA missed a \$1,000.00 discrepancy which occurred in the month prior to the control being implemented, December 2018. Consequently, an additional year-end verification control will be added to the monthly reconciliation process to ensure the amount reported in the SEFA is accurate. The DHS Grants Management team will recreate the monthly report SNAP Benefit paid balance tracking summary provided by the DHS Electronic Benefits Transfer (EBT) function to ensure there are no incorrect calculations included in the full year amount reported.

2018-010 Improve Capital Asset Management and ReportingState Entity:Department of Juvenile Justice

Finding Status: Previously Reported Corrective Action Implemented

2018-011 Processing of Tax Refund Requests and Estimating a Tax Refund Obligation for RefundsPending Approval at Year-EndDepartment of Revenue

Finding Status: Previously Reported Corrective Action Implemented

2017-016 Controls over Financial Reporting

State Entity:Atlanta Metropolitan State CollegeRepeat of Prior Year Finding:2016-019

Finding Status: Previously Reported Corrective Action Implemented

2016-019 Deficiencies in Controls over Financial ReportingState Entity:Atlanta Metropolitan State College

Finding Status: Previously Reported Corrective Action Implemented

2018-012 Continue to Strengthen Logical Access Controls		
State Entity:	Georgia World Congress Center Authority	
Repeat of Prior Year Finding:	2017-018 (partial repeat), 2016-024 (partial repeat)	

Finding Status: Partially Resolved

Due to the timing of the FY18 audit report, GWCCA was unable to implement the required procedures for the full fiscal year ending 6/30/19.

In FY20, GWCCA management and staff will implement the following procedures:

- In January of each year, a report will be generated of all Paycom non-client side, base level user's access. This report will be sent directly to the Directors/Managers of each department to verify the following:
 - Confirm users are currently in their department
 - Confirm user's level of access is valid and accurate

Estimated Completion Date: January 31, 2020.

- An end of month User Change Report will be reviewed by the HR Director & HRIS Analyst. Applicable Directors will receive a User Change Report if users from their department are listed on the report and there's a need for further clarification of a change.
- An annual review of all system privileges and security rights will be conducted for all Supervisor level and above (Managers, Directors, Executives) client-side users. Estimated Completion Date: April 30, 2020.
- A quarterly review of the Super User activity report will be conducted by the Director of Internal Audit.
- Permission Profiles will be created for each department, detailing all supervisors, managers and admin roles and their rights within the department. An annual review of the Permission Profiles will be conducted by the Human Resources Department and the Director of each department to ensure all users are accurate and maintain the appropriate level of access.

2017-018 Continue to Strengthen Logical Access Controls

State Entity:Georgia World Congress Center AuthorityRepeat of Prior Year Finding:2016-024

Finding Status: Partially Resolved

See response to finding number 2018-012.

2016-024 Strengthen Logical Access ControlsState Entity:Georgia World Congress Center Authority

Finding Status: Partially Resolved

See response to finding number 2018-012.

2018-013 Internal Controls over Financial ReportingState Entity:Georgia World Congress Center Authority

Finding Status: Previously Reported Corrective Action Implemented

2018-014 Improve Controls over Financial ReportingState Entity:State Road and Tollway AuthorityRepeat of Prior Year Finding:2017-019, 2016-025

Finding Status: Partially Resolved

SRTA transitioned to the State's Enterprise Financial System (TeamWorks) on July 1, 2019. The transition to TeamWorks proved to be more challenging than anticipated, due to the learning curve. This resulted in time constraints that prevented us from formally implementing monthly and quarterly financial balance reviews. As we move further into FY 2020, SRTA will continue to focus our efforts on improving monthly and quarterly review processes and controls. SRTA did not fully implement a new financial reporting system as planned; however, we did start the project and expect to complete it for the FY 2020 reporting period.

2017-019 Improve Controls over Financial Reporting		
State Entity:	State Road and Tollway Authority	
Repeat of Prior Year Finding:	2016-025	

Finding Status: Partially Resolved

See response to finding number 2018-014.

	2016-025 <u>Improve Controls over Financial Reporting</u> State Entity: State Road and Tollway Authority		
Finding Status: Partially Resolved			
See response to finding number 2018-014.			
2018-015 Strengthen Logical Access Controls			
State Entity: State Road and To	llway Authority		
Repeat of Prior Year Finding: 2017-021, 2016-02	20, 2015-055		
Finding Status: Previously Reported Corrective Action Implemented			
2017-021 Strengthen Logical Access Control	S		
	and Tollway Authority		
	2015-055		
Repeat of Prior Year Finding: 2016-026,	2013-033		
Finding Status: Previously Reported Corrective Action Implemented			
2016-026 Strengthen Logical Access Control			
	d and Tollway Authority		
Repeat of Prior Year Finding: 2015-	5 5		
Repeat of Frior Tear Finding: 2013-	55		
Finding Status: Previously Reported Corre	ctive Action Implemented		
2015-055 Inadequate Financial Accounting System			
	and Tollway Authority		
State Entry. State Road	and rollway Authority		
Finding Status: Previously Reported Corre	ctive Action Implemented		

PRIOR FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

2018-016 Federal Work Study Earmarking Requirements		
Federal Agency:	U.S. Department of Education	
State Entity:	Georgia State University	
Finding Status:	Previously Reported Corrective Action Implemented	
2018-017 Improve	e Controls over Cash Management	
Federal Agency:	U.S. Department of Education	
State Entity:	Augusta University	
Finding Status:	Previously Reported Corrective Action Implemented	
2017-023 Excessiv	e Cash Balances	
Federal Agency:	U.S. Department of Education	
State Entity:	Albany State University	
Finding Status:	Previously Reported Corrective Action Implemented	
2016-034 Return of Title IV Funds		

Federal Agency:U.S. Department of EducationState Entity:Savannah State UniversityRepeat of Prior Year Finding:2015-016, 2014-033

Finding Status: Partially Resolved

The Institution has corrected issues associated with identifying potential unofficial withdrawals and performing Return of Title IV calculations for these students. In an effort to correct issues associated with the accuracy of Return of Title IV calculations performed and timeliness of those returns, SSU has made personnel changes and is working to identify the underlying causes of this deficiency. SSU plans to enhance processes and procedures to ensure that student financial aid refunds are properly calculated and that unearned funds are correctly returned to the appropriate accounts. SSU plans to have the enhancements fully implemented by June 30, 2020.

2015-016 Return of Title IV Funds

Federal Agency:	U.S. Department of Education
State Entity:	Savannah State University
Repeat of Prior Year Finding:	2014-033

Finding Status: Partially Resolved

See response to finding number 2016-034.

2014-033 <u>Return of Title]</u> Federal Agency: State Entity:	IV Funds U.S. Department of Education Savannah State University	
Finding Status: Partial	ly Resolved	
See response to finding number 2016-034.		
2018-018 Improve Controls over Cash Management		
Federal Agency:	U.S. Department of Education	
State Entity:	University of West Georgia	
Finding Status: Previously Reported Corrective Action Implemented		
2017-024 Excessive Cash Balance	S	
Federal Agency:	U.S. Department of Education	
State Entity:	Atlanta Metropolitan State College	
Finding Status: Previously Reported Corrective Action Implemented		
2017-026 <u>Reports Not Reconciled</u> Federal Agency: State Entity:	U.S. Department of Education Atlanta Metropolitan State College	

Finding Status: Unresolved

This issue was resolved for award year 2018-2019 when the FISAP was submitted on 09/30/2019 in fiscal year 2020. The College's Fiscal Affairs Office and Financial Aid Office will both sign off on the reconciliations/numbers of the FISAP each year before submittal. This process also requires the two departments to agree on the amounts being reported for each program.

2017-027 Return of Title IV Funds		
Federal Agency:	U.S. Department of Education	
State Entity:	Atlanta Metropolitan State College	

Finding Status: Unresolved

The Financial Aid Office has completed a system review and has corrected the Return of Title IV refund percentages to match back to the number of days for the semester, which is required by Title IV regulations. This is a review that will occur each semester before the semester begins. This corrective action was partially implemented in Spring 2019 but will be fully implemented in Fall 2019.

In addition, the College has implemented some new reports that provide withdrawal information more quickly to the Financial Aid Office, allowing the withdrawals to be processed sooner. The College is also partnering with Dalton State College's Registrar and Financial Aid Director to ensure that the proper expertise is in the Office to maintain compliance with all Title IV regulations. This corrective action was partially implemented in Spring 2019 but will be fully implemented in Fall 2019.

The College plans to have all new processes and procedures implemented by December 31, 2019.

2017-028 Federal Direct Loan Program Reconciliations

Federal Agency:	U.S. Department of Education
State Entity:	Atlanta Metropolitan State College

Finding Status: Partially Resolved

This issue is currently being addressed. The Interim Director of Financial aid just recently took over the department and is in the process of implementing the monthly reconciliation process. She plans to implement the same process that Dalton State College uses to perform it's monthly reconciliation of the Direct Lending program. This will not be an issue going forward and the college will be in 100% compliance for award year 2019-2020.

The College plans to have a full year of monthly reconciliations completed by June 30, 2020.

2018-019 Strengthen Contro	ls over the Awarding Process
Federal Agency:	U.S. Department of Education
State Entity:	Atlanta Technical College

Finding Status: Partially Resolved

With assistance from the TCSG System Office, the Technical College has made several revisions to the awarding and disbursement rules within the student information system. This should result in the awarding of the appropriate amount of Subsidized and Unsubsidized loans. In addition, the Technical College has made several revisions to the student information system processing of Satisfactory Academic Progress (SAP) that should result in correct SAP calculations.

The Institution plans to have all new processes and procedures implemented by January 7, 2020.

2018-020 Strengthen Controls over Matching Requirements		
Federal Agency:	U.S. Department of Education	
State Entity:	Atlanta Technical College	
Finding Status:	Previously Reported Corrective Action Implemented	
2018-021 Improve Controls over the Verification Process		
Federal Agency:	U.S. Department of Education	
State Entity:	Atlanta Technical College	
Finding Status:	Previously Reported Corrective Action Implemented	
2010 022 I		
	e Controls over the Return of Title IV Funds Process	
Federal Agency:	U.S. Department of Education	

State Entity:Atlanta Technical College

Finding Status: Unresolved

Regarding the issue of calculating institutional charges correctly, the Technical College has updated the original charge cutoff date within the student information system to be the last date of the term. The Technical College's step-by-step Semester Set Up Guide will be updated to include the step that requires the original charge date to be changed to the last day of the semester, as well. Furthermore, Academic Affairs will be conducting training with the faculty on how to enter grades each semester to ensure that the last date of attendance entered is correct. A document and video will also be created and shared with faculty as a training and reference tool.

The Institution plans to have all new processes and procedures implemented by January 31, 2020.

2018-023 Strengthen	Controls over the Student Financial Aid Awarding Process
Federal Agency:	U.S. Department of Education
State Entity:	Augusta Technical College

Finding Status: Previously Reported Corrective Action Implemented

2017-032 Overpayment of Student Financial Assistance	
Federal Agency:	U.S. Department of Education
State Entity:	Georgia Piedmont Technical College

Finding Status: Partially Resolved

Georgia Piedmont Technical College (GPTC) has partially resolved the overpayment challenges identified during the 2017 fiscal year. The Technical College underwent a change in leadership for the Financial Aid and Registrar's Office during the Spring 2019 term. A new Satisfactory Academic Progress policy was also adopted by GPTC in the Spring. Oversight of these new procedures is monitored by the Financial Aid Director, Registrar and Vice President of Student Affairs. Furthermore, GPTC has withdrawn from the Federal Student Loan Program (FSLP) effective for the 2018-2019 Award Year. Lastly, the Technical College System of Georgia (TCSG) has developed a quality assurance program providing an additional layer of compliance and conducts an annual review of the Technical College's financial aid policies, procedures and student testing. TCSG is confident that new policies and procedures, change in leadership and additional support will reflect vast improvement in this area.

GPTC plans to have all new processes and procedures implemented by April 2020.

2017-033 Return of	of IV Funds	
Federal Agency:	U.S. Department of Education	
State Entity:	Georgia Piedmont Technical College	
·		
Finding Status:	Previously Reported Corrective Action Implemented	
0		
2017-034 Unofficia	al Withdrawals	
Federal Agency:	U.S. Department of Education	
State Entity:	Georgia Piedmont Technical College	
-		
Finding Status:	Previously Reported Corrective Action Implemented	
2018-024 Strengthen Controls over Matching Requirements		
2018-024 Strength	en Controls over Matching Requirements	
2018-024 <u>Strength</u> Federal Agency:	ten Controls over Matching Requirements U.S. Department of Education	
Federal Agency:	U.S. Department of Education	
Federal Agency:	U.S. Department of Education	
Federal Agency: State Entity:	U.S. Department of Education Southern Crescent Technical College	
Federal Agency: State Entity:	U.S. Department of Education Southern Crescent Technical College	
Federal Agency: State Entity: Finding Status:	U.S. Department of Education Southern Crescent Technical College	
Federal Agency: State Entity: Finding Status:	U.S. Department of Education Southern Crescent Technical College Previously Reported Corrective Action Implemented	
Federal Agency: State Entity: Finding Status: 2018-025 <u>Improve</u>	U.S. Department of Education Southern Crescent Technical College Previously Reported Corrective Action Implemented	
Federal Agency: State Entity: Finding Status: 2018-025 <u>Improve</u> Federal Agency:	U.S. Department of Education Southern Crescent Technical College Previously Reported Corrective Action Implemented <u>Controls over Unofficial Withdrawals</u> U.S. Department of Education	
Federal Agency: State Entity: Finding Status: 2018-025 <u>Improve</u> Federal Agency:	U.S. Department of Education Southern Crescent Technical College Previously Reported Corrective Action Implemented <u>Controls over Unofficial Withdrawals</u> U.S. Department of Education	

2018-026 Continue to Strengthen Application Risk Management Program

Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Community Health
Repeat of Prior Year Finding:	2017-037, 2016-044

Finding Status: Partially Resolved

DCH OIT is continuing to make progress toward the completion of identified organizational goals, objectives and tasks required to fully remediate this finding by March 31, 2020.

Updates include the following:

- Facilitated the successful completion of three Independent Security and Privacy Assessment Engagement Projects to strengthen the organizations controls over its Application Risk Management Program. Those are:
 - Independent NIST 800-53 Federal Computer Security Standards Based Assessment of the State's Technology Hosting Platform and Data Center along with State Service Organization Controls.
 - Independent NIST 800-53 Federal Computer Security Standards Based Assessment of the organizations Third-Party Hosted Medicaid Management Information System.
 - Independent HHS/OCR Audit Protocol Criteria Assessment of the organization's compliance status pertaining to privacy, security, and breach notification laws, regulations, and standards.
- Working with State Auditors to provide artifacts and supporting documentation that demonstrates the organization's commitment to tighten application risk management controls by addressing organizational oversight procedures known as Complimentary User Entity Controls (CUECs) necessary to continuously monitor service delivery management and service organization transaction processing systems and services.
- Requiring healthcare service providers to provide System Security Plans and periodic security metrics reports that demonstrate the service organizations compliance status with Federal computer security standards.
- Reviewing and approving service organization contingency plans and disaster recovery exercise reports to ensure that Medicaid transaction processing systems meet the organizations data confidentiality, integrity, and availability standards and requirements.
- Continuing to work with organizational leadership to address budgetary and security resource requirements to grow the security program staff to an appropriate level.
- Working closely with CMS and Social Security Administration Federal business partners to certify planned Medicaid Transaction Processing Systems and Services to ensure that they meet applicable Federal and State Security and Privacy Laws, Regulations, and Standards.

2017-037 Strengthen Application Risk Management Program

Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Community Health
Repeat of Prior Year Finding:	2016-044

Finding Status: Partially Resolved

See response to finding number 2018-026.

2016-044 Strengthen Application Risk Management Program	
Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Community Health

Finding Status: Partially Resolved

See response to finding number 2018-026.

2018-027 Continue to Monitor Controls over Eligibility Documentation

Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Human Services
Repeat of Prior Year Finding:	2017-038

Finding Status: Partially Resolved

After training was completed for staff in October 2018, a few errors were still noted during subsequent quality reviews. The Division of Family and Children Services will continue a comprehensive three-layer internal controls monitoring process, specifically targeting Temporary Assistance for Needy Families (TANF). The following Corrective Action Plan (CAP) will be implemented:

- Monthly, District TANF Field Program Specialists (FPS) will perform first-level case Accuracy Review on sample TANF cases prior to client notification of eligibility status.
- Second-level reviews will also be completed by FPS staff.
- District supervisors and/or administrators will perform first and second level reviews.

2017-038 Strengthen Controls over Eligibility Documentation

Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Human Services

Finding Status: Partially Resolved

See response to finding number 2018-027.

2018-028 Monitor Controls over Child Support Noncooperation Sanctions

Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Human Services
Repeat of Prior Year Finding:	2017-039

Finding Status: Partially Resolved

The monitoring of the Sanction Request reports were not previously being monitored by applicable staff. However, the Division of Family and Children Services will implement additional steps to the current multi-layer internal controls. The following Corrective Action Plan (CAP) will be implemented:

- Training for veteran District TANF staff has been completed.
- Field Program Specialists (FPS) will track all sanction requests to ensure timely action.
- Monthly logs of TANF related sanction requests will be received directly from the Office of Child Support Services (OCSS) and the logs will be reviewed by State Office staff to ensure sanctions have been implemented.
- Further, Field Program Specialists (FPS) will be copied on all sanction requests and are tracking to ensure timely action. This will add an additional layer of control to detect instances of noncompliance.
- TANF policy has been updated to include district procedures for OCSS sanctions.

2017-039 Improve Controls over	Child Support Noncooperation Sanctions
Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Human Services

Finding Status: Partially Resolved

See response to finding number 2018-028.

2017-040 Strengthen Logical Access Controls

Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Department of Human Services

Finding Status: Previously Reported Corrective Action Implemented

2018-029 Improve Controls over Medicaid Eligibility Determinations	
Federal Agency:	U.S. Department of Health and Human Services
State Entity:	Various State Agencies:
	Department of Community Health and
	Department of Human Services

Finding Status: Unresolved

The Department of Community Health ("DCH") has begun the implementation of the following corrective action plan, however, not all actions were completed by June 30, 2019. As a result, the corrective action was not fully resolved as of the end of the fiscal year.

Below is the Department of Community Health's ("DCH") update to the corrective action plan for SSI Ex-Parte cases for continuing Medicaid determination issued in SFY2018.

- Training materials will be developed and submitted to DCH Member Policy Unit for review and approval. Once approved, the DFCS State Office Medicaid Unit will re-train appropriate ABD and Family Medicaid Administrators, Field Program Specialists, Medicaid eligibility supervisors and Medicaid eligibility workers on the correct procedures for Ex-Parte. Ongoing training will be provided for new staff. Status: Training materials have been developed and approved by DCH. Training of ABD, Family Medicaid Administrators, Field Program Specialists, Medicaid eligibility supervisors, and Medicaid eligibility workers will be completed by April 30, 2020.
- The DFCS State Office Medicaid Unit will designate an individual to obtain the daily reports ELG-5003-D SSI MAO-Q Track Ex-Parte Determination List and ELG-5004-D SSI RSM Ex-Parte Determination List, and the monthly reports ELG-5103-M SSI Q-Track Non-Confirmation List and ELG-5104-M SSI RSM Non-Confirmation List from GAMMIS. Status: We will designate an individual by December 31, 2019.
- The assigned designee will format and filter the daily and monthly lists by District and distribute to the assigned field ABD administrator with a copy to the District's Medicaid Field Program Specialist (FPS). Status: This process will be finalized and in place by April 30, 2020.
- The DFCS FPS staff will monitor progress of the lists and reach out to Districts that have not submitted responses in a timely manner. Assigned staff are to review the lists and take action daily, including filling out the DCH notification forms. Field staff are to report up to the DFCS State office Medicaid unit manager on a weekly basis. In addition, they will report any issues encountered for review and resolution. District Leadership will be notified of any issues related to untimely completion of this work. Status: This process will be finalized and in place by April 30, 2020.
- A summary report will be sent to DCH from the DFCS Medicaid Unit to advise of the number of outstanding cases by the 15th of each month to include the following: the number of cases assigned, cases completed, and cases that remain pending for the previous month. The report will specify district, the number of Ex-Parte from the end of the previous reporting period, the number of any additional Ex-Parte, the number completed, and the remaining at the end of the reporting period. Status: The new reporting process will be implemented by April 30, 2020.

2018-029 Improve Controls over Medicaid Eligibility Determinations (continued)

- DCH MEQC will monitor the monthly submission of reports, track progress, and review efforts as part of quarterly Program Improvement Plan (PIP) meetings with DFCS. The Member Policy unit will address progress on a monthly basis as part of regular meetings with DFCS Medicaid Unit and provide guidance on any additional steps required. Status: This process will be finalized and in place by April 30, 2020.
- DCH Member Policy unit will receive a report from DXC of Ex-Parte cases closed on a monthly basis to track actions taken on the cases and ensure there is no overlap in eligibility. Status: This process will be finalized and in place by April 30, 2020.
- DCH will develop a plan to automate the Ex-Parte CMD process between GAMMIS and Gateway. Status: DCH has moved forward with requesting a CSR (CSR #1492) which will result in modifications to GAMMIS. The business requirements have been drafted. We will be meeting with our fiscal agent, DXC, to prioritize and finalize all requested changes. The next step will be to submit a Change Request (CR) for Gateway.
- DCH will refund the requested amount of \$192,298 in accordance with federal regulations. Status: DCH has taken the necessary steps to refund the \$192,298.

Also, the above corrective actions are a collaboration between both DCH and DHS and require continuous procedure process review. These corrective actions were implemented in SFY2019 and expect to be fully finalized by April 2020.

2016-047 Strengthen Controls over Preparing UI Financial ReportsFederal Agency:U.S. Department of LaborState Entity:Department of Labor

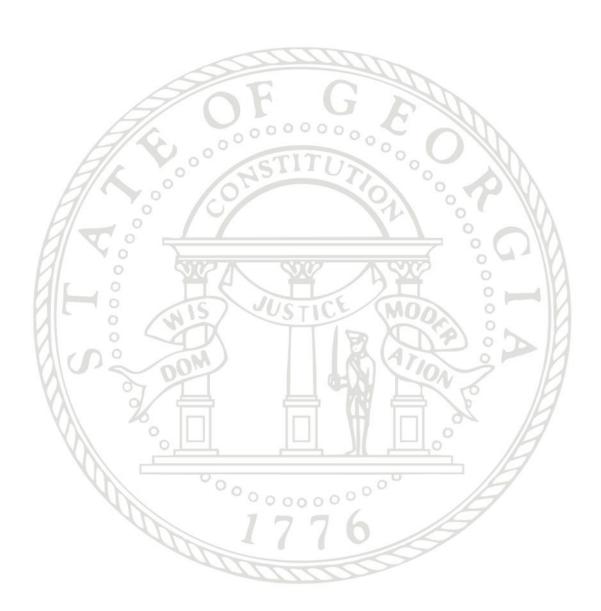
Finding Status: Previously Reported Corrective Action Implemented

2017-041 Continue to Improve Subrecipient Monitoring Controls		
Federal Agency:	U.S. Department of Transportation	
State Entity:	Department of Transportation	
Repeat of Prior Year Fin	ding: 2016-049, 2015-036, 2014-019, FA-484-13-03, FA-484-12-05	
Finding Status: Previo	ously Reported Corrective Action Implemented	
2016-049 Improv	e Subrecipient Monitoring Controls	
Federal Agency:	U.S. Department of Transportation	
State Entity:	Department of Transportation	
State Entity.	Department of Transportation	
Finding Status:	Previously Reported Corrective Action Implemented	
2015-036 Noncon	npliance with Subrecipient Monitoring Requirements	
Federal Agency:	U.S. Department of Transportation	
State Entity:	Department of Transportation	
Finding Status:	Previously Reported Corrective Action Implemented	
2014-019 Noncompliance with Subrecipient Monitoring Requirements		
Federal Agency:	U.S. Department of Transportation	
State Entity:	Department of Transportation	
Finding Status:	Previously Reported Corrective Action Implemented	
FA-484-13-03 <u>No</u>	ncompliance with Subrecipient Monitoring Requirements	
Federal Agency:	U.S. Department of Transportation	
State Entity:	Department of Transportation	
Finding Status:	Previously Reported Corrective Action Implemented	
FA-484-12-05 Inadequate Internal Controls over Subrecipient Monitoring		
Federal Agency:	U.S. Department of Transportation	
State Entity:	Department of Transportation	
Finding Status:	Previously Reported Corrective Action Implemented	
2018-030 Sub-recipient Monitoring		
Federal Agency:	U.S. Environmental Protection Agency	
State Entity:	Georgia Environmental Finance Authority	

Finding Status: Previously Reported Corrective Action Implemented

2018-031 <u>Sub-recipient M</u>	lonitoring	
Federal Agency:	U.S. Environmental Protection Agency	
State Entity:	Georgia Environmental Finance Authority	
Finding Status: Previo	usly Reported Corrective Action Implemented	
2018-032 Continue to Stro	engthen Logical Access Controls	
Federal Agency:	Various Federal Agencies:	
	U.S. Department of Agriculture	
	U.S. Department of Health and Human Services	
State Entity:	Department of Human Services	
Repeat of Prior Year Fine	ding: 2017-042, 2016-052	
Finding Status: Previously Reported Corrective Action Implemented		
2017-042 Continue to Strengthen Change Management and Logical Access Controls		
Federal Agency:	U.S. Department of Agriculture	
5 .	U.S. Department of Health and Human Services	
State Entity:	Department of Human Services	
Repeat of Prior Y	ear Finding: 2016-052	
Finding Status:	Previously Reported Corrective Action Implemented	
2016-052 Strengthen Change Management and Logical Access Controls		
Federal Agency: U.S. Department of Agriculture		
i cuciai rigency.	U.S. Department of Health and Human Services	
State Entity:	Department of Human Services	
v		

Corrective Action Plan for Current Year Findings



Brian P. Kemp Governor

Thomas Alan Skelton, CPA State Accounting Officer



February 28, 2020

Mr. Greg S. Griffin, State Auditor Georgia Department of Audits and Accounts 270 Washington Street, S.W., Room 1-156 Atlanta, Georgia 30334-8400

Dear Mr. Griffin,

Enclosed with this letter is the State of Georgia's "Corrective Action Plan" (CAP) for reporting in the Single Audit for fiscal year ending June 30, 2019. This CAP is compiled by the State Accounting Office (SAO) based on corrective action plans provided by the respective State Organization, and is organized by finding type (financial statement and federal award), Federal Agency (if applicable), State Organization, and finding number.

The State's CAP satisfies the requirements as detailed in Title 2 U.S. *Code of Federal Regulations, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), Subpart F, Section 511 – Audit findings follow-up.

If you have any questions regarding this CAP, please contact our Office.

Sincerely,

Alan Sh

Thomas Alan Skelton, CPA State Accounting Officer

200 Piedmont Avenue • 1604 West Tower • Atlanta, Georgia 30334 • (404) 656-2133 • (404) 463-5089 FAX www.sao.georgia.gov

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<u>FINANCIAL STATEMENT FINDINGS REPORTED UNDER</u> <u>GOVERNMENT AUDITING STANDARDS</u>

2019-001 Continue to Improve Financial Statement Preparation

State Entity: Statewide Finding

Corrective Action Plans:

Preparing the CAFR continues to be a very complex and manual process. The items noted in this finding generally relate to misclassifications of data within the CAFR. SAO will continue to train staff on CAFR preparation which will include focusing on how data is presented. SAO will also continue to work towards automation and will add in additional analytical procedures, where applicable, to ensure consistent and accurate presentation of financial amounts within the CAFR.

Estimated Completion Date: June 30, 2020

Contact Person: Kris Martins, Deputy State Accounting Officer - Financial Reporting **Telephone:** (404) 463-1528; **E-mail:** kris.martins@sao.ga.gov

2019-002 Strengthen Logical Access Controls

State Entity: Statewide Finding

Corrective Action Plans:

As noted in the finding, the user access issues have already been resolved. The recommendations will be reviewed and evaluated in conjunction with other logical access and change controls in place and will be implemented based on risk.

Estimated Completion Date: June 30, 2020

Contact Person: Barbara Rosenke-Sweeney, Chief Information Officer **Telephone:** (404) 656-2133; **E-mail:** barbara@sao.ga.gov

2019-003 Improve Financial Reporting Controls

State Entity: Department of Public Health

Corrective Action Plans:

DPH will strengthen its financial controls, reconciliations, reporting, and year-end close processes by:

- Improving, streamlining, and automating routine accounting processes and procedures
- Performing regular, timely, and thorough general ledger account reconciliations and analysis
- Researching and resolving outstanding differences on bank reconciliations
- Increasing training and regularly scheduled review sessions with financial staff
- Establishing task lists, timelines, and deadlines for timely transactional processing and reporting to ensure a smooth and efficient year-end financial close process
- Analyzing more carefully accounting data records and transactions for accuracy and integrity before submission for entry and reporting

2019-003 <u>Improve Financial Reporting Controls (continued)</u> Estimated Completion Date: December 31, 2020

Contact Person: Lee Wright, Chief Financial Officer **Telephone:** (404) 463-2725; **E-mail:** lee.wright@dph.ga.gov

2019-004 <u>Continue to Improve Internal Controls over Claims Processing</u> State Entity: Department of Community Health

Corrective Action Plans:

In addition to the third-party, financial audits of the PBM that include rebates, financial accuracy and financial guarantee components that occur on an ongoing basis, DCH plans to take the following steps:

- 1. Implement monthly claims testing in addition to testing when implementing benefit changes and the annual readiness review conducted; and
- 2. Include eligibility as part of the ongoing PBM audits.

Estimated Completion Date: May 31, 2020

Contact Person: Jeff Rickman, Executive Director **Telephone:** (404) 463-0826; **E-mail:** jrickman@dch.ga.gov

2019-005 Continue to Strengthen Financial Reporting Controls

State Entity: Department of Community Health

Corrective Action Plans:

The Department of Community Health will implement the following corrective actions to continue to strengthen financial reporting controls.

- DCH will continue its annual engagement meeting with its contracted actuary to prepare a timeline of key dates for data sharing, to discuss methodologies and assumptions and reporting requirements to ensure schedules and calculations are accurate and complete.
- DCH will document accounting policies and procedures for specific year-end accrual journal entries such as Drug Rebates and Benefit Estimates and provide training to staff.
- DCH will create and perform key analytics to help prevent or timely detect financial errors in data used to prepare the CAFR-related financial statements.
- DCH will continue to ensure Financial Reporting staff receive additional hours of training in GASB, GAAP and governmental financial reporting annually.
- DCH will continue to hire staff in the area of Financial Reporting with higher technical accounting skills to help oversee the preparation of financial statements.

Estimated Completion Date: June 30, 2020

Contact Person: Tisha Phillips, Director of Financial Services **Telephone:** (404) 657-7201; **E-mail:** tisha.phillips@dch.ga.gov

2019-006 Continue to Strengthen Application Risk Management Program

State Entity: Department of Community Health

Corrective Action Plans:

DCH has taken steps to obtain the necessary federal and state funds and security resources to address these deficiencies in a timely manner. DCH Management is working to onboard security program resources during the 2nd Quarter of 2020 and procure the necessary third-party security services by the 3rd Quarter of 2020 and fully remediate the audit findings by the end of CY 2020.

Estimated Completion Date: December 31, 2020

Contact Person: Sherman Harris, CISO, Cybersecurity Director **Telephone:** (404) 656-9653; **E-mail:** sheharris@dch.ga.gov

2019-007 Strengthen Logical Access ControlsState Entity:Department of Human Services

Corrective Action Plans:

DHS has corrected all concerns related to this finding. The cited user exceptions have been remediated and DHS implemented procedures whereby administrative database privileges are reviewed/adjusted monthly for appropriateness of access based on current job roles and responsibilities. Supporting evidence for these reviews is retained for at least 18-months.

Estimated Completion Date: February 27, 2020

Contact Person: Ananias Williams, Deputy Chief Information Officer **Telephone:** (470) 463-0929; **E-mail:** ananias.williams@dhs.ga.gov

2019-008 Strengthen Logical Access Controls

State Entity: Department of Human Services

Corrective Action Plans:

DHS has corrected all concerns related to this finding. The cited generic user IDs have been removed and all Data Base Administrators (DBAs) are now required to use their assigned, unique and individual user ID when accessing the database. Other cited developers and users have been removed. Default general security settings have been modified to address the security concerns. DHS implemented procedures for periodic review of database access for appropriateness of access based on current job roles and responsibilities.

Estimated Completion Date: February 27, 2020

Contact Person: Ananias Williams, Deputy Chief Information Officer **Telephone:** (470) 463-0929; **E-mail:** ananias.williams@dhs.ga.gov

2019-009 <u>Strengthen Logical Access Controls</u> State Entity: Department of Revenue

Corrective Action Plans:

Change Management – Monitoring

The Georgia Department of Revenue (DOR) will submit a request to remove all unauthorized personnel. We will limit access to only those required for job duties and set up a process to review the access granted to the production file share to ensure that no unauthorized access has been granted.

Currently there is a process within the application called Health Check. This process runs daily and compares the Repository to the Database and reports any discrepancies via email to the support team.

Health Check was enabled on 10/1/2017.

Change Management – Windows Developer Access to Production

V12 of the Tax application implements role-based security and would give DOR the opportunity to do a complete review of how application security is administered and update to align more with least privilege standards.

ITS will work to remove all elevated developer production access in ITS. We will replace this access with view only in areas that could or have the potential to impact the financials of DOR and are not critical to the support of the application. The DOR support team will still need access to production support areas required for successful support of the ITS application. If elevated access to production is needed to support the business in areas that are not required for production support, access will only be granted on a temporary basis and that access will be documented through a security case and an end date of elevated access will be required. The case will be documented with why the access is needed and what will be done while the developer has the access. This case must be submitted by the developers' team lead and approved by senior application management.

V12 estimated installation date is July 2022.

Logical Access – Monitoring and Current User

Starting with the upcoming fiscal year, a work item will be systematically created twice a year (first business day of January and first business day of July) which will be auto-assigned to any user with employees in ITS. Work item lists all employees and their access and cannot be closed until all employees have been marked as reviewed and approved. Any access not approved will require supervisor to follow current process of submitting security case to change access.

A manual process for reviewing was implemented on 7/1/2019. An automated version of this was implemented on 2/19/2020.

Logical Access – Database – Privileged User

The DBA privileges granted to specific user(s) was revoked on 4/30/2019 as soon as the issue was identified.

2019-009 Strengthen Logical Access Controls (continued)

Logical Access – Database – General Security Settings This Audit Trail has always been turned on at DOR. It is believed to have been turned off as part of maintenance. The Audit Trail setting was turned back on 7/10/2019 immediately after being discovered.

Estimated Completion Date: June 30, 2020

Contact Person: Henry Rutherford, Senior Manager App Support Development **Telephone:** (404) 417-6497; **E-mail:** henry.rutherfordIII@dor.ga.gov

2019-010 Continue to Strengthen Logical Access Controls

State Entity: Georgia World Congress Center Authority

Corrective Action Plans:

In FY20, GWCCA management and staff will implement the following procedures:

- 1. In January of each year, a report will be generated of all Paycom non-client side, base level user's access. This report will be sent directly to the Directors/Managers of each department to verify the following:
 - a. Confirm users are currently in their department
 - b. Confirm user's level of access is valid and accurate

Estimated Completion Date: January 31, 2020.

- 2. An end of month User Change Report will be reviewed by the HR Director & HRIS Analyst. Applicable Directors will receive a User Change Report if users from their department are listed on the report and there's a need for further clarification of a change.
- 3. An annual review of all system privileges and security rights will be conducted for all Supervisor level and above (Managers, Directors, Executives) client side users. Estimated Completion Date: April 30, 2020.
- 4. A quarterly review of the Super User activity report will be conducted by the Director of Internal Audit.
- 5. Permission Profiles will be created for each department, detailing all supervisors, managers and admin roles and their rights within the department. An annual review of the Permission Profiles will be conducted by the Human Resources Department and the Director of each department to ensure all users are accurate and maintain the appropriate level of access.

Estimated Completion Date: April 30, 2020

Contact Person: Ronald Miranda, Director of Human Resources **Telephone:** (404) 223-4417; **E-mail:** RMiranda@GWCC.com

FEDERAL AWARD FINDINGS

2019-011 Improve Controls over the Return of Title IV Funds Process

Federal Agency:U.S. Department of EducationState Entity:Clayton State University

Corrective Action Plans:

The Institution concurs with this finding and these are isolated incidents. We will complete dual R2T4 calculations. The R2T4 calculation will be performed by the Financial Aid team member and by the Bursar's Office team member to confirm the R2T4 calculation and return amount.

Estimated Completion Date: December 17, 2019

Contact Person: Lakisha Sanders, Director of Financial Aid **Telephone:** (678) 466-4181; **E-mail:** LakishaSanders@clayton.edu

2019-012 Improve Controls over the Verification Process

Federal Agency:U.S. Department of EducationState Entity:Fort Valley State University

Corrective Action Plans:

The University has invested in an electronic system to collect and store documents to prevent error in losing paperwork. The Office of Financial (OFA) will ensure proper training of employees on the verification process. Also, as employee's transition out of the department, the Director or Associate Director will ensure the proper review of the financial aid files they were responsible for are properly documented and processed.

Verification was performed on the student in question with the correct documentation and no changes were needed. The student's award amounts stayed the same. No aid needs to be returned to the U.S. Department of Education.

Estimated Completion Date: December 30, 2019

Contact Person: Kimberly Morris, Director, Financial Aid **Telephone:** (478) 825-6605; **E-mail:** morrisk01@fvsu.edu

2019-013 Improve Controls over Cost of Attendance Budgets

Federal Agency:U.S. Department of EducationState Entity:Georgia Southwestern State University

Corrective Action Plans:

Once the Vice President for Student Engagement and Success confirms the COA all students will be re-evaluated. Furthermore, the University will attempt to set the COA before evaluations begin for the aid year.

Estimated Completion Date: February 17, 2020

Contact Person: Sandra Johnson, Assistant Director of Financial Aid **Telephone:** (229) 931-2031; **E-mail:** sandra.johnson@gsw.edu

2019-014 Improve Controls over Unofficial WithdrawalsFederal Agency: U.S. Department of EducationState Entity:Georgia Southwestern State University

Corrective Action Plans:

The Financial Aid Office will run the unofficial withdrawal report and share the original report with the Student Accounts Office, so that no students will be missed in future processes.

Estimated Completion Date: February 17, 2020

Contact Person: Sandra Johnson, Assistant Director of Financial Aid **Telephone:** (229) 931-2031; **E-mail:** sandra.johnson@gsw.edu

2019-015 Strengthen Controls over Enrollment Reporting

Federal Agency:U.S. Department of EducationState Entity:Albany Technical College

Corrective Action Plans:

Faculty are going to receive more training to insure that they report withdrawals to the Registrar earlier. Also, the Registrar is going to update the course status as well as the overall student status to insure the student's enrollment status is updated and sent to the National Student Clearinghouse and NSLDS.

Estimated Completion Date: January 13, 2020

Contact Person: Barbara Brown, Vice President of Student Affairs **Telephone:** (229) 430-3504; **E-mail:** bbrown@albanytech.edu

2019-016 Strengthen Controls over the Awarding Process

Federal Agency:U.S. Department of EducationState Entity:Georgia Piedmont Technical College

Corrective Action Plans:

The Technical College has modified its procedure for SAP to ensure compliance but will also institute an additional review for students whose SAP calculations were performed before the system was reconfigured to ensure accurate calculations. The Technical College will thoroughly review its awarding setup to ensure no student awards are calculated incorrectly.

Estimated Completion Date: April 30, 2020

Contact Person: James Chiara, Director of Financial Aid **Telephone:** (404) 297-9522; **E-mail:** chiaraj@gptc.edu

2019-017 Improve Controls over Federal Work-Study Earmarking Requirements

Federal Agency:U.S. Department of EducationState Entity:Georgia Piedmont Technical College

Corrective Action Plans:

The Technical College has increased the rate of pay for the positions that qualify for the federal earmarking requirement and will do a marketing campaign to students to attract more students to these positions. This will ensure these positions stay filled and that the 7% threshold is met in the future.

Estimated Completion Date: June 30, 2020

Contact Person: James Chiara, Director of Financial Aid **Telephone:** (404) 297-9522; **E-mail:** chiaraj@gptc.edu

2019-018 Improve Controls over Special Reporting

Federal Agency:U.S. Department of EducationState Entity:Georgia Piedmont Technical College

Corrective Action Plans:

The Technical College will ensure all documentation regarding the FISAP is saved and accessible by multiple individuals to ensure turnover will not result in this information not being accessible. The Financial Aid Office will conduct a second review after submission with the Business Office, before the December deadline to process corrections, to ensure both parties are in agreement and have documentation to justify all reported figures.

Estimated Completion Date: December 31, 2019

Contact Person: James Chiara, Director of Financial Aid **Telephone:** (404) 297-9522; **E-mail:** chiaraj@gptc.edu

2019-019 Strengthen Controls over Enrollment Reporting

Federal Agency:U.S. Department of EducationState Entity:Georgia Piedmont Technical College

Corrective Action Plans:

The Technical College has developed a report to identify students who need their enrollment status updated after the term ends when unearned "F" grades are entered. The Registrar's Office will coordinate with the System Office to ensure all withdrawal reports are updated timely.

Estimated Completion Date: December 31, 2019

Contact Person: James Chiara, Director of Financial Aid **Telephone:** (404) 297-9522; **E-mail:** chiaraj@gptc.edu

2019-020 Improve Controls over Unofficial WithdrawalsFederal Agency: U.S. Department of EducationState Entity:Wiregrass Technical College

Corrective Action Plans:

All accounts identified in the review have been corrected and submitted to COD. Effective for the Fall 2019 term, Wiregrass Georgia Technical College (WGTC) has revised its grading policy and procedures. Going forward, WGTC will require that all "F" grades submitted by faculty include a last date of academic related activity (LDA) entered into Banner. The Registrar's Office will review the grades and LDAs to determine if the student earned a final grade for their course(s). Academic Deans will monitor any late and/or missing responses from faculty that require additional validation. Grades that cannot be validated as 'earned' will be considered unearned and processed according to federal guidelines by the Financial Aid Office. Students that are considered withdrawn will have the ability to appeal their status with the Registrar's Office and potentially reinstate their funding and enrollment status.

Estimated Completion Date: December 20, 2019

Contact Person: Angela Hobby, Vice President for Enrollment Management **Telephone:** (229) 333-5365; **E-mail:** angela.hobby@wiregrass.edu

2019-021 Improve Controls over Medicaid Capitation Payments

Federal Agency:U.S. Department of Health and Human ServicesState Entity:Department of Community Health

Corrective Action Plans:

The Department ("DCH") will review and update its current policy and process related to the identification and review of members with multiple member identification numbers. Additionally, DCH will review and update its policy and process related to the merger and consolidation of multiple identification numbers associated with the same member. This review will include education and clarification of those instances wherein the merger of multiple identification numbers is not appropriate and deemed an exception.

2019-021 Improve Controls over Medicaid Capitation Payments (continued) Estimated Completion Date: September 1, 2020

Contact Person: Lynnette Rhodes, Executive Director, Medical Assistance Plans **Telephone:** (404) 656-7513; **E-mail:** lrhodes@dch.ga.gov

2019-022 Improve Controls over Medicaid Payments

Federal Agency:U.S. Department of Health and Human ServicesState Entity:Department of Community Health

Corrective Action Plans:

The Department ("DCH") will modify its date of death processes within the Georgia Medicaid Management Information System ("GAMMIS") to apply additional edits to all date of death information sources received in GAMMIS.

Estimated Completion Date: September 1, 2020

Contact Person: Lynnette Rhodes, Executive Director, Medical Assistance Plans **Telephone:** (404) 656-7513; **E-mail:** lrhodes@dch.ga.gov

2019-023 Improve Controls over Medicaid Capitation Payments

Federal Agency:U.S. Department of Health and Human ServicesState Entity:Department of Community Health

Corrective Action Plans:

The Department ("DCH") will modify its Georgia Medicaid Management Information System ("GAMMIS") to include processes to recoup capitation payments from the Care Management Organizations for Medicare eligible recipients when appropriate.

DCH will review the eligibility criteria with staff to ensure that all guidelines are understood and properly implemented when programming system edits for its managed care programs.

Further, DCH will follow the recommendation of DOAA and consult with CMS regarding overpayments for members who are retroactively enrolled in Medicare.

Estimated Completion Date: September 1, 2020

Contact Person: Lynnette Rhodes, Executive Director, Medical Assistance Plans **Telephone:** (404) 656-7513; **E-mail:** lrhodes@dch.ga.gov

2019-024 Continue to Strengthen Application Risk Management Program

Federal Agency:U.S. Department of Health and Human ServicesState Entity:Department of Community Health

Corrective Action Plans:

DCH has taken steps to obtain the necessary federal and state funds and security resources to address these deficiencies in a timely manner. DCH Management is working to onboard security program resources during the 2nd Quarter of 2020 and procure the necessary third-party security services by the 3rd Quarter of 2020 and fully remediate the audit findings by the end of CY 2020.

Estimated Completion Date: December 31, 2020

Contact Person: Sherman Harris, CISO, Cybersecurity Director **Telephone:** (404) 656-9653; **E-mail:** sheharris@dch.ga.gov

2019-025 Improve Controls over Inpatient Medicaid Payments

Federal Agency:U.S. Department of Health and Human ServicesState Entity:Department of Community Health

Corrective Action Plans:

The Department (DCH) will review the State Plan to evaluate if any changes are needed. Also, DCH will review the third-party vendor contract to determine if it needs to be amended to include language stating all audits must be completed by end of state fiscal year and add language requiring vendor to revise desk review process to ensure expanded audits are conducted annually where necessary.

Estimated Completion Date: June 30, 2020

Contact Person: Kim Morris, Director of Reimbursement **Telephone:** (404) 657-0229; **E-mail:** kim.morris@dch.ga.gov

2019-026 Strengthen Logical Access Controls

Federal Agency:U.S. Department of Health and Human ServicesState Entity:Department of Human Services

Corrective Action Plans:

DHS has corrected all concerns related to this finding. The cited generic user IDs have been removed and all Data Base Administrators (DBAs) are now required to use their assigned, unique and individual user ID when accessing the database. Other cited developers and users have been removed. Default general security settings have been modified to address the security concerns. DHS implemented procedures for periodic review of database access for appropriateness of access based on current job roles and responsibilities.

Estimated Completion Date: February 27, 2020

Contact Person: Ananias Williams, Deputy Chief Information Officer **Telephone:** (470) 463-0929; **E-mail:** ananias.williams@dhs.ga.gov

2019-027 Improve Controls over Medicaid Eligibility Determinations

Federal Agency: U.S. Department of Health and Human ServicesState Entity:Various State Agencies:
Department of Community Health
Department of Human Services

Corrective Action Plans:

DCH will continue to meet with the DFCS Medicaid Unit on a monthly basis to review and monitor the status of the Ex-Parte list and to ensure that Continuing Medicaid Eligibility Determinations are performed. DFCS will continue training identified staff until all training is complete. Ongoing training will be provided to new hires.

DCH, through its fiscal agent, will continue programming the required modifications to the GAMMIS system in order to automate the Ex-Parte Continuing Medicaid Eligibility Determination process. Automating the process will result in an interface between the Integrated Eligibility System ("Gateway") and Georgia Medicaid Management Information System (GAMMIS).

Pending completion of the automated process, daily and monthly reports will be created, reviewed, and distributed to designated staff. Ex-Parte cases will be assigned to staff for completion, monitored, and tracked by the lead supervisor and Director.

Estimated Completion Date:

- The projected completion date for modifications to the GAMMIS system is September 1, 2020.
- Training will be completed by DFCS on or before April 30, 2020.

Estimated Completion Date: September 1, 2020

Contact Person: Lynnette Rhodes, Executive Director, Medical Assistance Plans **Telephone:** (404) 656-7513; **E-mail:** lrhodes@dch.ga.gov

2019-028 Follow Established Controls over Real Property and EquipmentFederal Agency: U.S. Department of the InteriorState Entity:Department of Natural Resources

Corrective Action Plans:

In any future events of inadequate staffing, reconciliations will be reviewed and approved monthly by the asset manager's supervisor.

Estimated Completion Date: March 20, 2020

Contact Person: Tim Wright, Accounting Director **Telephone:** (404) 656-7736; **E-mail:** Tim.Wright@DNR.GA.GOV 2019-029 Strengthen Controls over the Awarding ProcessFederal Agency: Various Federal Agencies:U.S. Department of EducationU.S. Department of Health and Human ServicesState Entity:University of West Georgia

Corrective Action Plans:

The population selection process for the enrollment freeze was determined to be incorrect. In August 2019, Financial Aid worked with an ITS member to resolve the problem. The population selection process was corrected, but it was corrected temporarily for Fall 2019. A permanent solution for coding the correct population selected is already in progress.

Estimated Completion Date: January 15, 2020

Contact Person: Leigh Ann Hussey, Director, Financial Aid **Telephone:** (678) 839-2256; **E-mail:** lhussey@westga.edu

2019-030 Improve Controls over Cost of Attendance Budgets

Federal Agency:Various Federal Agencies:
U.S. Department of Education
U.S. Department of Health and Human ServicesState Entity:University of West Georgia

Corrective Action Plans:

For the 18-19 award year, COA budgets were adjusted by a straight 3% across-the-board from 17-18 award year COA budgets. Documentation from 17-18 COA budgets could not be located. The 19-20 award year COA budgets were correctly documented via a Qualtrics survey and corresponding results. The results are stored on the Financial Aid Shared Drive. In Spring 2019, USG informed institutions during an audit webinar that straight percentage increases across the board were no longer acceptable. UWG Financial Aid has already adjusted the Financial Aid Policy and Procedure Manual to state that "Cost of Attendance research will be performed annually before awarding for the upcoming aid year. Documentation will be placed on the Financial Aid shared drive."

Estimated Completion Date: July 1, 2019

Contact Person: Leigh Ann Hussey, Director, Financial Aid **Telephone:** (678) 839-2256; **E-mail:** lhussey@westga.edu

2019-031 Improve Controls over the Return of Title IV Funds Process

Federal Agency: Various Federal Agencies: U.S. Department of Education U.S. Department of Health and Human Services

State Entity: University of West Georgia

Corrective Action Plans:

The UWG Financial Aid Office will implement a temporary corrective action plan immediately followed by a permanent corrective action plan. Until the permanent plan can be implemented, 2 UWG Financial Aid employees will review each R2T4 calculation. This will ensure timeliness and accuracy in the current process. In order to reduce the capacity for human error as much as possible, the permanent solution will be to completely move the R2T4 process into Banner. The UWG Financial Aid Office will work to complete this project with both the Bursar's and Registrar's Offices.

Estimated Completion Date: August 31, 2020

Contact Person: Leigh Ann Hussey, Director, Financial Aid **Telephone:** (678) 839-2256; **E-mail:** lhussey@westga.edu

State of Georgia

ORGANIZATIONAL UNIT	CONTROL <u>NUMBERS</u>
Accounting Office, State	407
Administrative Services, Department of	403
Agricultural Commodities Commissions	93X
Agricultural Exposition Authority, Georgia	926
Agriculture, Department of	402
Audits and Accounts, Department of (*)	404
Aviation Authority, Georgia	992
Banking and Finance, Department of	406
Behavioral Health and Developmental Disabilities, Department of	441
Boll Weevil Eradication Foundation of Georgia, Inc.	930
Building Authority, Georgia (*)	900
Community Affairs, Department of (*)	428
Community Health, Department of	419
Community Supervision, Department of	477
Correctional Industries Administration, Georgia	921
Corrections, Department of	467
Defense, Department of	411
Development Authority, Georgia (*)	914
Driver Services, Department of	475
Early Care and Learning, Department of	469
Economic Development, Department of	429
Education, Department of	414
Environmental Finance Authority, Georgia (*)	928
Financing and Investment Commission, Georgia State (*)	409
General Assembly, Georgia (*)	444
Geo. L. Smith II Georgia World Congress Center Authority	922
Georgia Forestry Commission	420
Governor, Office of the	422
Higher Education Assistance Corporation, Georgia (*)	918
Higher Education Facilities Authority, Georgia (*)	969
Housing and Finance Authority, Georgia (*)	923
Human Services, Department of	427
Insurance, Department of (1)	408
International and Maritime Trade Center Authority, Georgia	974
Investigation, Georgia Bureau of	471
Jekyll Island State Park Authority	910
Jekyll Island Foundation, Inc.	993
Judicial Branch	430
Court of Appeals, Georgia	432
Judicial Council of Georgia	434

(1) Organization elected to use the 10% de minimis cost rate, see page C-99 for more information.

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ORGANIZATIONAL UNIT	CONTROL <u>NUMBERS</u>
Juvenile Court Judges of Georgia, Council of	431
Prosecuting Attorneys' Council of Georgia (1)	418
Superior Courts, Georgia	436
Supreme Court, Georgia	438
Juvenile Justice, Department of	461
Labor, Department of	440
Lake Lanier Islands Development Authority	913
Law, Department of	442
Lottery Corporation, Georgia (*)	973
Natural Resources, Department of	462
North Georgia Mountains Authority	912
OneGeorgia Authority	981
Pardons and Paroles, State Board of	465
Pension and Other Employee Benefit Trust Funds	
Augusta University Early Retirement Pension Plan	5127
Employees' Retirement System of Georgia (*)	0127
Regular	416
Deferred Compensation 401 (K) Plan	n/a
Deferred Compensation 457 Plan	n/a
Defined Contribution Plan, Georgia	n/a
District Attorneys' Retirement Fund of Georgia	946
Judicial Retirement System, Georgia	n/a
Legislative Retirement System, Georgia	n/a
Military Pension Fund, Georgia	n/a
Public School Employees Retirement System	468
State Employees' Assurance Department	n/a
Superior Court Judges Retirement Fund of Georgia	945
Firefighters' Pension Fund, Georgia	950
Judges of the Probate Courts Retirement Fund of Georgia	949
Magistrates Retirement Fund of Georgia	991
Peace Officers' Annuity and Benefit Fund of Georgia	947
School Personnel Postemployment Health Benefit Fund, Georgia	360A
Sheriffs' Retirement Fund of Georgia	951
State Employees Postemployment Health Benefit Fund	360B
Superior Court Clerks' Retirement Fund of Georgia (*)	948
Teachers Retirement System of Georgia (*)	482
Ports Authority, Georgia (*)	916
Properties Commission, State	410
Public Defender Standards Council, Georgia	492
Public Health, Department of	405

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ORGANIZATIONAL UNIT	CONTROL <u>NUMBERS</u>
Public Safety, Department of	466
Public Service Commission	470
Public Telecommunications Commission, Georgia	977
Regents of the University System of Georgia, Board of	472
Abraham Baldwin Agricultural College	557
Albany State University	522
Atlanta Metropolitan State College	561
AU Health System, Inc. (*)	5128
Augusta University	512
Augusta University Foundation, Inc. and Subsidiaries (*)	5272
Augusta University Research Institute, Inc. (*)	5126
Clayton State University	528
College of Coastal Georgia	563
Columbus State University	530
Dalton State College	569
East Georgia State College (1)	572
Fort Valley State University	533
Georgia Advanced Technology Ventures, Inc. and Subsidiaries (*)	5038
Georgia College & State University	536
Georgia College & State University Foundation, Inc. and Subsidiaries (*)	5362
Georgia Gwinnett College	540
Georgia Gwinnett College Foundation, Inc. (*)	5365
Georgia Health Sciences Foundation, Inc. (*)	5273
Georgia Highlands College	573
Georgia Institute of Technology	503
Georgia Military College	968
Georgia Southern University	539
Georgia Southern University Housing Foundation, Inc. and Subsidiaries (*)	5392
Georgia Southwestern State University	542
Georgia State University	509
Georgia State University Athletic Association, Inc. (*)	5093
Georgia State University Foundation, Inc. (*)	5091
Georgia State University Research Foundation, Inc. (*)	5092
Georgia Tech Athletic Association (*)	5032
Georgia Tech Facilities, Inc. (*)	5034
Georgia Tech Foundation, Inc. (*)	5035
Georgia Tech Research Corporation (*)	5036
Gordon State College	576
Kennesaw State University	543
Kennesaw State University Foundation, Inc. (*)	5431

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State of Georgia

ORGANIZATIONAL UNIT	CONTROL <u>NUMBERS</u>
Medical College of Georgia Foundation, Inc. (*)	5122
Middle Georgia State University (1)	583
Middle Georgia State University (1) Middle Georgia State University Real Estate Foundation, Inc. and Subsidiaries (*	5841
Savannah State University	548
South Georgia State College	588
University of Georgia	518
University of Georgia Athletic Association, Inc. (*)	5181
University of Georgia Foundation (*)	5182
University of Georgia Research Foundation, Inc. and Subsidiaries (*)	5182
University of North Georgia	553
University of North Georgia Real Estate Foundation, Inc. and Subsidiaries (*)	5452
University of West Georgia	554
University System of Georgia Foundation, Inc. and Affiliates (*)	4721
UWG Real Estate Foundation, Inc. (*)	5543
Valdosta State University	551
VSU Auxiliary Services Real Estate Foundation, Inc. (*)	5512
Regional Educational Service Agencies	0012
Central Savannah River Area RESA	8684
Chattahoochee-Flint RESA	8724
Coastal Plains RESA	8864
First District RESA	8804
Griffin RESA	8624
Heart of Georgia RESA	8764
Metropolitan RESA	8564
Middle Georgia RESA	8644
North Georgia RESA	8524
Northeast Georgia RESA	8584
Northwest Georgia RESA	8504
Oconee RESA	8664
Okefenokee RESA	8884
Pioneer RESA	8544
Southwest Georgia RESA	8844
West Georgia RESA	8604
Regional Transportation Authority, Georgia	976
Revenue, Department of	474
Road and Tollway Authority, State	927
Secretary of State	478
State Treasurer, Office of the	486
Stone Mountain Memorial Association (*)	911
Student Finance Authority, Georgia (*)	917

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Appendix "A" – Listing of Organizational Units Comprising the State of Georgia Reporting Entity For the Fiscal Year Ended June 30, 2019

State of Georgia

ORGANIZATIONAL UNIT	CONTROL <u>NUMBERS</u>
Student Finance Commission, Georgia	476
REACH Georgia Foundation, Inc. (*)	4761
Subsequent Injury Trust Fund	489
Superior Court Clerks' Cooperative Authority, Georgia (*)	955
Technical College System of Georgia	415
Albany Technical College	820
Athens Technical College	822
Atlanta Technical College	823
Augusta Technical College	824
Central Georgia Technical College	835
Chattahoochee Technical College	827
Coastal Pines Technical College	818
Columbus Technical College	828
Georgia Northwestern Technical College	829
Georgia Piedmont Technical College	830
Gwinnett Technical College	832
Lanier Technical College	834
North Georgia Technical College (1)	838
Oconee Fall Line Technical College	817
Ogeechee Technical College	844
Savannah Technical College	841
South Georgia Technical College	842
Southeastern Technical College	843
Southern Crescent Technical College	831
Southern Regional Technical College (1)	837
West Georgia Technical College	826
Wiregrass Technical College (1)	848
Technology Authority, Georgia	980
Transportation, Department of	484
Veterans Service, Department of	488
Workers' Compensation, State Board of	490

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