# WAYNE STATE UNIVERSITY

FINANCIAL REPORT

2019









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#### **Independent Auditor's Report**

To the Board of Governors Wayne State University

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the business-type activities and the discretely presented component unit of Wayne State University (the "University") as of and for the years ended September 30, 2019 and 2018 and the related notes to the financial statements, which collectively comprise Wayne State University'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 audits. We conducted our audits 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 audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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 entity'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 entity'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.

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, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the discretely presented component unit of Wayne State University as of September 30, 2019 and 2018 and the respective changes in its financial position and, where applicable, cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.



To the Board of Governors Wayne State University

#### Other Matters

#### Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedule of changes in the University's total OPEB liability and related ratios 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, which 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 supplemental 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.

#### Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise Wayne State University's basic financial statements. The other supplemental information, as identified in the table of contents, is presented for the purpose of additional analysis and is not a required part of the basic financial statements.

The other supplemental 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. 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. In our opinion, the other supplemental information is fairly stated in all material respects in relation to the basic financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated February 13, 2020 on our consideration of Wayne State University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is 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 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 Wayne State University's internal control over financial reporting and compliance.

Plante & Moran, PLLC

February 13, 2020

### Management's Discussion and Analysis - Unaudited

#### Introduction

The following discussion and analysis provides an overview of the financial position of Wayne State University (the "University") at September 30, 2019 and the results of its operations and cash flows for the year then ended. Comparative information is provided as of and for the year ended September 30, 2018. This discussion has been prepared by management and should be read in conjunction with the accompanying financial statements and related notes to facilitate and enhance the reader's understanding of the 2019 financial report.

Wayne State University is a nationally recognized public research university with urban roots and a global reputation. The main campus, located in Detroit's University Cultural Center, includes more than 350 undergraduate, graduate, doctoral, certificate, and professional programs offered through the University's schools and colleges. The University ranks among the top public universities in the nation and has the most diverse student body of any university in Michigan. As the 6th largest employer in the city of Detroit, as ranked by the 2019 Crain's Business Survey of Detroit's Largest Employers, the University has a significant impact on the local economy and contributes to the state and nation as well through its research and public service programs.

Excellence in research is essential to the University's mission. Based on the 2018 National Science Foundation Research and Development Expenditures Survey, the University ranked 99<sup>th</sup> among all universities and 68<sup>th</sup> among public universities in research and development expenditures. A substantial portion of the University's research is conducted at the School of Medicine, the nation's largest single-campus medical school. The 2018 National Science Foundation Research and Development Expenditures Survey ranked the University 53<sup>rd</sup> in the health sciences category. Based on the 2019 Carnegie classification of higher education, Wayne State University ranked within the top 3.0 percent of the nation's universities and colleges with the Carnegie classification of R1 (very high research activity). Wayne State University, Michigan State University, and the University of Michigan, the state's three largest research universities, are partners in the University Research Corridor (URC). The URC is an alliance among these three universities to spark regional economic development through invention, innovation, and technology transfer, by educating a work force prepared for the "knowledge economy," and by attracting smart and talented people to Michigan.

#### **Using this Report**

The University's financial report includes three financial statements: the statement of net position; the statement of revenue, expenses, and changes in net position; and the statement of cash flows. The report also includes notes to the financial statements, which are an integral component of the report, and required supplementary information (RSI). These financial statements, accompanying notes, and RSI are prepared in accordance with the principles of the Governmental Accounting Standards Board (GASB). Consistent with the GASB principles, the Wayne State University Foundation (the "Foundation"), as a controlled corporate organization, is a discretely presented component unit (DCU) of the University. The Foundation's statement of financial position and statement of activities and changes in net position are discretely presented in the University's financial statements. The management's discussion and analysis refers to the University only (excluding the Foundation), unless otherwise noted. Additional supplemental information, which provides the statement of net position and operating information for the various funds of the University, is also included in the report.

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Overall Financial Highlights**

The University's financial position at September 30, 2019 includes assets and deferred outflows of resources of approximately \$1.71 billion and liabilities and deferred inflows of resources of \$1.05 billion. Net position, which represents the residual interest in the University's assets and deferred outflows of resources after liabilities and deferred inflows of resources are deducted, was \$0.66 billion as of September 30, 2019.

#### **Financial Position**

The summary table below shows the University's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position at September 30 for the past three fiscal years:

	2019			2018	2017	
			(in	millions)		
Total assets	\$	1,693.8	\$	1,662.7	\$	1,454.1
Deferred outflows of resources		13.7		14.4		12.8
Total liabilities		819.5		833.4		807.8
Deferred inflows of resources		226.2		177.0		-
Net position		661.8		666.7		659.1

Specific discussion and analysis of the changes in the components of the assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position categories are provided on pages 5-9.

#### **Operations**

A summary of revenue and expenses, including the operating, nonoperating, and other categories for the years ended September 30, 2019, 2018, and 2017, is as follows:

		2019		2018		2017
Revenue:			(in	millions)		
Operating revenues	\$	585.6	\$	596.7	\$	640.4
Nonoperating revenues		304.6		284.6		271.0
Other		1.2		1.0		4.1
Total revenues	\$	891.4	\$	882.3	\$	915.5
Expenses:						
Operating expenses	\$	875.3	\$	855.7	\$	848.7
Nonoperating expenses		21.0		19.0		20.5
Total expenses	<u>\$</u>	896.3	\$	874.7	\$	869.2

During fiscal year 2019, total revenue increased \$9.1 million (1.0 percent) compared to 2018, while total expenses increased \$21.6 million (2.5 percent). During fiscal year 2018, total revenue decreased \$33.2 million (3.6 percent) compared to 2017, while total expenses increased \$5.5 million (0.6 percent). Specific discussion and analysis of the changes in the components of the revenue and expense categories are provided on pages 10-15.

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Statement of Net Position**

The statement of net position presents the financial position of the University at the end of each fiscal year and includes all assets, deferred outflows of resources, liabilities, and deferred inflows of resources of the University. Net position is one key indicator of the current financial position of the University, while the change in net position is a key indicator of how the current year's operations affected the overall financial condition of the University. Assets, deferred outflows of resources, deferred inflows of resources, and liabilities are generally measured using current values. One notable exception is capital assets, which are stated at historical cost less accumulated depreciation.

A summarized comparison of the University's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position at September 30, 2019, 2018, and 2017 is as follows:

	2019		2018		2017
			(in	millions)	
Current assets	\$	587.3	\$	596.0	\$ 570.3
Noncurrent assets:					
Investments		78.8		106.8	4.1
Capital assets - Net of depreciation		996.3		926.1	842.7
Other		31.4		33.8	 37.0
Total assets		1,693.8		1,662.7	1,454.1
Deferred outflows of resources		13.7		14.4	12.8
Current liabilities		313.7		312.3	300.5
Noncurrent liabilities:					
Long-term debt - Net of current portion		448.8		464.7	446.5
Other		57.0		56.4	 60.8
Total liabilities		819.5		833.4	 807.8
Deferred inflows of resources		226.2		177.0	 
Total net position	\$	661.8	\$	666.7	\$ 659.1

#### **Current Assets and Liabilities**

Current assets are comprised primarily of cash and cash equivalents, current investments, and receivables. In 2019, current assets decreased \$8.7 million (1.5 percent) to \$587.3 million compared to \$596.0 million at September 30, 2018. This decrease consisted of a decrease in cash and cash equivalents and current investments of \$9.1 million, and a decrease in net current receivables of \$3.1 million, partially offset by an increase in other assets of \$3.5 million. Changes in cash and cash equivalents and current investments are the result of the University's overall operating performance and timing.

In 2018, current assets increased \$25.7 million (4.5 percent) to \$596.0 million compared to \$570.3 million at September 30, 2017. The increase was attributable to an increase in cash and temporary investments of \$71.1 million, partially offset by a decline in net current receivables of \$45.4 million.

## Management's Discussion and Analysis - Unaudited (Continued)

Current liabilities are comprised of amounts payable within one year and consist primarily of accounts payable, accrued liabilities, and unearned revenue. In 2019, total current liabilities increased by \$1.4 million (0.4 percent) to \$313.7 million compared to \$312.3 million at September 30, 2018. The increase consisted of an increase in unearned revenue, the current portion of long-term debt, and deposits of \$3.7 million, \$1.9 million, and \$0.1 million, respectively, partially offset by a decrease in accounts payable and accrued liabilities of \$4.3 million. Unearned revenue primarily consists of 75 percent of student tuition and fees for the current fall term received or due prior to October 2019. The increase in unearned revenue was attributable principally to fall 2019 tuition and fee rate increases of 3.2 percent for undergraduate and graduate students. The decrease in accounts payable and accrued liabilities was largely due to the timing of disbursements (\$9.1 million) for certain program funds collected by the University in an agency capacity that were disbursed to program participants prior to September 30 in 2019, whereas in 2018, the funds were disbursed subsequent to fiscal year-end. The decrease was offset partially by an increase in construction and other trade accounts payables (\$4.8 million) which resulted generally from having more major construction projects in progress at the end of fiscal year 2019 compared to 2018.

In 2018, total current liabilities increased by \$11.8 million (3.9 percent) to \$312.3 million compared to \$300.5 million at September 30, 2017. The increase consisted of an increase in accounts payable and accrued liabilities of \$15.9 million, partially offset by decreases in the current portion of long-term debt, deposits, and unearned revenue of \$2.7 million, \$0.8 million, and \$0.6 million, respectively. The increase in accounts payable and accrued liabilities was largely due to a change in the flow of funds related to a specific University Health Affairs program, which resulted in the University collecting program funds in an agency capacity for program participants. The program funds collected prior to September 30 were disbursed to program participants subsequent to fiscal year-end.

The University's current ratio (current assets divided by current liabilities), a measure of liquidity, was 1.9 at September 30, 2019, 2018, and 2017.

#### **Deferred Outflow of Resources**

Deferred outflow of resources totaled \$13.7 million in 2019, compared to \$14.4 million in 2018 and \$12.8 million in 2017. The amounts in 2019, 2018, and 2017 relate, principally, to losses recognized in the defeasance of debt.

#### **Deferred Inflow of Resources**

Deferred inflow of resources totaled \$226.2 million in 2019, compared to \$177.0 million in 2018. The 2019 amount includes \$224.3 million related to the service concession arrangement (more fully discussed in Note 15), \$1.4 million for OPEB-related amounts, and \$0.5 million related to an irrevocable split-interest agreement. The 2018 amount includes \$0.8 million for OPEB-related amounts, \$175.7 million related to the service concession arrangement, and \$0.4 million related to an irrevocable split-interest agreement. There were no deferred inflows of resources in 2017.

#### **Noncurrent Assets and Liabilities**

#### **Noncurrent Assets**

Noncurrent assets are comprised primarily of investments, capital assets, and noncurrent receivables. Notable changes from 2018 to 2019 in noncurrent assets include a decrease in investments of \$28.0 million and an increase in net capital assets of \$70.2 million.

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Investments**

Investments are categorized in either the Endowment Fund or the Plant Fund. The Endowment Fund investments consist of gift annuity, life income funds, and endowments not managed by the Foundation. Investments in the Plant Fund consist primarily of invested bond proceeds and related earnings, which are restricted for capital projects. The invested bond proceeds and the majority of these endowment fund investments are managed by the University.

The composition of noncurrent investments at September 30, 2019, 2018, and 2017 is as follows:

	2019			2018	2017
			(in	millions)	
Endowment Fund	\$	6.2	\$	5.2	\$ 4.1
Plant Fund - Restricted invested bond proceeds		72.6		101.6	 -
Total noncurrent investments	\$	78.8	\$	106.8	\$ 4.1

The invested bond proceeds component of noncurrent investments decreased \$29.0 million in 2019 as funds were spent for planned capital projects.

The 2018 invested bond proceeds component of noncurrent investments represents proceeds of \$133.0 million from the Series 2018A Bonds issued in February 2018, net of expenditures for related capital projects.

#### **Foundation Investments**

The Foundation manages approximately 99 percent of the University's endowment funds. The composition of the Foundation's noncurrent investments at September 30, 2019, 2018, and 2017 is as follows:

	20	019	20	18		2017
	(in millions)					
Endowment Fund investments	\$	394.3	\$	388.0	\$	353.6

In 2019, the Foundation Endowment Fund investments increased \$6.3 million (1.6 percent) to \$394.3 million. The 2019 increase is principally because of a net investment gain (\$5.6 million) and new gifts (\$14.4 million), offset partially by net distributions to the University (\$12.5 million).

In 2018, the Foundation Endowment Fund investments increased \$34.4 million (9.7 percent) to \$388.0 million. The 2018 increase is principally because of a net investment gain (\$20.9 million) and new gifts (\$20.0 million), offset partially by net distributions to the University (\$11.6 million).

#### Capital Assets

One factor critical to enhancing the quality of the University's academic and research programs and residential life is the development and renewal of its capital assets. The University continues to modernize its older teaching, research, and administrative buildings as well as construct new facilities.

Capital additions during 2019 totaled \$130.6 million, compared to \$149.4 million in 2018 and \$51.4 million in 2017. The 2019 capital additions include expenditures for the construction of the Anthony Wayne Drive Apartment project – Phase I&II (\$53.7 million), the renovation and repurposing of the Science and Engineering Library (\$19.5 million), the Hillberry Gateway Performance Complex expansion, construction and renovation project (\$5.0 million), as well as renovations and upgrades to many other university buildings.

## Management's Discussion and Analysis - Unaudited (Continued)

The 2018 capital additions included expenditures for the construction of the Mike Ilitch School of Business (\$30.7 million), a New Data Center (\$12.7 million), the Anthony Wayne Drive Apartment project – Phase I (\$63.0 million), and the purchase of the Next Energy Building (\$4.9 million).

Capital asset additions are funded primarily with bond proceeds, gifts, state capital appropriations, service concessionaire arrangements, and unrestricted net assets designated for capital purposes.

#### **Noncurrent Liabilities**

Notable changes in the noncurrent liability section of the statement of net position from 2018 to 2019 included a decrease in long-term debt (net of the current portion) of \$15.9 million, partially offset by an increase in other noncurrent liabilities of \$0.6 million.

#### Long-term Debt

Total long-term debt (including the current portion) totaled \$464.8 million, \$478.8 million, and \$463.3 million, at September 30, 2019, 2018, and 2017, respectively.

For 2019, total long-term debt decreased \$14.0 million, which primarily represented principal payments made during the year.

For 2018, total long-term debt increased \$15.5 million. The increase was attributable principally to the issuance of the Series 2018A bonds (more fully discussed below) for a par amount of \$122.2 million, and the related net premium of \$10.8 million, offset partially by principal payments made during the year totaling \$114.2 million, including the partial advance refunding of Series 2008 and Series 2009A bonds (more fully discussed below).

In its role of financial steward, the University works to manage its financial resources effectively, including the use of debt to finance capital projects. As more fully discussed in Note 6 to the financial statements, the University issued its tax-exempt Series 2018A bonds in February 2018. These bonds were issued to finance or partially finance several projects including the construction of the Mike Ilitch School of Business, the Hillberry Theatre expansion, construction and renovation project, renovation of the Science and Engineering laboratory, construction of a new Data Center, electrical upgrades at various university buildings, a weight room addition, construction of an art gallery, and various relocation activities.

In fiscal year 2018, the University entered into a Service Concessionaire Agreement (SCA) with Corvias Campus Living-WSU, LLC (Corvias), whereby Corvias will manage, maintain, and operate housing resources on campus for a 40-year term. As part of the initial investment, Corvias deposited \$102.9 million with a trustee to pay principal and interest on the housing related debt which effectively defeased \$79.2 million and \$19.8 million, of the Series 2008 and Series 2009A bonds, respectively (more fully discussed in Note 6).

## **Management's Discussion and Analysis - Unaudited (Continued)**

#### **Net Position**

Net position represents the difference between assets, deferred outflows of resources, deferred inflows of resources, and liabilities. The University's net position at September 30, 2019, 2018, and 2017 is summarized as follows:

	2019		2018		2017	
	(in millions)					
Net investment in capital assets	\$	391.5	\$	391.4	\$	393.2
Restricted:						
Nonexpendable		11.3		11.1		11.3
Expendable		74.4		73.3		91.2
Unrestricted		184.6		190.9		163.4
Total net position	\$	661.8	\$	666.7	\$	659.1

Descriptions of the components of total net position are as follows:

 Net Investment in Capital Assets - The University's investment in capital assets, net of accumulated depreciation, and outstanding principal balances of debt issued for the acquisition, construction, or improvement of those assets. Changes from year to year result from capital additions, issuance and payments of long-term debt, retirement of assets, and depreciation expense.

#### Restricted:

- Nonexpendable The corpus portion of gifts to the University's permanent true endowment funds, certain University funds, which have been specifically allocated and restricted pursuant to specific agreements with individuals or entities, and the University's required funding match for federal student loans and donor-restricted University loans.
- Expendable Gifts and sponsored and governmental grants and contracts, which are subject to externally imposed restrictions governing their use (scholarships, academic and research programs, and capital projects). This category of net position also includes undistributed accretion from investments of permanent true endowments and funds functioning as endowments with externally imposed restrictions.

The restricted nonexpendable funds and the funds functioning as endowments included in the restricted expendable components of net position are directly affected by the performance of the University's long-term investments and its spending policy.

Unrestricted - Funds which are not subject to externally imposed restrictions; however, most of the
University's unrestricted net position is designated by the board of governors and/or management for
various academic, research and administrative programs, and capital projects. In 2019, unrestricted
net position decreased \$6.3 million (3.3 percent) to \$184.6 million compared to \$190.9 million and
\$163.4 million at September 30, 2018 and 2017, respectively. The 2018 increase of \$27.5 million was
attributable to increases in the General Fund (\$14.5 million), Designated Fund (\$3.2 million), Auxiliary
Operations (\$5.7 million), and the Plant Fund (\$3.7 million).

## Management's Discussion and Analysis - Unaudited (Continued)

#### Statement of Revenues, Expenses, and Changes in Net Position

The statement of revenues, expenses, and changes in net position presents the operating results of the University, as well as the nonoperating revenues and expenses.

#### Revenues

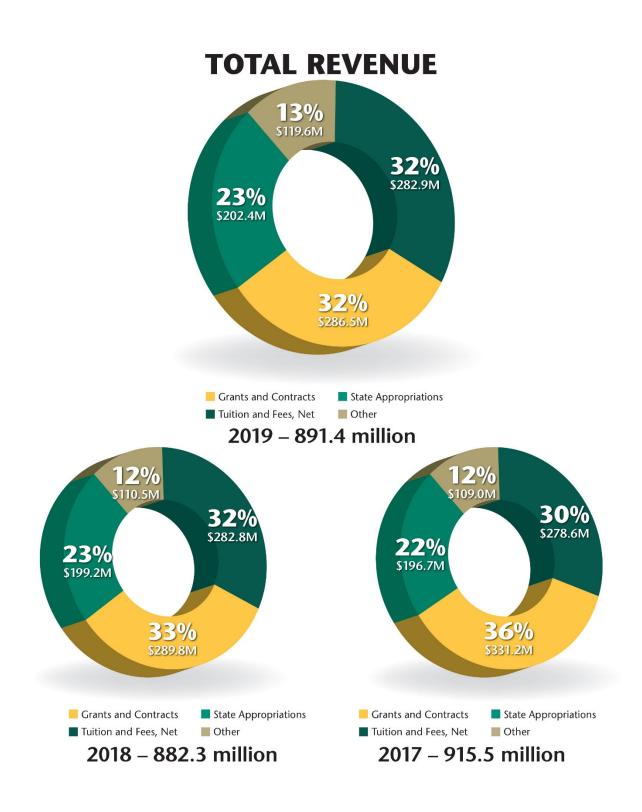
Consistent with GASB principles, revenues are categorized as operating, nonoperating, or other. Operating revenues generally result from exchange transactions, such as revenues received for tuition and fees or grants and contracts revenue for services performed on sponsored programs. Nonoperating revenues are primarily nonexchange in nature, such as state operating appropriations and investment income. Other represents capital and endowment transactions.

Summarized operating, nonoperating, and other revenues for the years ended September 30, 2019, 2018, and 2017 are presented below:

	2019	2018	2017
Operating Revenues	 	(in millions)	
Student tuition and fees - Gross	\$ 404.1	\$ 393.7	\$ 382.5
Less scholarship allowances	 (121.2)	(110.9)	(103.9)
Net student tuition and fees	282.9	282.8	278.6
Grants and contracts	247.6	255.9	298.1
Departmental activities, auxiliary enterprises, and other	 55.1	58.0	63.7
Total operating revenues	585.6	596.7	640.4
Nonoperating Revenues			
State operating appropriation	202.4	199.2	196.1
Federal Pell grants	38.9	33.9	33.1
Gifts	22.5	27.7	22.3
Investment income:			
Income and realized gains	12.9	11.6	9.7
Unrealized (loss) gain	9.2	(8.3)	(2.3)
Change in fair value of derivatives	0.4	0.1	(0.3)
Net distributions from the Foundation	12.5	11.6	10.4
Other	 5.8	8.8	2.0
Total nonoperating revenues	304.6	284.6	271.0
Other			
State capital appropriation	-	-	0.6
Capital and endowment gifts	 1.2	1.0	3.5
Total other	 1.2	1.0	4.1
Total revenues	\$ 891.4	\$ 882.3	\$ 915.5

## Management's Discussion and Analysis - Unaudited (Continued)

The charts below graphically depict total revenue by source for the years ended September 30, 2019, 2018, and 2017:



## **Management's Discussion and Analysis - Unaudited (Continued)**

#### **Primary Revenue Sources**

The University's research and public service mission and significant components of instruction are supported primarily by federal, state, and nongovernmental grants and contracts, which, in the aggregate, typically comprise the largest revenue source to the University. The state operating appropriation and student tuition and fees represent the majority of resources available to fund the University's General Fund operations.

#### **Operating Revenues**

Operating revenue totaled \$585.6 million in 2019 compared to \$596.7 and \$640.4 million in 2018 and 2017, respectively. The 2019 decrease in total operating revenues of \$11.1 million (1.9 percent) was attributable to several factors:

Student Tuition and Fees - In fiscal year 2019, gross student tuition and fees increased \$10.4 million and scholarship allowances increased by \$10.3 million, resulting in an increase in net student tuition and fees of \$0.1 million. The increase in gross student tuition and fees was attributable principally to the fall 2018 tuition rate increases for undergraduate and graduate students of 2.9 percent.

The 2018 increase in gross student tuition and fees was attributable principally to the fall 2017 undergraduate lower and upper division tuition rate increases of 3.75 and 4.0 percent, respectively, combined with a slight increase in student credit hours.

For financial reporting purposes, student tuition and fees and auxiliary enterprise revenue are reduced by "scholarship allowances." These scholarship allowances represent financial aid granted to students, which is applied directly to their accounts to pay tuition and fee assessments (in the General Fund) and room and board assessments (in the Auxiliary Activities Fund).

The University continues to provide a substantial amount of financial aid to mitigate the impact of tuition rate increases. In 2019, 2018, and 2017 the University provided total scholarships and fellowships of \$141.1 million, \$127.3 million, and \$122.5 million, respectively. For 2019, the \$13.8 million increase represents a 10.8 percent increase in financial aid. The increases in 2018 and 2017 of \$4.8 million and \$6.5 million, respectively, represent percentage increases of 3.9 and 5.6 percent, respectively. The increase in 2019 was driven by an overall increase in university scholarships and other financial aid to help minimize the impact of rising tuition rates for students in need and to provide incentives to increase student retention, combined with an increase in Federal Pell awards of \$5.0 million.

<u>Grants and Contracts</u> - Grants and contracts revenues decreased \$8.3 million (3.2 percent) from 2018 to 2019. The decrease consisted of a decrease in nongovernmental grants and contracts of \$14.7 million, offset partially by increases in federal grants and contracts of \$3.5 million, and state and local grants and contracts of \$2.9 million. The 2019 decrease in nongovernmental grants and contracts was attributable largely to an increase in adjustments to reduce certain contract receivable amounts due from affiliate organizations, deemed uncollectible, to the net realizable value (\$23.9 million), offset partially by an overall increase other nongovernmental grant revenue (\$9.2 million).

Grants and contracts revenues decreased \$42.2 million (14.2 percent) from 2017 to 2018. The decrease consisted of decreases in nongovernmental grants and contracts of \$37.1 million, federal grants and contracts of \$3.4 million, and state and local grants and contracts of \$1.7 million. The 2018 decline was attributable largely to a decrease in program revenue for a specific University Health Affairs program.

## Management's Discussion and Analysis - Unaudited (Continued)

<u>Departmental Activities</u>, <u>Auxiliary Enterprises</u>, <u>and Other</u> - Departmental activities, auxiliary enterprises, and other revenue decreased \$2.9 million (5.0 percent) to \$55.1 million in 2019, compared to \$58.0 million and \$63.7 million in 2018 and 2017, respectively. The 2019 decrease consisted of a decline in auxiliary enterprises and other operating revenues of \$3.7 million and \$0.2 million, respectively, offset partially by an increase in departmental activities revenue of \$1.0 million. The decrease in auxiliary enterprises revenue in 2019 and 2018 was attributable principally to a reduction in residence hall and apartment revenue. As previously mentioned, the University entered into a Service Concessionaire Agreement (SCA) with Corvias Campus Living-WSU, LLC (Corvias) in fiscal year 2018. As part of the agreement, the University's housing operations, including the related housing revenue, was transferred to Corvias, effective November 30, 2017.

#### **Nonoperating and Other Revenues**

Nonoperating and other revenues were \$305.8 million in 2019, compared to \$285.6 million and \$275.1 million in 2018 and 2017, respectively. Factors affecting this change are as follows:

#### **Nonoperating Revenues**

- State operating appropriations, which is the primary source of nonoperating revenue, increased \$3.2 million (1.6 percent) to \$202.4 million in 2019, compared to \$199.2 million and \$196.1 million in 2018 and 2017, respectively.
- The fund components of investment income included in nonoperating revenues for the past three years are as follows:

# Investment Income (including realized and unrealized income)

2019		2018			2017
		(in n	nillions)		
		·	,		
\$	12.9	\$	11.6	\$	9.7
	9.2		(8.3)		(2.3)
	0.4		0.1		(0.3)
\$	22.5	\$	3.4	\$	7.1
		\$ 12.9 9.2 0.4	(in r \$ 12.9 \$ 9.2	(in millions)  \$ 12.9 \$ 11.6 9.2 (8.3) 0.4 0.1	(in millions)  \$ 12.9 \$ 11.6 \$ 9.2 (8.3) 0.4 0.1

Investment income is attributable principally to cash pool investments. The 2019 increase in net investment income of \$19.1 million was due to an increase in investment income and unrealized gains resulting from positive financial market performance. The 2018 decrease in net investment income of \$3.7 million was due largely to an increase in the unrealized loss, which resulted from an increase in interest rate levels during the year.

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Expenses**

Operating and nonoperating expenses for the years ended September 30, 2019, 2018, and 2017 are summarized below:

	2019		2018			2017
Operating expenses	\$ 875.3			n millions) 855.7	\$	848.7
Operating expenses  Nonoperating expenses:	\$	675.5	Φ	655.7	Φ	040.7
Interest		20.3		19.0		20.5
Other		0.7	-			
Total nonoperating expenses		21.0		19.0		20.5
Total expenses	\$	896.3	\$	874.7	\$	869.2

Operating expenses by both functional and natural classification for the years ended September 30, 2019, 2018, and 2017 are as follows:

		2	2019	2018			2017		
			Percentage of			Percentage of			Percentage of
			Total			Total			Total
			Operating			Operating			Operating
	D	ollars	Expenses	D	ollars	Expenses	С	ollars	Expenses
					(in m	illions)			
Natural Classification									
Compensation and benefits	\$	600.7	68.6%	\$	583.7	68.2%	\$	580.4	68.4%
Supplies, services, and other		196.6	22.5%		198.2	23.2%		193.3	22.7%
Depreciation		59.8	6.8%		59.1	6.9%		61.6	7.3%
Scholarships and fellowships (1)		18.2	2.1%		14.7	1.7%		13.4	1.6%
Total	\$	875.3	100%	\$	855.7	100%	\$	848.7	100%
Functional Classification									
Instruction	\$	277.8	31.7%	\$	276.3	32.3%	\$	276.5	32.6%
Research		155.2	17.7%		157.3	18.5%		156.4	18.5%
Public service		65.6	7.5%		62.0	7.2%		62.2	7.3%
Academic support		73.4	8.4%		68.2	8.0%		66.4	7.8%
Student services		42.2	4.8%		39.6	4.6%		41.9	4.9%
Institutional support		94.9	10.8%		92.7	10.8%		85.0	10.0%
Operation and maintenance of plant		66.0	7.6%		62.0	7.2%		60.4	7.1%
Scholarships and fellowships (1)		18.2	2.1%		14.7	1.7%		13.4	1.6%
Auxiliary enterprises		22.2	2.6%		23.8	2.8%		24.9	2.9%
Depreciation		59.8	6.8%		59.1	6.9%		61.6	7.3%
Total	\$	875.3	100%	\$	855.7	100%	\$	848.7	100%

<sup>(1)</sup> Excludes "scholarship allowances" applied directly to students' tuition and room and board (see pages 10, 12, and 15).

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Operating Expenses**

Compensation and benefit expenses increased \$17.0 million (2.9 percent) in 2019 to \$600.7 million compared to \$583.7 million and \$580.4 million in 2018 and 2017, respectively. The moderate increases in 2019 and 2018 resulted primarily from inflationary increases in salary and benefit costs.

Total scholarships and fellowships granted in 2019 increased \$13.8 million (10.8 percent) to \$141.1 million, compared to \$127.3 million in 2018. As discussed previously, the increase in 2019 was attributable principally to an overall increase in university scholarships and other financial aid, combined with an increase in Federal Pell grant awards of \$5.0 million. Total scholarships and fellowships granted in 2018 increased \$4.8 million (3.9 percent) to \$127.3 million, compared to \$122.5 million in 2017. The increase in 2018 was attributable to an overall increase in university scholarships and other financial aid.

Total scholarships and fellowships granted have two components. The scholarships and fellowships reflected on the table on page 14 of \$18.2 million, \$14.7 million, and \$13.4 million are disbursed directly to students and are reported as operating expenses in 2019, 2018, and 2017, respectively. The remaining amounts for 2019, 2018, and 2017 of \$122.9 million, \$112.6 million and \$109.1 million, respectively, are applied directly to the students' accounts receivable balances. These amounts are netted against student tuition and fees, or room and board in the Auxiliary Activities Fund, as "scholarship allowances" in the statement of revenue, expenses, and changes in net position on page 20.

Another way to analyze this same pool of operating expenses is by function.

In this regard, combined expenditures for instruction increased \$1.5 million (0.5 percent) to \$277.8 million in 2019, compared to \$276.3 million and \$276.5 million in 2018 and 2017, respectively. The expenses in 2019 and 2018 remained relatively flat.

Research expenditures decreased \$2.1 million (1.3 percent) in 2019 to \$155.2 million, compared to \$157.3 million and \$156.4 million in 2018 and 2017, respectively. The decrease in 2019 was attributable to a decrease in compensation-related expenses of \$1.8 million, combined with a decrease in direct expenses of \$0.3 million. The expenses in 2018 remained relatively flat.

Institutional support expenses increased \$2.2 million (2.4 percent) in 2019 to \$94.9 million, compared to \$92.7 million and \$85.0 million in 2018 and 2017, respectively. The increase in 2019 was attributable to an increase in compensation-related expenses of \$2.1 million, combined with an increase in direct expenses of \$0.1 million. The increase in 2018 was attributable to an increase in compensation-related expenses of \$1.7 million, combined with an increase in direct expenses of \$6.0 million.

#### **Nonoperating Expenses**

Interest expense totaled \$20.3 million, \$19.0 million, and \$20.5 million, in 2019, 2018, and 2017, respectively. Interest expense was net of a federal subsidy related to the Series 2009B Build America Bonds of \$0.5 million in 2019, 2018, and 2017.

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Statement of Cash Flows**

The statement of cash flows provides information about the University's cash receipts and cash disbursements during the fiscal year. Unlike the statement of revenues, expenses, and changes in net position, which reports revenue when it is earned and expenses when they are incurred regardless of when cash is received or disbursed, the statement of cash flows reports actual cash received and disbursed during the period. The focus of the statement of cash flows is on the resulting increase or decrease in cash and cash equivalents. The statement of cash flows assists the users in assessing the University's ability to meet its obligations as they come due and the needs for external financing.

A comparative summary of the statement of cash flows for the years ended September 30, 2019, 2018, and 2017 is as follows:

	2019		2018	2017
Cash and cash equivalents (used in) provided by:				
Operating activities	\$	(234.2)	\$ (149.8)	\$ (197.4)
Noncapital financing activities		282.9	284.1	264.1
Capital and related financing activities		(109.3)	27.5	(54.7)
Investing activities		32.8	(84.8)	32.6
Net increase (decrease) in cash and cash equivalents		(27.8)	77.0	44.6
Cash and cash equivalents - Beginning of year		177.0	100.0	55.4
Cash and cash equivalents - End of year	\$	149.2	<u>\$ 177.0</u>	<u>\$ 100.0</u>

Cash flows used in operating activities reflect tuition and fees, grants and contracts, and auxiliary and departmental activities. Major uses include payment of wages, employee benefits, supplies, utilities, and scholarships. The most significant source of cash flows provided by noncapital financing activities is the state operating appropriation, which totaled \$202.4 million in 2019, compared to \$199.2 million and \$196.1 million in 2018 and 2017, respectively. Cash flows from capital and related financing activities represent Plant Fund and related long-term debt activities and capital gifts. Cash flows from investing activities include uses of cash to purchase investments, increases in cash and cash equivalents as a result of selling investments, and income earned on cash and cash equivalents. Investing activities also include cash proceeds from the sale of bond-related investments to finance construction expenditures.

## Management's Discussion and Analysis - Unaudited (Continued)

#### **Economic Factors That Will Affect the Future**

#### Higher Education Industry

The United States higher education industry remains stable as demand continues to be strong and enrollment is steady. The long-term outlook for higher education is favorable as the number of careers requiring degrees and advanced degrees continues to grow. The lifetime earnings disparity between degreed and non-degreed individuals strongly supports the value of higher education. Despite the strong demand, the sector continues to face a multi-faceted set of challenges. There are continuous pressures on institutions regarding affordability, accountability, and competition. Also, there is uncertainty surrounding the federal policy for higher education and concern regarding the growth in unfunded pension liabilities. Research funding is expected to have moderate increases from both federally funded and non-federally funded agencies, with funding likely to shift to comprehensive universities that offer cross-discipline collaboration.

In the short-term, institutions of higher education are experiencing very modest increases in tuition revenue. State support across the country has varied significantly from state-to-state over the last 5-years with some states still below pre-recession funding levels. Constrained revenue sources require institutions to continuously manage operating costs while balancing the competitive recruitment and retention of its faculty and staff. Universities continue to utilize debt financing and philanthropy to provide the necessary investments in campus infrastructure.

#### State of Michigan – Local Economy

The State of Michigan budget for fiscal year 2020 included a 0.5 percent increase in operating appropriations for public universities which falls below the inflation rate of the higher education price index (HEPI). The increase in fiscal year 2020 funding is at a lower rate in comparison to the previous two fiscal years of 2 percent, respectively. While state appropriations has continued to increase in recent years, the total support for public universities remains well below historical amounts in nominal value.

Michigan continues to forecast a shortage of degreed graduates emphasizing the importance of higher education for the State. Of the top 50 good paying and growing occupations in Michigan through 2024, 43 require some level of higher education and 36 require a bachelor's degree or higher.

The Michigan economy is expected to remain stable over the next two years. Moderate growth is expected in state-level gross domestic product but slower than the national average. Employment is forecasted to remain flat. Wage and salary growth is anticipated to increase at a rate slightly under the national average.

#### Wayne State University

The University is positioning itself to address the challenges and opportunities guided by its strategic plan, Distinctively Wayne State University. The strategic plan sets forth seven pillars of focus:

• Student success – Students remain the University's top priority, and it will provide students with the tools and experience that they need to learn and succeed. Academic excellence, innovative pedagogies, collaborative and interdisciplinary research, career preparation, global experiences, and deep engagement in cultural diversity within a dynamic urban environment all create a "Distinctively Wayne State" student experience.

## **Management's Discussion and Analysis - Unaudited (Continued)**

- Teaching excellence The University will use both proven and thoughtfully innovative, evidence-based, high-impact practices, and culturally responsive and reflective pedagogies to increase the levels of student engagement and learning outcomes, as well as promote greater academic performance and achievement.
- Research The University will increase strategic integrative research and nurture the broad ecosystem for scholarly inquiry, discovery, creativity, and urban location. The University believes the research ecosystem is a key driver for economic growth, for revitalization in Detroit, and for addressing real-world challenges in a rapidly evolving urban environment. By engaging students at all levels enhances the research mission as well as their participation with the University and preparation for careers.
- **Diversity and inclusion** The University strives to have an inclusive environment where diversity is valued broadly and appreciate the ability of every person to contribute to over diversity of thought. The University's rich multicultural experiences enable us to develop exportable programs and curricula, which provide leadership in a multicultural society.
- Entrepreneurship The University strives to become a bustling hub of innovation, where new ideas are constantly developed into new ventures; students and faculty collaborate through TechTown Detroit to mentor community, urban, and minority entrepreneurs; and industry leaders and startup CEOs seek innovative resources. The lively exchange of new ideas and the innovative collaboration both on and off campus will allow the translation of research and development into entrepreneurship, which will permeate the campus culture and increase the growth and vitality of the University, the city, and region.
- **Community engagement** The University encourages every faculty member, administrator, and student to participate in meaningful, sustainable, and mutually beneficial relationships with the community. The experiential learning and community service are vital to the academic mission.
- **Financial and operational** The University is committed to grow revenue and increase the efficiency and effectiveness of business processes in order to provide adequate resources to support the University's mission while maintaining a value-based tuition structure.

## **Statement of Net Position**

	Se	ptember 30, 20	)19	September 30, 2018					
		Wayne State	_		Wayne State	_			
		University			University				
		Foundation			Foundation				
	University	(DCU)	Total	University	(DCU)	Total			
Assets			(in thou	ısands)					
Current Assets			•	,					
Cash and cash equivalents	\$ 149,174	\$ 4,716	\$ 153,890	\$ 177,016	\$ 3,630	\$ 180,646			
Investments	267,876	-	267,876	249,088	-	249,088			
Current receivables - Net (Note 4)	124,212	736	124,948	127,308	253	127,561			
Inventories	1,131	-	1,131	1,204	-	1,204			
Prepaid expenses and deposits	44,948		44,948	41,270		41,270			
Total current assets	587,341	5,452	592,793	595,886	3,883	599,769			
Noncurrent Assets									
Endowment investments	6,213	394,329	400,542	5,183	388,023	393,206			
Restricted investments	72,533	-	72,533	101,664	-	101,664			
Noncurrent receivables - Net (Note 4)	30,731	30	30,761	33,503	38	33,541			
Derivative instruments (Note 7)	677	-	677	265	-	265			
Capital assets - Net (Note 5)	996,321		996,321	926,169		926,169			
Total noncurrent assets	1,106,475	394,359	1,500,834	1,066,784	388,061	1,454,845			
Total assets	1,693,816	399,811	2,093,627	1,662,670	391,944	2,054,614			
Deferred Outflows of Resources	13,735	-	13,735	14,405	-	14,405			
Liabilities									
Current Liabilities									
Accounts payable and accrued liabilities	111,163	591	111,754	115,502	290	115,792			
Unearned revenue	179,981	-	179,981	176,265	-	176,265			
Deposits	6,480	-	6,480	6,461	-	6,461			
Long-term debt - Current portion (Note 6)	16,026		16,026	14,092		14,092			
Total current liabilities	313,650	591	314,241	312,320	290	312,610			
Noncurrent Liabilities									
Federal portion of student loan funds	29,092	-	29,092	28,097	-	28,097			
Accrued employee benefits and other liabilities	27,934	-	27,934	28,282	-	28,282			
Long-term debt - Net of current portion (Note 6)	448,816		448,816	464,735		464,735			
Total noncurrent liabilities	505,842		505,842	521,114		521,114			
Total liabilities	819,492	591	820,083	833,434	290	833,724			
<b>Deferred Inflows of Resources</b> (Note 1)	226,237	-	226,237	176,967	-	176,967			
Net Position									
Net investment in capital assets Restricted nonexpendable:	391,506	-	391,506	391,412	-	391,412			
Scholarships, research, academic support,									
and other	2,290	228,178	230,468	2,234	214,134	216,368			
Loans	9,022	-	9,022	8,883	-	8,883			
Restricted expendable:									
Scholarships, research, academic support,									
and other	65,426	163,218	228,644	66,287	169,893	236,180			
Capital projects	8,994	-	8,994	7,007	-	7,007			
Unrestricted	184,584	7,824	192,408	190,851	7,627	198,478			
Total net position	\$ 661,822	\$ 399,220	\$ 1,061,042	\$ 666,674	\$ 391,654	\$ 1,058,328			

## Statement of Revenues, Expenses, and Changes in Net Position

	Year End	led September	30, 2019	Year Ended September 30, 2018					
		Wayne State			Wayne State				
		University			University				
		Foundation			Foundation				
	University	(DCU)	Total	University	(DCU)	Total			
One retire Revenues	Offiversity	(DCO)			(DCO)	Total			
Operating Revenues Student tuition and fees	\$ 404,105	¢	(in thou \$ 404,105	sands) \$ 393,769	¢	\$ 393,769			
	(121,215)	φ -	(121,215)	(110,948)	φ -	(110,948)			
Less scholarship allowances	(121,213)		(121,213)	(110,940)		(110,940)			
Net student tuition and fees	282,890	-	282,890	282,821	-	282,821			
Federal grants and contracts	108,651	-	108,651	105,128	-	105,128			
State and local grants and contracts	25,745	-	25,745	22,822	-	22,822			
Nongovernmental grants and contracts	113,193	_	113,193	127,928	=	127,928			
Departmental activities	23,596	_	23,596	22,569	_	22,569			
Auxiliary enterprises - Net of scholarship allowances				,-		,-			
of \$1,670 in 2019 and \$1,665 in 2018	26,449	_	26,449	30,143	_	30,143			
Other operating revenues	5,041	_	5,041	5,329	_	5,329			
•									
Total operating revenues	585,565	-	585,565	596,740	-	596,740			
Operating Expenses (Note 11) Instruction	277,815		277,815	276,255		276,255			
		-			-				
Research	155,212	-	155,212	157,281	-	157,281			
Public service	65,567	-	65,567	62,021	-	62,021			
Academic support	73,384	-	73,384	68,160	-	68,160			
Student services	42,209	-	42,209	39,608	-	39,608			
Institutional support	94,932	-	94,932	92,738	-	92,738			
Operation and maintenance of plant	66,006	-	66,006	62,020	-	62,020			
Scholarships and fellowships	18,241	_	18,241	14,721	-	14,721			
Auxiliary enterprises	22,154	-	22,154	23,831	-	23,831			
Depreciation	59,750		59,750	59,147		59,147			
Total operating expenses	875,270		875,270	855,782		855,782			
Operating Loss	(289,705)	-	(289,705)	(259,042)	-	(259,042)			
Nonoperating Revenues (Expenses)									
State operating appropriation	202,363	_	202,363	199,170	=	199,170			
Federal Pell grants	38,941	_	38,941	33,882	=	33,882			
Gifts	22,461	342	22,803	27,726	1,010	28,736			
Investment income including change in fair value									
of derivatives of \$412 in 2019 and \$88 in 2018	22,504	5,633	28,137	3,367	20,942	24,309			
Net distributions from the Foundation	12,485	(12,485)		11,633	(11,633)	-			
Interest on capital asset - Related debt	(20,340)	- '	(20,340)	(18,960)	-	(18,960)			
Gain (Loss) on capital assets retired	(681)	_	(681)	3,862	_	3,862			
Other	5,912	-	5,912	4,909	-	4,909			
Net nonoperating revenues	283,645	(6,510)	277,135	265,589	10,319	275,908			
Income Before Other	(6,060)	(6,510)		6,547	10,319	16,866			
	,	, ,	, ,						
Other Capital gifts	1,208	_	1,208	1,014	_	1,014			
Gifts for permanent endowments	1,206	14,076	14,076	1,014	18,986	18,986			
•	1,208	14,076	15,284	1,014					
Total other	1,200	14,070	10,204	1,014	18,986	20,000			
Increase in Net Position	(4,852)	7,566	2,714	7,561	29,305	36,866			
Net Position	000.05:	0010=:	4.0=0.00=	0=0.4:-	0000:-	100115			
Beginning of year	666,674	391,654	1,058,328	659,113	362,349	1,021,462			
End of year	\$ 661,822	\$ 399,220	\$ 1,061,042	\$ 666,674	\$ 391,654	\$ 1,058,328			

## **Statement of Cash Flows**

		Year Ended S	Septem	ber 30
		2019	-	2018
		Unive	rsity	
		(in thou	sands)	)
Cash Flows from Operating Activities	•	000 000	_	000 004
Tuition and fees - Net	\$	289,838	\$	283,661
Grants and contracts		243,634		296,718
Auxiliary enterprises		25,786		26,369
Departmental activities		21,349		20,799
Loans issued to students		(725)		(1,457)
Collection of loans from students		5,895		4,030
Scholarships and fellowships		(21,812)		(15,294)
Payments to suppliers		(203,721)		(184,209)
Payments to employees and benefit providers		(599,439)		(585,756)
Other receipts		5,040		5,328
Net cash used in operating activities		(234, 155)		(149,811)
Cash Flows from Noncapital Financing Activities				
State operating appropriation		202,363		199,170
Federal Pell grants		38,941		33,882
Gifts		22,533		28,451
External student lending receipts		207,880		193,606
External student lending disbursements		(203,982)		(194,361)
Net distributions from the Foundation		12,485		11,633
Payments received from the service concession arrangement				12,104
Other		2,666		(394)
Net cash provided by noncapital financing activities		282,886		284,091
Cash Flows from Capital and Related Financing Activities				
Capital gifts and grants		1,705		12,538
Proceeds from issuance of debt and other long-term obligations		-		133,860
Expenditures for capital assets		(77,639)		(96,911)
Principal paid on capital debt		(11,265)		(15,154)
Interest paid on capital debt				(17,369)
Other		(20,805) (1,359)		10,567
Net cash provided by (used in) capital and related financing activities		(109,363)		27,531
Cash Flows from Investing Activities				
Investment income - Net		1,360		1,380
Proceeds from sales and maturities of investments		31,430		23,663
Purchase of investments		-		(109,833)
Net cash (used in) provided by investing activities		32,790		(84,790)
Net (Decrease) Increase in Cash and Cash Equivalents		(27,842)		77,021
Cash and Cash Equivalents - Beginning of year		177,016		99,995
Cash and Cash Equivalents - End of year	\$	149,174	\$	177,016
·	<u>-</u>			,
Reconciliation of Operating Loss to Net Cash from Operating Activities Operating loss	\$	(289,705)	¢	(259,042)
·	φ	(209,703)	φ	(239,042)
Adjustments to reconcile operating loss to net cash from operating activities:		50.750		50.447
Depreciation expense		59,750		59,147
Changes in assets and liabilities:				
Receivables - Net		5,517		38,830
Prepaid expenses and inventories		(3,678)		(830)
Accounts payable and accrued liabilities		(9,020)		18,010
Deposits		(265)		(262)
Unearned income		2,455		(998)
Deferred inflow of resources		659		449
Accrued employee benefits and other liabilities		132		(5,115)
Net cash used in operating activities	\$	(234,155)	\$	(149,811)
Noncash Transactions				
	\$	E2 704	¢	62 550
Capital expenditures related to the Anthony Wayne Drive housing project	Φ	52,701	φ	63,552
Payments related to refunding of Series 2008 and Series 2009A Bonds		-		102,890

#### Note 1 - Basis of Presentation and Significant Accounting Policies

#### Overview

Wayne State University (the "University") is a state-supported institution with a fall 2019 enrollment of approximately 26,800 students. The financial statements include the individual schools, colleges, and departments of the University (the primary government) and the controlled organization which is a discretely presented component unit (DCU). The controlled organization of the University is the Wayne State University Foundation (the "Foundation"), which manages approximately 99 percent of the University's endowment funds. The Foundation is a legally separate, tax-exempt entity which meets the criteria set forth for component units under GASB Statement No. 39, Determining Whether Certain Organizations are Component Units, as amended by GASB No. 61. The Foundation provides financial support for the objectives, purposes, and programs of the University. The University controls the timing and amount of its receipts from the Foundation, and the resources (and income thereon) which the Foundation holds and invests are dedicated to benefit the University. Because the resources held by the Foundation can only be used by, or for the benefit of, the University, the Foundation is considered a component unit (DCU) of the University and its statement of net position and statement of revenues, expenses, and changes in net position are discretely presented in the University's financial statements. The Foundation does not issue its own financial statements.

While the University is a political subdivision of the State of Michigan, it is not a component unit of the State of Michigan, as defined by the provisions of Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity,* as amended by GASB No. 61. The University is classified as a state instrumentality under Internal Revenue Code Section 115 and is also classified as an educational organization under Internal Revenue Code Section 501(c)(3) and is generally exempt from federal and state income taxes. Certain activities of the University may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514.

#### **Basis of Presentation**

The financial statements have been prepared in accordance with generally accepted accounting principles in the United States as prescribed by the Governmental Accounting Standards Board (GASB). The University reports as a special purpose government engaged primarily in business-type activities (BTA), as defined by the GASB using the economic resources measurement focus, on the accrual basis. Business-type activities are those that are financed in whole or in part by fees charged to external parties for goods and services.

#### **Summary of Significant Accounting Policies**

Scholarships and fellowships applied directly to student accounts are shown as a reduction to gross student tuition and fees and auxiliary enterprises revenue. Scholarships and fellowships disbursed directly to students are presented as scholarship and fellowship expenses.

Operating activities, as reported in the statement of revenues, expenses, and changes in net position, are those activities that generally result from exchange transactions, such as revenues received for tuition and fees, grants and contracts revenue for services performed on sponsored programs, or expenses paid for goods or services. Nonoperating revenues are generally nonexchange in nature. State appropriations, Pell grant revenue, gifts, and investment activity are nonexchange transactions.

#### Note 1 - Basis of Presentation and Significant Accounting Policies (Continued)

Preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

Cash and Cash Equivalents – Cash and cash equivalents include highly liquid, short-term investments (90 days or less) that bear little if no market risk and includes the liquidity pool component of the University's cash pool. Small allocations to cash and cash equivalents are also held in the liquidity reserve pool and the diversified pool components of the cash pool, and the Foundation's endowments. Any cash balances held in these funds at the date of these financial statements are due to timing of reinvesting the proceeds in the fund.

**Investments** - Investments in marketable securities are recorded at market value as established by the major securities markets. Purchases and sales of investments are accounted for on the trade date basis. Realized and unrealized gains and losses are reported as investment income. Nonmarketable investments are valued based on the most recent available data. Investments include the liquidity reserve pool and the diversified pool components of the cash pool and the Foundation's endowments. Investments also include invested bond proceeds and related earnings.

For donor-restricted endowments, the Uniform Prudent Management of Institutional Funds Acts, as adopted in Michigan on September 15, 2009, permits the board of governors to spend an amount of realized and unrealized endowment appreciation, as they deem prudent. The University's policy is to retain the realized and unrealized appreciation with the endowment after the spending policy distributions are applied. Effective April 1, 2017, the University completed a transition from annual distributions equal to 5.00 percent of the three-year moving average of the market value of the endowment fund, measured at quarterly intervals, to annual distributions equal to 4.50 percent of a three-year moving average of the market value of endowment assets, measured at quarterly intervals. Of this annual distribution, 4.05 percent is transferred to the beneficiary or operating program accounts and 0.45 percent is used for administration of the University's development efforts. The Foundation follows the spending policy established by the University.

**Unearned Revenue** - Unearned revenue represents amounts received and/or receivable in advance of an event or in advance of incurring the related costs. This includes 75 percent of the student tuition and fees for the current fall term received or due prior to October 1, with the remaining 25 percent being recognized as revenue during the current fiscal year. It also includes amounts received from grant and contract sponsors which have not yet been earned under the terms of the underlying agreements. Unearned revenue will be recognized as revenue in subsequent periods commensurate with generally accepted accounting principles and/or the applicable grant and contract terms and conditions.

**Derivative Instruments** - Derivative instruments consist of interest rate swap agreements and are stated at fair value based on the proprietary pricing model.

**Compensated Absences** - Certain University employees earn vacation and sick leave benefits based, in part, on length of service. After the completion of the probation period, vacation pay is fully vested when earned. Upon separation from service, employees are paid accumulated vacation and sick pay based upon the nature of separation (death, retirement, or termination). Certain limitations have been placed on the hours of vacation and sick leave that employees may accumulate and carry over for payment at death, retirement, or termination. Unused hours exceeding these limitations are forfeited.

#### Note 1 - Basis of Presentation and Significant Accounting Policies (Continued)

**Inventories** - Inventories are stated at the lower of cost or market, determined by the first-in, first-out method.

**Prepaid Expenses and Deposits** - Prepaid expenses and deposits primarily represent cash payments made in advance of when the related expenditures are recognized for financial statement purposes. The balances at fiscal year-end consist primarily of prepaid student financial aid, which is paid to students at the beginning of the fall term each fiscal year, with the expense recognized for accounting purposes over the financial reporting period (fall semester) to which it relates.

**Capital Assets** - Capital assets are recorded at cost or, if acquired by gift, at the fair market value as of the date of donation. Depreciation is computed on the straight-line method over the estimated service lives (5 to 40 years) of the respective assets.

**Deferred Outflows of Resources** - In addition to assets, the statement of net position reports a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense) until then. The University reports deferred outflows of resources of \$12,400 for OPEB-related amounts discussed in Note 12 and \$13,723,000 related to the losses recognized in debt defeasance as of September 30, 2019. The University reported deferred outflows of resources of \$9,000 for OPEB-related amounts and \$14,396,000 related to the losses recognized in debt defeasance as of September 30, 2018.

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

The University reports deferred inflows of resources of \$1,387,000 for OPEB-related amounts discussed in Note 12, \$224,359,000 related to the service concession arrangement discussed in Note 15, and \$491,000 related to an irrevocable split-interest agreement at September 30, 2019. The University reports deferred inflows of resources of \$840,000 for OPEB-related amounts, \$175,720,000 related to the service concession arrangement, and \$407,000 related to an irrevocable split-interest agreement at September 30, 2018.

**Net Position** - Consistent with GASB principles, the University reports its net position in four categories as follows:

- Net Investment in Capital Assets The University's investment in capital assets, net of
  accumulated depreciation, and outstanding principal balances of debt issued for the
  acquisition, construction, or improvement of those assets. Deferred inflows of resources
  associated with the aforementioned are also included in this component of net position.
  Changes from year to year result from capital additions, issuance and payments of long-term
  debt, retirement of assets, amortization of deferred inflows of resources and depreciation
  expense.
- Restricted Nonexpendable The corpus portion of gifts to the University's permanent true endowment funds, certain university funds which have been specifically allocated and restricted pursuant to specific agreements with individuals or entities, and the University's required funding match for federal student loans and donor-restricted university loans.

#### Note 1 - Basis of Presentation and Significant Accounting Policies (Continued)

- Restricted Expendable Gifts and sponsored and governmental grants and contracts, which
  are subject to externally imposed restrictions governing their use (scholarships, academic and
  research programs, and capital projects). This category of net position also includes
  undistributed accretion from investments of permanent true endowments and funds functioning
  as endowments with externally imposed restrictions.
- Unrestricted Funds which are not subject to externally imposed restrictions; however, most
  of the University's unrestricted net position is designated by the board of governors and/or
  management for various academic, research, and administrative programs and capital
  projects.

It is the University's policy to apply restricted resources first when an expense is incurred for purposes for which both restricted and unrestricted net position are available.

**Revenue Recognition** - State operating appropriations are recognized in the period for which they are appropriated. Grants and contract revenue are recognized as the related expenditures are incurred. State capital appropriations, funded through the State Building Authority, are recognized as eligible capital project expenditures are incurred.

Pledges and bequests of financial support from corporations, foundations, and individuals are recognized as revenue when a pledge representing an unconditional promise to give is received and all eligibility requirements, including time requirements, have been met. In the absence of such a promise, revenue is recognized when the gift is received. Endowment pledges and conditional promises do not meet eligibility requirements, as defined by GASB Statement No. 33, *Financial Reporting for Non-Exchange Transactions*, and are not recorded as assets until the related gifts are received.

Donor unconditional promises to give that are expected to be collected in future years are recorded at the present value of the estimated future cash flows. The discounts on these amounts are computed using risk-free interest rates applicable to the years in which the promises are made, commensurate with expected future payments. The allowance for uncollectible pledge receivables is provided based on management's judgment of potential uncollectible amounts.

The University disbursed approximately \$203,982,000 and \$194,361,000 in 2019 and 2018, respectively, for student loans through the U.S. Department of Education federal direct lending and federal guaranteed student loan programs. These disbursements and the related receipts are not included as revenue or expenditures in the accompanying statement of revenues, expenses, and changes in net position. The disbursements and related receipts are reflected in the noncapital financing activities section of the statement of cash flows.

**Reclassifications** – University amounts have been reclassified from cash and temporary investments to cash and cash equivalents or current investments to conform to the current year's presentation.

#### Note 2 - Cash and Investments

Cash and investments, by classification and investment type, at September 30, 2019 and 2018 are as follows (in thousands):

Classification	 2019	2018		
Cash and cash equivalents, current Investments:	\$ 149,174	\$	177,016	
Investments, current	267,876		249,088	
Endowment Fund, noncurrent	6,213		5,183	
Plant Fund - Restricted invested bond proceeds and related earnings	 72,533		101,664	
Total investments	 346,622		355,935	
Total cash and investments	\$ 495,796	\$	532,951	
Туре	 2019		2018	
Cash and cash equivalents	\$ 149,174	\$	177,016	
Fixed income	274,053		349,437	
Equity securities	40,859		-	
Hedge funds	9,634		-	
Real assets	14,342		-	
Other	 7,734		6,498	
Total cash and investments	\$ 495,796	\$	532,951	

The University's cash pool, which consists of cash, cash equivalents, and current investments, provided a return of 4.8 and 0.2 for the fiscal years ended September 30, 2019 and 2018, respectively. Investments in the Plant Fund consist of invested bond proceeds and related earnings which are restricted for capital projects.

#### **Investment Policies**

Cash and cash equivalents and bond proceed investments are managed in accordance with the board of governors' cash management policy. This policy sets a general target allocation for its investments as follows:

					Range	Actual at
		Liguidity			(Diversified	September 30,
Asset Class	Liquidity Pool	Reserve Pool	Diversified	Total Portfolio	Pool)	2019
Cash	100%	0%	0%	30%		26%
Fixed Income	0%	100%	30%	56%	+/- 7%	56%
Equities	0%	0%	45%	9%	+/- 7%	11%
Hedge Funds	0%	0%	10%	2%	+/- 5%	3%
Real Assets	0%	0%	15%	3%	+/- 5%	4%

The investment policy permits investments in money market funds, U.S. government and government agency obligations, municipal obligations, certificates of deposit, commercial paper, corporate debt and securitized investments, certain additional securitized investments and fixed-income funds with intermediate duration, multi-strategy, and short-term high-yield strategies. In addition, cash pool investments are comprised of equities, hedge funds, and real assets.

#### Note 2 - Cash and Investments (Continued)

The cash pool's three tiers (liquidity pool, liquidity reserve pool, and diversified pool) have different time horizons and liquidity needs, therefore, they have different permissible asset classes, credit quality, and maturity/interest rate risk characteristics. These risks are considered as part of the overall risk versus investment return characteristics of the aggregate investment portfolio when establishing its asset allocation and selecting its investment managers. Investments are managed in accordance with the investment policy and are monitored according to the risk versus investment return characteristics as compared to applicable benchmarks in the investment industry.

#### **Custodial Credit Risk**

For amounts deposited in commercial banks, custodial credit risk is the risk that, in the event of a bank failure, the University's deposits may not be available or returned. The University does not have a deposit policy governing custodial credit risk. At September 30, 2019 and 2018, the carrying amount of these deposits totaled \$136,491,000 and \$162,819,000, respectively. Of these amounts, \$135,938,000 and \$162,017,000 were uninsured and not collateralized at September 30, 2019 and 2018, respectively.

For investments, custodial credit risk is the risk that, in the event of the failure of the counterparty, the University may not be able to recover the value of its investments that are in the possession of an outside party. The counterparty is the firm that sells investments to or buys them from the University. Cash management investment policies do not limit the value of investments that may be held by an outside party. Investments in external investment pools and open-ended mutual funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form. The University's counterparties held \$74,872,000 and \$239,762,000 of its portfolio at September 30, 2019 and 2018, respectively. These investments are either held in the name of the University or a nominee's name for the benefit of the University and would not be subject to any general creditor claims.

#### **Credit Risk**

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. Nationally recognized rating organizations, such as Moody's and Standard & Poor's, assign credit ratings to security issuers and issues that indicate a measure of potential credit risk to investors. As discussed previously, specific credit standards are applied to each of the three tiers of the Cash Pool based on their ability to take risk which is tied to their time horizon and liquidity needs. The minimum credit quality for the Liquidity Pool is A-/A3 for bank deposits, money market funds shall have at least two of the three NRSRO's A1/P1/F1, and short term bond funds must have an average credit rating of A or better. The Liquidity Reserve Pool must have a credit rating of BBB-/Baa3 or better. The Diversified Pool must have an average credit rating of B-/B3 or better. For both years, the University was in compliance with its credit risk policy.

#### Note 2 - Cash and Investments (Continued)

Fixed-income investments classified by credit ratings at September 30, 2019 and 2018 were as follows (in thousands):

2019 Credit Rating											
AAA			AA		A		BBB		Below BB		Total
\$	_	\$	32,252	\$	38,232	\$	-	\$	_	\$	70,484
	2,050		-		-		-		-		2,050
	-		-		-		-		-		-
	83		-		-		-		-		83
	-		-		-		-		-		-
	-		46,221		117,034		-		38,181		201,436
	-		-		-		-		-		-
	-		-		-		-		-		-
			_						_		
\$	2,133	\$	78,473	\$	155,266	\$		\$	38,181	\$	274,053
2018 Credit Rating											
-					(in thou	san	ds)				
	AAA		AA		À		BBB	Ве	elow BB		Total
\$	-	\$	93,293	\$	8,371	\$	-	\$	-	\$	101,664
	2,226		-		-		-		-		2,226
	4,703		2,985		531		-		-		8,219
	3,533		-		-		-		-		3,533
	1,924		5,996		38,455		61,489		-		107,864
	-		33,769		53,770		-		14,671		102,210
	-		-		-		-		9,717		9,717
	-		499		5,180		4,989		-		10,668
	575		1,817		456		488				3,336
\$	12,961	\$	138,359	\$	106 763	Ф	66 966	\$	24 388	\$	349,437
	\$	\$ - 2,050 - 83 	\$ - \$ 2,050	\$ - \$ 32,252 2,050 83 83 46,221 5 2,133 \$ 78,473  AAA AA \$ - \$ 93,293 2,226 4,703 2,985 3,533 4,704 5,996 - 33,769 499 575 1,817	\$ - 32,252 \$ 2,050 83 46,221	AAA AA AA AA AA AAA AAA AAA AAA AAA AA	AAA AA AA AA AA AAA AAA AAAAAAAAAAAAAA	\$ - \$ 32,252 \$ 38,232 \$ - 2,050	AAA	AAA	AAA

<sup>(1)</sup> Includes bond proceeds that are collateralized by securities that are held by the pledging financial institution's custodian, in the University's name.

#### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of investment in a single issuer of fixed-income securities. The cash management policy provides that investment pool funds be sufficiently diversified. For the liquidity and liquidity reserve pools, investment in the securities of a single issuer shall not be in excess of 5 percent of the total market value of the assets under management at the time of purchase (excluding U.S. Treasury and agency obligations and commingled funds). For the diversified pool, concentration of credit risk is managed in accordance with the fund managers' policies.

The University is in compliance with its concentration of credit risk policy.

As of September 30, 2019 and 2018, the University's liquidity and liquidity reserve pools did not have investments with a particular issuer which equaled or exceeded 5 percent.

#### Note 2 - Cash and Investments (Continued)

#### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The maximum maturity duration for the liquidity pool is one year. The maximum average duration for the liquidity reserve pool is five years. The diversified pool has no duration restriction.

For both years, the University was in compliance with its interest rate risk policy.

The University held the following types of fixed-income investments and maturities at September 30, 2019 and 2018 (in thousands):

	Less						More		
Investment Type		han 1		1-5		6-10	Than 10		 Total
Municipal Bonds <sup>(1)</sup>	\$	-	\$	70,484	\$	-	\$	-	\$ 70,484
U.S. Treasuries		-		2,050		-		-	2,050
Securitized investments (1)		-		-		-		-	-
Money market mutual funds (2)		83		-		-		-	83
Corporate securities		-		-		-		-	-
Fixed-income institutional bond funds (2)		-		94,337		107,099		-	201,436
High-yield short-term fund <sup>(2)</sup>		-		-		-		-	-
Non-U.S. fixed-income securities		-		-		-		-	-
Municipal securities						-			
Total fixed-income investments	\$	83	\$	166,871	\$	107,099	\$		\$ 274,053
		Less					More		
Investment Type	T	han 1		1-5	6-10		Than 10		Total
Municipal Bonds <sup>(1)</sup>	\$	-	\$	101,664	\$	-	\$	-	\$ 101,664
U.S. Treasuries				2,226					2,226
Securitized investments (1)		-		4,629		1,027		2,563	8,219
Money market mutual funds (2)		3,533		-		-		-	3,533
Corporate securities		5,859		63,131		37,896		978	107,864
Fixed-income institutional bond funds (2)				16,372		85,838		-	102,210
High-yield short-term fund <sup>(2)</sup>		-		9,717		-		-	9,717
Non-U.S. fixed-income securities		1,898		7,231		1,539		-	10,668
Municipal securities				2,232		944		160	3,336
Total fixed-income investments	\$	11,290	\$	207,202	\$	127,244	\$	3,701	\$ 349,437

The effective maturity on securitized investments can be significantly less than the legal maturity date.

#### Foreign Currency Risk

Foreign currency risk represents the risk that changes in exchange rates will adversely affect the fair value of an investment. The University's cash management policy does not specifically limit foreign currency exposure.

<sup>(2)</sup> The maturities indicated for these funds are the average of the overall pool.

<sup>(3)</sup> Includes bond proceeds that are collateralized by securities that are held by the pledging institution's custodian, in the University's name.

#### Note 3 - Foundation Investments

The Foundation's investments, by statement of net position classification and investment type, at September 30, 2019 and 2018 are as follows (in thousands):

Туре		2019	2018		
Fixed income	\$	82,607	\$	64,092	
Equity securities		197,538		185,136	
Other investment instrument types not included above:					
Limited partnerships		106,604		127,790	
Commingled funds and mutual funds	_	7,580		11,005	
Total investments	\$	394,329	\$	388,023	

The Foundation's investments had investment performance of 1.6 and 6.5 percent for the years ended September 30, 2019 and 2018, respectively.

#### **Investment Policy**

The Foundation investments are managed in accordance with the Statement of Investment Policy (Foundation Investment Policy) as approved by the Foundation's board of directors. The policy sets a target allocation and ranges for its investments as follows:

			Actual at
Investment Instrument	Target	Range	September 30, 2019
U.S. equities	22%	12%-32%	25%
Non-U.S. equities	17%	7%-27%	23%
Emerging market equities	8%	0%-18%	8%
Fixed-income securities	25%	15%-35%	21%
Hedge funds	5%	0%-15%	8%
Real assets	11%	1%-21%	9%
Private markets	12%	2%-22%	2%
Opportunistic	0%	0%-10%	1%
Cash	0%	0%-20%	3%

The Foundation's investment policy uses diversification as a fundamental risk management strategy and these funds are broadly diversified. This policy does not specifically limit interest rate, credit, concentration of credit, or foreign currency risks. These risks are considered as part of the overall risk versus investment return characteristics of the aggregate investment portfolio when establishing its asset allocation and selecting its investment managers. Investments are managed in accordance with the investment policy and are monitored according to the risk versus investment return characteristics as compared to applicable benchmarks in the investment industry.

Other investment instrument types in the Foundation's endowment fund are comprised of limited partnership investments, hedge fund managers, and private markets investment managers who invest in U.S. and international equities and fixed-income instruments. Due to the pooled nature of these investments, the related amounts are not included in the disclosures that follow. Additionally, certain managers utilize derivatives to manage investment risks to increase their portfolio liquidity and flexibility and to increase investment return within the level of risk defined in the manager's investment guidelines.

#### **Note 3 - Foundation Investments (Continued)**

#### **Custodial Credit Risk**

Custodial credit risk for investments was discussed previously in Note 2 - Cash and Investments. The Foundation's investment policies do not limit the value of investments that may be held by an outside party. The Foundation's counterparties held \$58,729,000 and \$69,814,000 of its portfolio at September 30, 2019 and 2018, respectively. These investments are held in a nominee's name for the benefit of the Foundation, and would not be subject to any general creditor claims.

#### **Credit Risk**

As discussed previously, the Foundation's investment policy does not specifically limit the credit risk that an issuer or counterparty to an investment assumes.

Fixed-income investments classified by credit ratings at September 30, 2019 and 2018 were as follows (in thousands):

	2019 Credit Rating											
Investment Type	AAA		AA		Α		BB		Not Rated		Total	
Money market mutual funds (1)	\$	11,529	\$	-	\$	-	\$	-	\$	-	\$	11,529
Fixed-income investments (1)		32,599		-		-		32,986		-		65,585
Direct loan fund <sup>(1)</sup>		-		-				-		5,493		5,493
Investments by rating	\$	44,128	\$		\$		\$	32,986	\$	5,493	\$	82,607
					:	2018 Cre	edit F	ating				
Investment Type		AAA		AA		Α		ВВ	No	t Rated		Total
Money market mutual funds (1)	\$	21,860	\$	_	\$	-	\$	-	\$	-	\$	21,860
Fixed-income investments (1)		23,092		-		-		12,592		-		35,684
Direct loan fund <sup>(1)</sup>		-		-				-		6,548		6,548
Investments by rating	\$	44,952	\$	-	\$	-	\$	12,592	\$	6,548	\$	64,092

The credit ratings indicated for these funds are the average of the overall pool.

#### **Concentration of Credit Risk**

As discussed previously, the Foundation's investment policy does not specifically limit the concentration of credit risk.

As of September 30, 2019 and 2018, the Foundation's investment portfolio did not have investments with a particular issuer that equaled or exceeded 5 percent.

#### **Interest Rate Risk**

As discussed previously, the Foundation's investment policy does not specifically limit the interest rate risk of its investments.

#### **Note 3 - Foundation Investments (Continued)**

The Foundation held the following types of fixed-income investments and maturities at September 30, 2019 and 2018 (in thousands):

	2019 Maturities (in Years)										
Investment Type		Less han 1		1-5		6-10		Total			
Money market mutual funds Fixed-income investments <sup>(1)</sup> Direct loan fund <sup>(1)</sup>	\$	11,529 - -	\$	- 32,599 5,493	\$	- 32,986 -	\$	11,529 65,585 5,493			
Total fixed-income investments	\$	11,529	\$	38,092	\$	32,986	\$	82,607			
				2018 Maturiti	es (in Y	ears)					
		Less									
Investment Type	1	han 1		1-5		6-10	Total				
Money market mutual funds	\$	21,860	\$	-	\$	-	\$	21,860			
Fixed-income investments (1)		-		-		35,684		35,684			
Direct loan fund (1)		-		6,548		-		6,548			
Total fixed-income investments	\$	21,860	\$	6,548	\$	35,684	\$	64,092			

<sup>&</sup>lt;sup>(1)</sup> The maturities indicated for these funds are the average of the overall pool.

#### Foreign Currency Risk

As discussed previously, the Foundation's investment policy does not specifically limit foreign currency risk.

#### **Investment Commitments**

In September 2018, the Foundation entered into an investment agreement that commits \$20,000,000 in a private equity investment fund. As of September 30, 2019, \$1,703,000 in investments were made to this fund. As of September 30, 2018, there were no investments made to the fund. The Foundation had approximately \$20,202,000 and \$21,986,000 of investment commitments outstanding at September 30, 2019 and 2018, respectively.

#### Note 4 - Receivables

At September 30, 2019 and 2018, receivables consisted of the following (in thousands):

	 2019	2018
Grants and contracts receivable	\$ 46,736	\$ 31,193
Pledged gifts receivable	5,577	9,375
Student notes receivable	23,352	26,468
Student accounts receivable	74,003	76,901
Other	 50,246	36,344
Total	199,914	180,281
Less:		
Provision for loss on receivables	(44,798)	(19,203)
Unamortized discount to present value on		
pledged gifts receivable	 (173)	 (267)
Total	154,943	160,811
Less net current portion of receivables	 (124,212)	 (127,308)
Net noncurrent receivables	\$ 30,731	\$ 33,503

Payments on pledged gifts receivable at September 30, 2019 are expected to occur in the following fiscal years (in thousands):

2020	\$ 3,507
2021-2051	 2,070
Total	\$ 5,577

Student notes receivable consist of loans to students made from both federal and university resources. Principal repayment and interest rate terms on these loans vary considerably. The provision for loss on receivables does not apply to the federal portion of federal student notes receivable, since federal regulations do not require the University to provide reserves on the federal portion of uncollectible student loans. Federal loan programs are funded principally with federal advances to the University from the Perkins and various health profession loan programs. The Federal Perkins loan program expired on September 30, 2017, which ended the issuance of new loans under this program. Pending additional information from the federal government, the University will continue to service all outstanding loans in accordance with program specifications.

**Note 5 - Capital Assets** 

Capital asset activity for the years ended September 30, 2019 and 2018 was as follows (in thousands):

Non-depreciated capital assets   Final Page   Final Pag		Ba	alance					Balance
Non-depreciated capital assets:		Septe	ember 30,				Se	ptember 30,
Land   Construction in progress   23,896   36,595   0,70   (17,650)   42,841   10,241   10,			2018	Additions	Retirements	Transfers		2019
Construction in progress         23.896         36.595         — (17.650)         42.841           Total - Nondepreciable assets         62.744         37.624         (7)         (17.650)         82.711           Depreciable capital assets:         1.00         30.857         2.290         — 10         30.857           Buildings         1.526.236         71.256         (12.498)         17.640         1.602.634           Library materials         181.3779         8.111         (268)         — 191.662         191.662           Equipment and software         181.838         8.111         (268)         — 191.662         191.662           Total - Depreciable assets         1.920.410         92.959         (14.546)         17.650         2.016,473           Less accumulated depreciation:         20.016         820         — 2         — 767.273         154.274         1.01,460         11.620         — 767.273         1.01,600         1.01,600         — 767.273         1.01,600         1.01,600         — 767.273         1.01,600         1.01,600         1.01,600         — 767.273         1.01,600         1.01,600         1.01,600         1.01,600         1.01,600         1.01,600         1.01,600         1.01,600         1.01,600         1.01,600         1.01,60	Non-depreciated capital assets:						_	
Total - Nondepreciable assets   62,744   37,624   7,	Land	\$	38,848	\$ 1,029	\$ (7	) \$ -	\$	39,870
Depreciable capital assets:   Land improvements   28,557   2,290   1 0 0 0,0057     Buildings   1,526,236   71,256   (12,498)   17,640   1,602,634     Library materials   1818,3779   8,111   (268)   - 191,622     Equipment and software   181,838   11,302   (1,780)   - 2 0,116,700     Total - Depreciable assets   1,920,410   92,959   (14,546)   17,650   2,016,473     Less accumulated depreciation:   Land improvements   20,016   820   - 2 0,203,636     Buildings   735,858   43,667   (12,252)   - 2 0,767,273     Library materials   148,202   6,072   - 150,402,402     Equipment and software   152,909   9,191   (1,620)   - 160,400     Total accumulated depreciation   1,056,985   59,750   (13,872)   - 1,102,863     Total depreciable capital assets, Net   863,425   33,209   (674)   17,650   913,610     Net capital assets   2017   863,425   33,209   (674)   17,650   913,610     Net capital assets   2017   863,425   33,209   (674)   17,655   913,610     Non-depreciated capital assets   2018   83,285   1,698   (1,135)   2,64,643   23,896     Construction in progress   26,715   21,824   - (24,643)   23,896     Construction in progress   27,769   991   (12,94)   (24,643)   23,896     Construction in progress   27,691   991   (12,94)   24,639   1,526,236     Library materials   27,691   991   (12,94)   24,639   1,526,236     Library materials   176,356   74,34   (11)   24,639   1,526,236     Library materials   176,356	Construction in progress		23,896	36,595	<u> </u>	(17,650	)	42,841
Description   Part	Total - Nondepreciable assets		62,744	37,624	(7	) (17,650	)	82,711
Buildings	Depreciable capital assets:							
Dependent and software   183,779   8,111   (268)   - 191,622	Land improvements		28,557	2,290	_	1	)	30,857
Equipment and software         181,838         11,302         (1,780)         —191,306           Total - Depreciable assets         1,920,410         92,959         (14,546)         17,650         2,016,473           Less accumulated depreciation:         20,016         820         — 2.038         2,036         1,026,203         6,022         — 2.038         767,273         1,026,935         43,667         (12,252)         — 767,273         1,026,935         43,667         (12,252)         — 6,027         1,02,474         1,026,935         59,760         (13,872)         — 1,026,835         1,026,935         59,750         (13,872)         — 1,026,835         1,026,935         59,750         (13,872)         — 1,026,835         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,727         1,026,935         — 70,728         1,026,935         — 70,728         1,026,935         — 70,728         1,026,935         — 70,72	Buildings	1	1,526,236	71,256	(12,498	) 17,64	)	1,602,634
Total - Depreciable assets	Library materials		183,779	8,111	(268	) -		191,622
Less accumulated depreciation:         20,016         820         -         20,368           Buildings         735,858         43,667         (12,252)         -         767,273           Library materials         148,202         6,072         -         -         150,4274           Equipment and software         152,909         9,191         (1,620)         -         1,00,80           Total accumulated depreciation         1,056,985         59,750         (13,872)         -         1,102,863           Total depreciable capital assets, Net         863,425         33,209         (674)         17,650         913,610           Net capital assets         \$926,169         70,833         (681)         \$         \$996,321           Non-depreciated capital assets         \$926,169         70,833         (681)         \$         \$996,321           Non-depreciated capital assets         \$926,169         \$1,698         \$(1,135)         \$         \$996,321           Non-depreciated capital assets         \$38,285         \$1,698         \$(1,135)         \$2,643         23,896           Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         27,691	Equipment and software		181,838	11,302	(1,780	)		191,360
Land improvements         20,016         820         -         20,836           Buildings         735,858         43,667         (12,252)         -         767,273           Library materials         148,202         6,72         -         -         160,480           Equipment and software         152,909         9,191         (1,620)         -         11,02,863           Total accumulated depreciation         1,056,985         59,750         (13,872)         -         1,102,863           Total depreciable capital assets, Net         863,425         33,209         (674)         17,650         913,610           Net capital assets         \$926,169         70,833         (681)         \$         \$996,321           Non-depreciated capital assets         \$2017         Additions         Retirements         Transfers         2018           Non-depreciated capital assets:         \$38,285         1,698         (1,135)         \$         \$38,848           Construction in progress         26,715         21,824         -         (24,643)         223,896           Total - Nondepreciable assets         25,701         991         (129)         4         28,557           Buildings         1,409,589         106,549         (	Total - Depreciable assets		1,920,410	92,959	(14,546	) 17,65	)	2,016,473
Buildings         735,858         43,667         (12,252)         -         767,273           Library materials         148,202         6,072         -         -         154,274           Equipment and software         152,909         9,191         (1,620)         -         1,102,863           Total accumulated depreciation         1,056,985         59,750         (13,872)         -         1,102,863           Total depreciable capital assets, Net         863,425         33,209         (674)         17,650         913,610           Net capital assets         \$926,169         \$70,833         (681)         \$         \$996,321           Net capital assets         \$926,169         \$70,833         (681)         \$         \$996,321           Net capital assets         \$926,169         \$70,833         (681)         \$         \$996,321           Net capital assets         \$926,169         \$70,833         \$(681)         \$         \$996,321           Non-depreciated capital assets         \$94,000         \$80,000         \$80,000         \$80,000         \$80,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000         \$90,000 <td>Less accumulated depreciation:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Less accumulated depreciation:							
Library materials	Land improvements		20,016	820	_	-		20,836
Equipment and software         152,909         9,191         (1,620)         —         160,480           Total accumulated depreciation         1,056,985         59,750         (13,872)         —         1,102,863           Total depreciable capital assets, Net         863,425         33,209         (674)         17,650         913,610           Net capital assets         \$926,169         70,833         (681)         \$	Buildings		735,858	43,667	(12,252	) -		767,273
Total accumulated depreciation         1,056,985         59,750         (13,872)         -         1,102,863           Total depreciable capital assets, Net         863,425         33,209         (674)         17,650         913,610           Net capital assets         \$926,169         \$70,833         (681)         \$-         \$996,321           Non-depreciated capital assets:         Balance September 30, 2017         Additions         Retirements         Transfers         2018           Non-depreciated capital assets:         Land         \$38,285         \$1,698         \$(1,135)         \$-         \$38,848           Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         23,896           Depreciable capital assets:         Land improvements         27,691         991         (129         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment	Library materials		148,202	6,072	-	-		154,274
Notal depreciable capital assets, Net   863,425   33,209   (674)   17,650   913,610     Net capital assets   926,169   70,833   (681)   5 -	Equipment and software		152,909	9,191	(1,620	)	_	160,480
Net capital assets         \$ 926,169         \$ 70,833         (681)         \$ — \$996,321           Balance September 30, 2017         Additions         Retirements         Transfers         September 30, 2018           Non-depreciated capital assets:         \$ 38,285         \$ 1,698         (1,135)         \$ — \$38,848           Construction in progress         26,715         21,824         — (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         —         183,779           Equipment and software         183,818         10,865         (12,845)         —         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         4         4,3493         (9,243)         —         735,858           Library materials         1,26,03         5,599         —	Total accumulated depreciation		1,056,985	59,750	(13,872	)	_	1,102,863
Balance September 30, 2017         Additions         Retirements         Transfers         Balance September 30, Additions           Non-depreciated capital assets:         Land         \$38,285         \$1,698         \$(1,135)         \$-         \$38,848           Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:           Land improvements         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,974,54         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         1,920,410         862         (50)         -         20,016 <tr< td=""><td>Total depreciable capital assets, Net</td><td></td><td>863,425</td><td>33,209</td><td>(674</td><td>)17,65</td><td><u> </u></td><td>913,610</td></tr<>	Total depreciable capital assets, Net		863,425	33,209	(674	)17,65	<u> </u>	913,610
Non-depreciated capital assets:         September 30, 2017         Additions         Retirements         Transfers         2018           Non-depreciated capital assets:         \$38,285         \$1,698         \$(1,135)         \$-         \$38,848           Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         1         1,25,839         (27,526)         24,643         1,920,410           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials<	Net capital assets	\$	926,169	\$ 70,833	\$ (681	) \$ -	\$	996,321
Non-depreciated capital assets:         September 30, 2017         Additions         Retirements         Transfers         2018           Non-depreciated capital assets:         \$38,285         \$1,698         \$(1,135)         \$-         \$38,848           Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         1         1,25,839         (27,526)         24,643         1,920,410           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials<								
Non-depreciated capital assets:         38,285         1,698         (1,135)         -         \$ 38,848           Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193		Ва	alance					Balance
Non-depreciated capital assets:   Land		Septe	ember 30,				Se	eptember 30,
Land Construction in progress         \$38,285         \$1,698         \$(1,135)         -         \$38,848           Construction in progress         \$26,715         \$21,824         -         \$(24,643)         \$23,896           Total - Nondepreciable assets         \$65,000         \$23,522         \$(1,135)         \$(24,643)         \$62,744           Depreciable capital assets:           Land improvements         \$27,691         991         \$(129)         4         \$28,557           Buildings         \$1,409,589         \$106,549         \$(14,541)         \$24,639         \$1,526,236           Library materials         \$176,356         \$7,434         \$(11)         -         \$183,779           Equipment and software         \$183,818         \$10,865         \$(12,845)         -         \$181,838           Total - Depreciable assets         \$1,797,454         \$125,839         \$(27,526)         \$24,643         \$1,920,410           Less accumulated depreciation:         \$19,204         \$862         \$(50)         -         \$20,016           Buildings         \$701,608         \$43,493         \$(9,243)         -         \$735,888           Library materials         \$142,603         \$5,599         -         -         \$148,202		2	2017	Additions	Retirements	Transfers		2018
Construction in progress         26,715         21,824         -         (24,643)         23,896           Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:         Land improvements         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         Land improvements         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909								
Total - Nondepreciable assets         65,000         23,522         (1,135)         (24,643)         62,744           Depreciable capital assets:         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659	Non-depreciated capital assets:							
Depreciable capital assets:   Land improvements   27,691   991   (129)   4   28,557     Buildings   1,409,589   106,549   (14,541)   24,639   1,526,236     Library materials   176,356   7,434   (11)   - 183,779     Equipment and software   183,818   10,865   (12,845)   - 181,838     Total - Depreciable assets   1,797,454   125,839   (27,526)   24,643   1,920,410     Less accumulated depreciation:   Land improvements   19,204   862   (50)   - 20,016     Buildings   701,608   43,493   (9,243)   - 735,858     Library materials   142,603   5,599   148,202     Equipment and software   156,380   9,193   (12,664)   - 152,909     Total accumulated depreciation   1,019,795   59,147   (21,957)   - 1,056,985     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)   24,643   863,425     Total depreciable capital assets, Net   777,659   66,692   (5,569)	·	\$	38,285	\$ 1,698	\$ (1,135	) \$ -	\$	38,848
Land improvements         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land	\$			. ,	,		
Land improvements         27,691         991         (129)         4         28,557           Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress	\$	26,715	21,824	-	(24,643	)	23,896
Buildings         1,409,589         106,549         (14,541)         24,639         1,526,236           Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:           Land improvements         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress Total - Nondepreciable assets	\$	26,715	21,824	-	(24,643	)	23,896
Library materials         176,356         7,434         (11)         -         183,779           Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         Land improvements         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets:	\$	26,715 65,000	21,824 23,522	(1,135	(24,643	)	23,896 62,744
Equipment and software         183,818         10,865         (12,845)         -         181,838           Total - Depreciable assets         1,797,454         125,839         (27,526)         24,643         1,920,410           Less accumulated depreciation:         Land improvements         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements		26,715 65,000 27,691	21,824 23,522 991	(1,135	(24,643) (24,643	) )	23,896 62,744 28,557
Less accumulated depreciation:         Land improvements       19,204       862       (50)       -       20,016         Buildings       701,608       43,493       (9,243)       -       735,858         Library materials       142,603       5,599       -       -       148,202         Equipment and software       156,380       9,193       (12,664)       -       152,909         Total accumulated depreciation       1,019,795       59,147       (21,957)       -       1,056,985         Total depreciable capital assets, Net       777,659       66,692       (5,569)       24,643       863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings		26,715 65,000 27,691 1,409,589	21,824 23,522 991 106,549	(1,135 (129 (14,541	(24,643 ) (24,643 ) 24,633	) )	23,896 62,744 28,557 1,526,236
Land improvements       19,204       862       (50)       -       20,016         Buildings       701,608       43,493       (9,243)       -       735,858         Library materials       142,603       5,599       -       -       148,202         Equipment and software       156,380       9,193       (12,664)       -       152,909         Total accumulated depreciation       1,019,795       59,147       (21,957)       -       1,056,985         Total depreciable capital assets, Net       777,659       66,692       (5,569)       24,643       863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials		26,715 65,000 27,691 1,409,589 176,356	21,824 23,522 991 106,549 7,434	(1,135) (129) (14,541) (11)	(24,643 ) (24,643 ) 24,63 ) 24,63	) )	23,896 62,744 28,557 1,526,236 183,779
Land improvements         19,204         862         (50)         -         20,016           Buildings         701,608         43,493         (9,243)         -         735,858           Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software		26,715 65,000 27,691 1,409,589 176,356 183,818	21,824 23,522 991 106,549 7,434 10,865	(1,135 (129 (14,541 (11) (12,845	(24,643 (24,643 ) (24,643 ) (24,63 ) -	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838
Buildings     701,608     43,493     (9,243)     -     735,858       Library materials     142,603     5,599     -     -     148,202       Equipment and software     156,380     9,193     (12,664)     -     152,909       Total accumulated depreciation     1,019,795     59,147     (21,957)     -     1,056,985       Total depreciable capital assets, Net     777,659     66,692     (5,569)     24,643     863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets		26,715 65,000 27,691 1,409,589 176,356 183,818	21,824 23,522 991 106,549 7,434 10,865	(1,135 (129 (14,541 (11) (12,845	(24,643 (24,643 ) (24,643 ) (24,63 ) -	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838
Library materials         142,603         5,599         -         -         148,202           Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets  Less accumulated depreciation:		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454	21,824 23,522 991 106,549 7,434 10,865 125,839	(1,135 (129 (14,541 (11 (12,845 (27,526	(24,643 (24,643 ) (24,643 ) 24,63 ) - ) 24,64	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410
Equipment and software         156,380         9,193         (12,664)         -         152,909           Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets  Less accumulated depreciation: Land improvements		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454	21,824 23,522 991 106,549 7,434 10,865 125,839	(1,135 (129 (14,541 (11 (12,845 (27,526	(24,643 (24,643 ) (24,643 ) 24,63 ) - ) 24,64	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410 20,016
Total accumulated depreciation         1,019,795         59,147         (21,957)         -         1,056,985           Total depreciable capital assets, Net         777,659         66,692         (5,569)         24,643         863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets  Less accumulated depreciation: Land improvements Buildings		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454 19,204 701,608	21,824 23,522 991 106,549 7,434 10,865 125,839 862 43,493	(1,135 (129 (14,541 (11 (12,845 (27,526 (50 (9,243	(24,643 (24,643 ) (24,643 ) 24,63 ) - ) 24,64	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410 20,016 735,858
Total depreciable capital assets, Net 777,659 66,692 (5,569) 24,643 863,425	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets  Less accumulated depreciation: Land improvements Buildings Library materials		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454 19,204 701,608 142,603	21,824 23,522 991 106,549 7,434 10,865 125,839 862 43,493 5,599	(1,135 (129 (14,541 (11 (12,845 (27,526 (50 (9,243	(24,643 (24,643 ) (24,643 ) 24,63 ) - ) 24,64 ) -	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410 20,016 735,858 148,202
	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets  Less accumulated depreciation: Land improvements Buildings Library materials Equipment and software		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454 19,204 701,608 142,603 156,380	21,824 23,522 991 106,549 7,434 10,865 125,839 862 43,493 5,599 9,193	(1,135 (129 (14,541 (11) (12,845 (27,526 (50) (9,243	(24,643 (24,643 ) (24,643 ) 24,63 ) - ) 24,64 ) - ) - ) -	) ) 1	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410 20,016 735,858 148,202 152,909
Net capital assets \$ 842,659 \$ 90,214 \$ (6,704) \$ - \$ 926,169	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets: Land improvements Buildings Library materials Equipment and software  Total - Depreciable assets  Less accumulated depreciation: Land improvements Buildings Library materials Equipment and software  Total accumulated depreciation		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454 19,204 701,608 142,603 156,380 1,019,795	21,824 23,522 991 106,549 7,434 10,865 125,839 862 43,493 5,599 9,193	(1,135 (129 (14,541 (11 (12,845 (27,526 (50 (9,243 - (12,664 (21,957	(24,643 (24,643 ) (24,643 ) 24,63 ) - ) 24,64 ) - ) - ) - ) - ) -	) 11	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410 20,016 735,858 148,202 152,909 1,056,985
	Land Construction in progress  Total - Nondepreciable assets  Depreciable capital assets:  Land improvements  Buildings Library materials  Equipment and software  Total - Depreciable assets  Less accumulated depreciation:  Land improvements  Buildings Library materials  Equipment and software  Total accumulated depreciation  Total depreciable capital assets, Net		26,715 65,000 27,691 1,409,589 176,356 183,818 1,797,454 19,204 701,608 142,603 156,380 1,019,795 777,659	21,824 23,522 991 106,549 7,434 10,865 125,839 862 43,493 5,599 9,193 59,147 66,692	(1,135 (129 (14,541 (11 (12,845 (27,526 (50 (9,243 (12,664 (21,957 (5,569	(24,643 (24,643 ) (24,643 ) (24,643 ) (24,644 ) (24,644 ) (24,644 ) (24,644 ) (24,644 ) (24,644 ) (24,644 ) (24,643 ) (2	)	23,896 62,744 28,557 1,526,236 183,779 181,838 1,920,410 20,016 735,858 148,202 152,909 1,056,985 863,425

Construction in progress represents expenditures for new projects that are underway but not yet completed. As projects are completed, they are removed from construction in progress and recorded as "transfers" and reflected in the applicable asset classification.

#### Note 5 - Capital Assets (Continued)

Several buildings on campus were financed through the issuance of bonds by the State of Michigan Building Authority (SBA). The SBA bonds are secured by a pledge of rentals to be received from the State of Michigan pursuant to a lease agreement entered into among the SBA, the State of Michigan, and the University. During the lease term, the SBA holds title to the buildings, the State of Michigan makes all lease payments directly to the SBA, and the University is responsible for all operating and maintenance costs. At the expiration of the lease, the SBA will transfer title to the buildings to the University.

#### Note 6 - Long-term Debt

Long-term debt activity for the years ended September 30, 2019 and 2018 was as follows (in thousands):

		2019								
		ginning			_		Ending			urrent
0 15 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	В	alance	Additio	ons	Red	luctions	B	Balance	F	ortion
General Revenue Bonds, Series 2018A, with interest ranging from 3.375% to 5.0%, maturing on November 15, 2049	\$	122,225	\$	_	\$	-	\$	122,225	\$	1,855
General Revenue and Refunding Bonds, Series 2016A, with interest ranging from 2.5% to 5.0%, maturing on November 15, 2037		89,975		_		-		89,975		355
General Revenue and Refunding Bonds, Series 2016B, with interest ranging from 1.5% to 4.0%, maturing on November 15, 2037		11,285		_		970		10,315		600
General Revenue and Refunding Bonds, Series 2015A, with interest ranging from 3.0% to 5.0%, maturing on November 15, 2036		48,300		-		1,590		46,710		1,680
General Revenue Bonds, Series 2013A, with interest ranging from 3.0% to 5.0%, maturing on November 15, 2044		79,375		_		1,580		77,795		1,645
General Revenue Bonds, Series 2009A, with interest ranging from 3.25% to 5.0%, maturing on November 15, 2029		36,505		_		3,715		32,790		3,905
Taxable General Revenue Build America Bonds, Series 2009B, with interest ranging from 4.844% to 6.536%, maturing on November 15, 2039		25,500		_		755		24,745		780
General Revenue Bonds, Series 2008, with interest at 5.0%, maturing on November 15, 2019		4,555		-		2,220		2,335		2,335
Taxable General Revenue Bonds, Series 2007B, with interest at 6.01%, maturing on November 15, 2030		4,220		-		-		4,220		-
Taxable General Revenue Bonds, Series 2003B, with interest at 5.02%, maturing on November 15, 2018		435		-		435		-		-
Capital lease payable, with interest at 3.8%, expiring on March 11, 2038 and 2.9% expiring on April 13, 2023		19,915		_		870		19,045		900
Various notes payable with varying interest rates maturing through 2024		70		63		-		133		57
Gross long-term debt		442,360		63		12,135		430,288		14,112
Plus unamortized bond premium - Net		36,467		81		1,994		34,554		1,914
Total long-term debt	\$	478,827	\$	144	\$	14,129	\$	464,842	\$	16,026

Note 6 - Long-term Debt (Continued)

	р.	2018						-ndina		Current
		eginning salance	٨	dditions	Po	ductions	Ending Balance		Current Portion	
General Revenue Bonds, Series 2018A, with interest ranging from 3.375% to 5.0%, maturing on November 15, 2049	\$	-	\$	122,225		-	\$	122,225		-
General Revenue and Refunding Bonds, Series 2016A, with interest ranging from 2.5% to 5.0%, maturing on November 15, 2037		89,975		-		-		89,975		-
General Revenue and Refunding Bonds, Series 2016B, with interest ranging from 1.5% to 4.0%, maturing on November 15, 2037		11,285		_		-		11,285		970
General Revenue and Refunding Bonds, Series 2015A, with interest ranging from 3.0% to 5.0%, maturing on November 15, 2036		49,820		_		1,520		48,300		1,590
General Revenue Bonds, Series 2013A, with interest ranging from 3.0% to 5.0%, maturing on November 15, 2044		80,870		_		1,495		79,375		1,580
General Revenue Bonds, Series 2009A, with interest ranging from 3.25% to 5.0%, maturing on November 15, 2029		61,060		-		24,555		36,505		3,715
Taxable General Revenue Build America Bonds, Series 2009B, with interest ranging from 4.844% to 6.536%, maturing on November 15, 2039		26,230		-		730		25,500		755
General Revenue Bonds, Series 2008, with interest at 5.0%, maturing on November 15, 2019		88,485		-		83,930		4,555		2,220
General Revenue Bonds, Series 2007A, with interest ranging from 4.0% to 5.0%, maturing on November 15, 2037		820		-		820		-		_
Taxable General Revenue Bonds, Series 2007B, with interest at 6.01%, maturing on November 15, 2030		4,220		-		-		4,220		-
Taxable General Revenue Bonds, Series 2003B, with interest at 5.02%, maturing on November 15, 2018		845		-		410		435		435
Capital lease payable, with interest at 3.8%, expiring on March 11, 2038 and 2.9% expiring on April 13, 2023		19,452		1,121		658		19,915		870
Various notes payable with varying interest rates maturing through 2020		111		-		41		70		44
Gross long-term debt		433,173		123,346		114,159		442,360		12,179
Plus unamortized bond premium - Net	_	30,107		11,220	_	4,860		36,467		1,913
Total long-term debt	\$	463,280	\$	134,566	\$	119,019	\$	478,827	\$	14,092

When economically feasible, the University considers defeasance or refunding of prior debt issuances to reduce borrowing costs. The total amount of defeased bonds outstanding at September 30, 2019 and 2018 was \$42,299,000 and \$186,902,000, respectively.

#### Note 6 - Long-term Debt (Continued)

In February 2018, the University issued its tax exempt Series 2018A Bonds for a par amount of \$122,225,000 and net premium of \$10,793,933. These bond proceeds, \$133,018,933 with an average coupon interest rate of 4.5 percent, were used to fund various university projects and related issuance costs. The projects include a) construction, renovation and expansion of the Hilberry Theatre; b) construction of the Mike Ilitch School of Business; c) renovation and repurposing of the Science and Engineering Library; d) construction of a new Data Center; e) construction of building electrical upgrades; f) weight room addition; g) construction and relocation of Campus Health Center; h) construction of an art gallery; i) various relocation activities.

In fiscal year 2018, the University entered into a Service Concessionaire Agreement (SCA) with Corvias Campus Living-WSU, LLC (Corvias) (more fully discussed in Note 15) whereby Corvias defeased \$79,180,000 and \$19,825,000, of the University's Series 2008 and Series 2009A Bonds, respectively. In November 2017, Corvias deposited \$102,890,223 with a trustee to pay principal and interest on the aforementioned bonds when called for redemption on November 15, 2018 and 2019. The difference between the amount deposited with the trustee and the net carrying amount of the debt totaled \$2,271,780. This amount, net of amortization, is included in deferred outflows of resources on the statement of net position.

In July 2016, the University issued its tax-exempt Series 2016A Bonds for a par amount of \$89,975,000 and net premium of \$15,667,458. The University also issued its taxable Series 2016B Bonds for a par amount of \$11,285,000, less a net discount of \$157,421. These bonds were issued to refinance prior outstanding debt to achieve interest rate savings. These bond proceeds, \$116,770,037 with an average coupon interest rate of 4.3 percent, were used to fully or partially advance refund the University's Series 2007A, Series 2008, and Series 2009A Bonds, aggregating \$105,285,000 with an average coupon interest rate of 4.93 percent. Of the \$116,770,037 in bond proceeds, \$603,231 was used to pay related issuance costs and \$116,166,806 was deposited with the trustee to pay principal and interest on the Series 2007A, Series 2008, and Series 2009A Bonds when called for redemption on November 15, 2017, 2018, and 2019, respectively. The advance refunding resulted in an economic gain of \$12,652,409 and total debt service payments decreased by \$15,662,379.

On March 19, 2012, the University entered into a capital lease agreement for a medical office building. The lease period commenced on March 12, 2013 with an initial term of 25 years. The capital lease is included in long-term debt and the related asset is included in buildings with cost of \$22,000,000 and accumulated depreciation of approximately \$3,623,000 and \$3,074,000 as of September 30, 2019 and 2018, respectively.

On October 13, 2017, the University entered into a capital lease agreement for lighting retrofit in certain University parking facilities. The lease period commenced on July 13, 2018 with an initial term of 5.5 years. The capital lease is included in long-term debt and the related asset is included in buildings with cost of \$1,121,000 and accumulated depreciation of approximately \$218,000 as of September 30, 2019.

#### Note 6 - Long-term Debt (Continued)

Principal and interest maturities on long-term debt at September 30, 2019 are as follows (in thousands):

		Bond and Variou	s Notes Payable			
Fiscal Years		Principal	Interest*	Capital Lease Minimum Payments		
2020	\$	13,212	\$ 18,745	\$ 1,608		
2021		13,721	18,102	1,608		
2022		14,356	17,426	1,608		
2023		14,886	16,718	1,556		
2024		15,604	15,966	1,383		
2025-2029		90,625	67,109	6,937		
2030-2034		86,115	45,886	7,016		
2035-2039		73,540	27,494	4,871		
2040-2044		50,480	13,641	-		
2045-2049	<u> </u>	38,704	3,588	<u> </u>		
Total	<u>\$</u>	411,243	\$ 244,675	26,587		
	Less amount repres	senting interest		7,542		
	Present value of mi	nimum lease payme	ents	\$ 19,045		

Amounts do not reflect 35 percent federal interest rate subsidies to be received for Build America Bonds interest.

Interest paid on long-term debt including the capital lease was \$20,808,000 and \$17,366,000 in 2019 and 2018, respectively.

Effective December 1, 2015, the University renewed and increased its line of credit facility to \$35.0 million. The agreement had a three-year term with a maturity date of December 1, 2018. The agreement was extended until March 1, 2019. Effective March 2019, the University renewed and increased its lines of credit facilities with two financial institutions to \$50.0 million total with borrowing rates of .40 percent in excess of one-month LIBOR. The facilities have three-year terms with a maturity date of March 2022. As of September 30, 2019 and 2018, there were no borrowings outstanding under the line of credit facilities.

#### Note 7 - Derivative Instruments

#### **Interest Rate Swaps**

As of September 30, 2014, the University held two interest rate instruments that were associated with the Series 2006 bonds. In February 2015, most of the Series 2006 bonds were advance refunded with proceeds from the Series 2015A bonds. In November 2016, the balance of the Series 2006 bonds was paid. As a result, all of the two interest rate instruments are now associated with the Series 2015A bonds.

#### Note 7 - Derivative Instruments (Continued)

The University initially entered into these swap agreements at the same time and for the same amount as the issuance of the Series 2006 bonds, with the intent of lowering its borrowing cost by creating a cash flow hedge, at a net interest rate that is lower than the fixed rate on the debt that was issued. The swap agreements are not effective hedges. They were ineffective swap agreements because they did not have consistent critical terms. In accordance with GASB Statement No. 53, an interest rate swap is considered an effective cash flow hedge if the swap payments received substantially offset the payments made on the associated debt, and then such changes in fair value are deferred. An interest rate swap that is not considered an effective cash flow hedge, in accordance with the provisions of this statement, is deemed to be an investment derivative instrument, and changes in fair value are recorded as a component of the change in net investment income (loss) in the statement of revenues, expenses, and changes in net position.

The fair value balances and notional amounts of the derivative instruments outstanding at September 30, 2019 and 2018, classified by type and the change in fair value, are shown below (in thousands):

	Change in Fair Valu	ie	Fair Value at September 30, 2019							
				(in thousands)						
Investment Derivative Instrument	Classification	Amount	Classification	Amount	Notional					
Series 2015A# - Pay-variable, receive variable/fixed annuity	Net investment income (loss)	\$ 412	Asset	\$ 677	\$ 39,570					
	Change in Fair Valu	ie	Fair Value a	t September 30	0, 2018					
				(in thousands)	1					
Investment Derivative Instrument	Classification	Amount	Classification	Amount	Notional					
Series 2015A# - Pay-variable, receive variable/fixed annuity	Net investment income (loss)	\$ 88	Asset	\$ 265	\$ 40,900					

The fair value of the swaps was estimated using the proprietary pricing model of an independent derivative valuation service.

Terms for the years ended September 30, 2019 and 2018 were as follows:

Associated	Effective	•		Pay			Counterparty	
Bond Issue	Date	Туре	Objective	Terms	Receive Terms	Maturity Date	Credit Rating*	_
		Pay variable, receive	Cash flow hedge					
Series 2006 and Series		variable plus fixed	for associated bond		67% LIBOR plus			
2015A# (2 swaps)	2/5/2015	annuity	issue	SIFMA	40.73 bps	11/15/2036	AA-/A	

<sup>#</sup> The associated bond issue was substantially changed from the Series 2006 bonds to the Series 2015A bonds effective February 5, 2015 as a result of an advance refunding of most of the Series 2006 bonds in 2015 and a subsequent refunding of the balance of the 2006 bonds in November 2016. As of September 30, 2016, almost all of the two interest rate instruments were associated with the Series 2015A bonds, and only a small portion was associated with the Series 2006 bonds. In November 2016, the balance of the Series 2006 bonds was paid.

LIBOR - London Interbank Offered Rate SIFMA - Securities Industry and Financial Markets Association bps - basis points

**Associated Risk** - The associated risks of the outstanding swaps as of September 30, 2019 and 2018 were as follows:

The swaps are tax basis swaps, which were executed with the objective of reducing the financing cost of the Series 2006 bonds and their related refunding bonds, the series 2015A bonds. Changes in interest rates as well as the SIFMA/LIBOR ratio cause the fair value of these swaps to rise and fall with financial market conditions. Due to changes in these market factors since inception, these swaps have a positive fair value at September 30, 2019 and September 30, 2018.

<sup>\*</sup> Effective March 1, 2012, one of the original counterparties transferred by novation all the rights, liabilities, duties, and obligations to a new counterparty.

#### Note 7 - Derivative Instruments (Continued)

Credit Risk - As of September 30, 2019 and 2018, the University was exposed to some credit risk from swap counterparties because the existing swaps had a positive fair value \$677,000 and \$265,000, respectively. The University executes swap transactions with various counterparties. At September 30, 2018, there were two outstanding swaps with two counterparties. The first counterparty held one swap that represented approximately 70 percent of the notional amount of swaps outstanding. This counterparty is rated "AA-" by Standard & Poor's (downgraded from AA+ in May 2016) and "Aa2" by Moody's (downgraded from Aa1 in June 2012). A second counterparty held one swap that represented approximately 30 percent of the notional amount of the swaps outstanding. This counterparty was rated "A+" by Fitch, "A" by Standard & Poor's (downgraded from A+ in December 2011), and "A2" by Moody's (down from A1 in November 2010).

**Basis Risk** - The swaps expose the University to basis risk. This is the risk that arises when the variable interest rates of a derivative instrument and a hedged item are based upon different interest rate reference indices. For the basis swaps, the University is exposed to the risk that the SIFMA interest rate, which it pays to the counterparties, will be more than the amount that it receives from the counterparties, which is based upon 67 percent of LIBOR plus an additional fixed annuity amount of 40.73 basis points (0.4073 percent).

**Termination** - The swap termination date is November 2036. The derivative contracts are documented by the International Swap Dealers Associations (ISDA) Master Agreement, which includes standard termination events such as failure to pay and bankruptcy. The schedule to the master agreement also provides that the swaps may be terminated by the University if the counterparty's credit quality rating falls below certain specified levels. The University or the counterparty may terminate the swap if the other party fails to perform under the terms of the contract. If at the time of termination the swap has a negative fair value, the University is liable for a payment equal to the swap's fair value.

#### **Futures Contract**

The Foundation utilizes derivative financial instruments in a "portable alpha" investment strategy. This investment strategy provides broad exposure to several equity and fixed income target markets while adding potential for additional return through a separate investment product. The portable alpha investment strategy utilizes futures contracts, which aid in obtaining incremental income or profit on the underlying investment exposures.

As of September 30, 2019 and 2018, the notional value of these contracts was \$37,610,000 and \$9,975,000, respectively. The notional values associated with these derivative financial instruments are generally not recorded on the financial statements; however, the 2018 amounts for exposure (realized gains/losses and investment income) on these instruments have been recorded. The fair value of these derivative instruments as of September 30, 2019 and 2018 was \$2,302,000 and \$784,000, respectively, which are recorded as endowment investment in the statement of net position.

The use of derivative financial instruments reduces certain investment risks and generally adds value to the portfolio. The instruments themselves, however, do involve some investment and counterparty risk not fully reflected in the financial statements.

#### **Note 8 - Defined Contribution Retirement Plan**

The University offers pension benefits for substantially all of its full-time employees through a defined contribution plan. In a defined contribution plan, benefits depend solely on amounts contributed to the plan plus investment results. Employees are eligible to participate after they reach 26 years of age. Eligible employees that contribute at least 1 percent of their salary will receive a university matching contribution equal to two times their contribution up to a maximum university contribution of 10 percent. The University's contribution is not vested until the employee has completed two years of service. University contributions to the plan for the years ended September 30, 2019 and 2018 were approximately \$34,532,000 and \$33,819,000, respectively.

#### Note 9 - Commitments

#### **Construction Commitments**

Approximately \$30,467,000 was committed to current University construction projects at September 30, 2019. This amount includes approximately \$19,912,000 for the STEM Innovation Learning Center, \$2,700,000 for the Hillberry Gateway Project, and various smaller construction projects. Commitments will be funded through a combination of resources, including external long-term financing, gifts, investment income, and various other University sources.

#### **Lease Obligations**

The University leases various buildings, office space, and equipment under operating lease agreements. Operating lease expenses totaled \$5,434,000 and \$7,080,000 for the years ended September 30, 2019 and 2018, respectively. Future minimum lease payments under noncancelable operating leases are expected to be paid in the following years ended September 30 (in thousands):

Fiscal Years	 num Lease bligation
2020	\$ 2,331
2021	2,627
2022	2,178
2023	1,460
2024	1,337
2025-2029	5,594
2030-2034	5,784
2035-2039	 302
Tota	\$ 21,613

On June 28, 2019, the University entered into a sublease agreement with a university affiliate for 55,000 rentable square feet in a medical office building. The lease period commenced on July 1, 2019 with an initial term of 15.5 years. The minimum lease obligation as of September 30, 2019 was \$15,535,000.

#### Note 10 - Contingencies

#### **Insurance Program**

In conjunction with the conduct of its operations, the University is exposed to various risks of loss and legal actions. To mitigate such risks, the University participates with 10 other Michigan public universities in the Michigan Universities Self-Insurance Corporation (MUSIC). This corporation provides comprehensive general liability, errors and omissions, property and vehicle liability, and excess liability insurance. The University participates in all of the aforementioned insurance programs except property insurance. The University maintains property insurance with FM Global. MUSIC loss coverages are structured on a three-layer basis with each member retaining a portion of its losses, MUSIC covering the second layer, and commercial carriers covering the third. Comprehensive general liability coverage is provided on an occurrence basis, errors and omissions coverage is provided on a claims-made basis, and property coverage is provided on a blanket basis. Each MUSIC member university is responsible for its regular anticipated losses, determined actuarially, for both general liability and errors and omissions. The aggregate retention amounts for each member are actuarially determined annually. MUSIC provides coverage for claims in excess of these retentions. By agreements with MUSIC, in the event the insurance reserves established by MUSIC are insufficient to meet its second-tier obligations, each of the participating universities shares this obligation. Participating universities are subject to additional assessments if the obligations and expenses (claims) of MUSIC exceed the combined periodic payments and accumulated operational reserves for any given year. The maximum possible additional assessment for the University for the year ended September 30, 2018, which is the most current data available, was approximately \$1,652,000. The University has not been subjected to additional assessments since the formation of MUSIC in 1987.

The University is self-insured for certain employee benefits. Claim expenditures and liabilities are recorded when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. This would include an estimate of any significant claims that have been incurred but not reported. The University's recorded reserves for its self-insured workers' compensation, dental, and certain medical insurance programs at September 30 2019 and 2018, totaled approximately \$3,512,000 and \$3,484,000, respectively. Specific excess (umbrella) coverage has been purchased by the University for its self-insured workers' compensation and medical insurance programs. For those risks that the University has purchased commercial insurance, settled claims have not exceeded the commercial coverage in any of the past three years.

#### **Pending Litigation**

The University is named as a defendant in certain civil actions. The University is of the opinion that the resulting disposition of these actions will not have a significant effect on the financial statements.

#### Note 10 - Contingencies (Continued)

#### **Derivative Instruments**

One of the University's derivative instrument agreements requires the University to post collateral when the University credit rating is suspended, withdrawn, or downgraded to BBB+ or below by Standard & Poor's or Baa1 or below by Moody's in order to preclude an additional termination event from occurring. The collateral would be posted in the amount of the fair value of the hedging instrument in a liability position over a specified threshold, which varies with the University's credit rating. The collateral could be posted in the form of cash, U.S. Treasury securities, agency notes, or other securities to which the parties may agree, and the valuation percentage allowed would vary by the creditworthiness and maturities of the underlying securities used for collateral. An additional termination event would occur if the University's rating is suspended, withdrawn, or downgraded to BBB- or below by Standard & Poor's or Baa3 or below by Moody's. The other university derivative instrument agreement does not require the University to post collateral. However, this agreement provides that an additional termination event occurs when the University's credit rating is suspended, withdrawn, or downgraded below BBB- by Standard & Poor's or below Baa3 by Moody's. In order to preclude this additional termination event from terminating the swap, the University would need to provide the counterparty with an acceptable credit support document.

At September 30, 2019 and 2018, the aggregate positive fair value of all hedging derivative instruments with these collateral posting provisions is \$677,000 and \$265,000, respectively. There were no posting requirements because the University maintained credit ratings above the thresholds.

#### Note 11 - Natural Classification of Expenses

Operating expenses by natural classification for the years ended September 30, 2019 and 2018 are summarized as follows (in thousands):

	 2019	 2018
Compensation and benefits	\$ 600,650	\$ 583,685
Supplies, services, and other	196,629	198,229
Depreciation	59,750	59,147
Scholarships and fellowships	 18,241	 14,721
Total operating expenses	\$ 875,270	\$ 855,782

#### **Note 12 - Postemployment Benefits Other Than Pensions**

The University offers a postemployment benefit of a fixed payout life insurance policy to its retirees. The University's annual postemployment benefits is actuarially determined in accordance with GASB Statement No. 75. For the year ended September 30, 2019, the University's reported OPEB liability was estimated based on an actuarial valuation date of October 1, 2017 and measurement date of September 30, 2018. For the year ended September 30, 2018, the University's reported OPEB liability was estimated based on an actuarial valuation date of October 1, 2017 and measurement date of September 30, 2017.

#### **Note 12 - Postemployment Benefits Other Than Pensions (Continued)**

The total OPEB accrued liability, which has been recorded as accrued employee benefits on the statement of net position, was \$7,530,000 and \$7,932,000 at September 30, 2019 and 2018, respectively. The discount rates used in determining the total reported OPEB liability were 4.18 percent and 3.64 percent for fiscal year 2019 and 2018, respectively. The increase in the discount rate resulted in a decrease in the liability and a credit to expense of \$402,000 and \$2,900,000 in fiscal year 2019 and 2018, respective. There are no OPEB assets set-aside to fund the liability amount disclosed.

In addition, the University makes available a plan under which certain retirees may receive healthcare coverage. There is no implicit rate subsidy and the employees pay 100 percent of the cost. As a result, there is no required or recorded liability relating to the retiree healthcare plan.

#### Note 13 - Related Party Transaction

The University guaranteed an operating line of credit of \$2.25 million and a term loan of \$6.0 million for the Research and Technology Park in the City of Detroit, Inc., a 501(c)(3) organization. During fiscal year 2016, the University paid the outstanding balances on the Research and Technology Park debt, which eliminated the guarantee, in exchange for a mortgage loan payable to the University in the amount of \$5,820,000. During fiscal year 2019, the mortgage loan was refinanced and the University provided additional funding of \$1,000,000. The outstanding mortgage receivable amount of \$6,149,000 and \$5,361,000 as of September 30, 2019 and 2018, respectively, is included in current and noncurrent receivables in the statement of net position.

#### Note 14 - Fair Value

The University categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy below.

In instances whereby inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The University's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

#### Note 14 - Fair Value (Continued)

The University has the following recurring fair value measurements as of September 30, 2019 and 2018 (in thousands):

		Fair Mar	ket l	Measurements	s Us	sing:			
Investments by Fair Value Level		Level 1		Level 2		Level 3	Total Fair Value at September 30, 2019		
Fixed-income securities:									
Municipal Bonds	\$	-	\$	72,533	\$	-	\$	72,533	
U.S. government securities		_		6,052		-		6,052	
Corporate bonds		-		445		-		445	
Corporate bond funds		151,944		58,686		-		210,630	
Money market mutual funds		148		-		-		148	
Asset-backed securities/CMOs		-		-		-		-	
Other				22,365		1,462		23,827	
Total fixed-income investments		152,092		160,081		1,462		313,635	
Equity securities:									
U.S.	\$	4,789	\$	11,926	\$	-		16,715	
Non-U.S.				14,302				14,302	
Total equity securities		4,789		26,228				31,017	
Other assets:									
Beneficial interest in charitable remainder trust			_			491		491	
Total other assets		-				491		491	
Investments measured by fair value level	\$	156,881	\$	186,309	\$	1,953		345,143	
Investments Measured at Net Asset Value (NAV) or Equivalent									
Fixed-income securities								19,554	
Multistrategy hedge funds								5,134	
Total investments measured at NAV								24,688	
Total investments measured at fair value							\$	369,831	
Hedging Derivative Instruments									
Interest rate swaps			\$	677					

#### Note 14 - Fair Value (Continued)

	Fair Marl	ket l	Measurements	s Us	ing:	
Investments by Fair Value Level	 Level 1		Level 2		Level 3	Fair Value at ober 30, 2018
Fixed-income securities:	 					 
Municipal Bonds	\$ -	\$	101,664	\$	-	\$ 101,664
U.S. government securities	2,226		400.000		-	2,226
Corporate bonds Corporate bond funds	91,224		122,823		-	122,823 91,224
Money market mutual funds	3,616		_		_	3,616
Asset-backed securities/CMOs	5,010		7,688		_	7,688
Other	-		-		1,200	1,200
Total fixed-income investments	97,066		232,175		1,200	330,441
Equity securities:						
U.S.	 3,960		-		-	 3,960
Total equity securities	 3,960					 3,960
Other assets:						
Beneficial interest in charitable remainder trust	 		_		407	407
Total other assets			_		407	407
Investments measured by fair value level	\$ 101,026	\$	232,175	\$	1,607	334,808
Investments Measured at Net Asset Value (NAV) or Equivalent						
Fixed-income securities						43,486
Multistrategy hedge funds						 309
Total investments measured at NAV						 43,795
Total investments measured at fair value						\$ 378,603
Hedging Derivative Instruments						
Interest rate swaps		\$	265			

#### Note 14 - Fair Value (Continued)

The Foundation has the following recurring fair value measurements as of September 30, 2019 and 2018 (in thousands):

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#### Note 14 - Fair Value (Continued)

The fair value of the University's and the Foundation's fixed-income and equity securities classified in Level 1 at September 30, 2019 and 2018 were valued using prices quoted in active markets for those securities.

The fair value of the University's fixed-income securities and equity securities classified in Level 2 at September 30, 2019 and 2018 were valued using other inputs such as interest rates and yield curves that are observable at commonly quoted intervals.

The fair value of the University's fixed-income securities classified in Level 3 at September 30, 2019 and 2018 were valued using otherwise unobservable inputs. The securities (primarily donated life insurance policies and gifted investments that are not actively traded in public markets) were valued using their cash surrender values or book values.

The fair value of the University's other assets classified in Level 3 at September 30, 2019 and 2018 were valued using otherwise unobservable inputs. The University's beneficial interest in the charitable remainder trust was valued based on the trust asset details.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented in the table that follows.

#### Investments in Entities that Calculate Net Asset Value per Share

The University and the Foundation hold shares or interests in investment companies whereby the fair value of the investments is measured on a recurring basis using net asset value per share (or its equivalent) of the investment companies as a practical expedient.

At September 30, 2019 and 2018, the University's fair value, unfunded commitments, and redemption policies of those investments is as follows (in thousands):

	Tota	l Fair Value a	at Se	ptember 30			
					Out	standing	
					Comr	nitments at	Redemption Policy at
		2019		2018	Septem	ber 30, 2019	September 30, 2019
Equity and fixed-income securities	\$	19,554	\$	43,486	\$	-	Primarily daily/monthly
Multistrategy hedge funds		5,134		309		-	Redemptions are not permitted
Total investments measured at the NAV	\$	24,688	\$	43,795	\$	_	

At September 30, 2019 and 2018, the Foundation's fair value, unfunded commitments, and redemption policies of those investments is as follows (in thousands):

	Total Fair Value at September 30									
	2019			2018		utstanding mitments at mber 30, 2019	Redemption Policy at September 30, 2019			
							Primarily monthly with a maximum of 30			
Equity and fixed-income securities	\$	216,354	\$	172,867	\$	-	days notice			
Credit and loan private investments		11,281		17,224		1,625	Redemptions are not permitted			
Multistrategy hedge funds		68,533		92,947		-	Quarterly with 90 days notice			
Equity private investments		6,136		5,049		18,577	Redemptions are not permitted			
Commodities private investments		34,831		32,628		-	Maximum of quarterly with 90 days notice			
Total investments measured at the NAV	\$	337,135	\$	320,715	\$	20,202				

#### Note 14 - Fair Value (Continued)

The University's and the Foundation's equity and fixed-income investments include limited partnership investments and commingled investment funds that invest primarily in publicly traded domestic and publicly traded international long only equity investments and domestic fixed-income securities and instruments. These are investments in long only publicly listed equity securities. The fair values of the investments in this class have been estimated using the net asset value per share of the investments. A majority of these investments can typically be liquidated on a monthly basis, with a 30-day notification period.

The Foundation's September 30, 2019 and 2018 credit and loan private investments include investments in private limited partnership investments that invest in domestic and European loan funds. The fair values of these investments have been estimated using the net asset values of the investments. The remaining investment period of these investments is less than five years. The nature of these investments involve capital calls and distributions being made throughout the investment period based upon the activity of the underlying investments. Because no public market exists for selling these types of investments, they are viewed as long-term investments in nature with funds being committed over the life of the investment.

The University's and the Foundation's September 30, 2019 and 2018 multi-strategy hedge funds class includes investments in hedge funds that pursue a variety of strategies to diversify risks and reduce volatility. The strategies may include equity long/short strategies, equity market-neutral strategies, fixed-income relative value, credit long/short, and global macro strategies, risk parity strategies, short bias, even driven, and fixed-income arbitrage positions. The fair values of the multi-strategy hedge funds investments have been estimated using the net asset value per share of the investments. The redemption policy is quarterly, with a 90-day notification period. The University's small hedge fund investment in this class is held within a trust in which the University is a minority beneficiary. Therefore, the University cannot request redemptions.

The Foundation's September 30, 2019 and 2018 equity private investments include investments in private equity funds that invest in venture capital, growth equity, buyout funds, and direct lending strategies. The fair values of the investments in this class have been estimated using the net asset value of the University's ownership interest in partners' capital. The investment period for the equity private investment is between three and twenty years. The nature of these investments involves capital calls being made throughout the investment period, as well as income distributions being received as underlying investments are bought and sold. Because no public market exists for selling these types of investments, they are viewed as long-term in nature with funds being committed over the life of the investment.

The Foundation's September 30, 2019 and 2018 real assets investments include investments in comingled funds and private investments that invest in inflation-linked fixed-income instruments, commodity derivative instruments, and real estate funds. The fair values of the investments in this class have been estimated using the net asset value of the University's ownership interest in partners' capital. The Foundation's real assets investments have a variety of redemption policies and notification periods, the most restrictive of which permit quarterly redemptions with a 90-day notification period.

#### **Note 15 - Service Concession Arrangement**

On November 30, 2017, the University entered into a Service Concessionaire Agreement (SCA) with Corvias Campus Living-WSU, LLC (Corvias), whereby Corvias will manage, maintain, and operate housing resources on campus for a 40-year term, which ends in November 2057. As part of the SCA, the University retains ownership of the housing projects and the ability, with certain limitations, to modify and approve rates, and specify or limit to whom services may be provided.

In accordance with the SCA, Corvias will construct and renovate housing projects on campus. The budget for these housing projects is \$151,350,000, and all projects are planned for completion by 2020. In 2019, Corvias provided \$53,272,000 for construction of the Anthony Wayne Drive housing project (substantially Phase II), which is recorded in capital assets as of September 30, 2019. In 2018, Corvias provided \$63,552,000 for construction of the Anthony Wayne Drive housing project (Phase 1) which is recorded in capital assets at September 30, 2018, \$102,890,000 to cover the total debt defeased by the project (see Note 6), and \$12,104,000 in up-front cash proceeds for additional transactional and housing expenses. The total consideration provided by Corvias of \$53,272,000 and \$178,546,000, in 2019 and 2018, respectively, was reflected as deferred inflow of resources. The University amortized \$4,633,000 and \$2,826,000 of the deferred inflow in 2019 and 2018, respectively, leaving a remaining deferred inflow of resources balance of \$224,359,000 and \$175,720,000 at September 30, 2019 and 2018, respectively.

#### Note 16 – Subsequent Event

#### Debt

In October 2019, the University issued its tax exempt Series 2019A Bonds for a par amount of \$62,450,000 and net premium of \$13,831,885 and its taxable Series 2019B Bonds for a par amount of \$25,685,000. The tax-exempt bond proceeds, \$76,281,885 with an average coupon interest rate of 4.8 percent, were used to fund various university projects and related issuance costs. The tax-exempt proceeds also current refunded the Series 2009A bonds par amount of \$28,885.000 and the Series 2009B bonds par amount of \$23,965,000. The taxable proceeds, \$25,685,000 with an average coupon of 3.5 percent, were issued to fund a basketball arena for the men's and women's basketball teams.

#### **Related Party**

In October 2019, the University entered into a loan and security agreement with a University affiliate in which the University agreed to provide certain financing to support the affiliate organization exit bankruptcy. The financing support includes a term loan of \$7,319,576 and a revolving loan (tranche A and tranche B) not to exceed \$7,759,165 with interest rates ranging from zero to 4.0 percent and a maturity date of September 30, 2034.

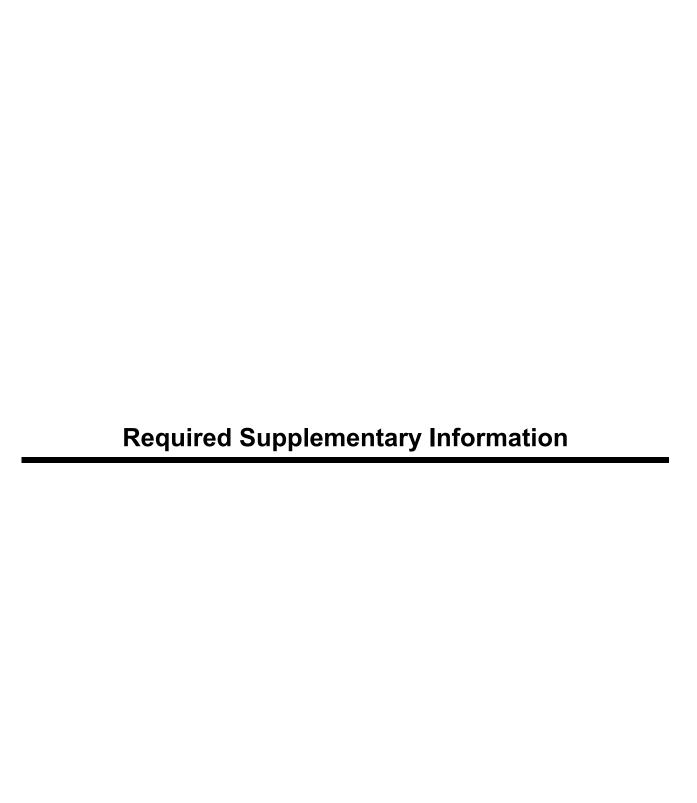
#### **Note 17 - Future Accounting Pronouncements**

In January 2017, the Governmental Accounting Standards Board issued GASB Statement No. 84, *Fiduciary Activities*, which establishes criteria for identifying fiduciary activities of governments and improves guidance for accounting and financial reporting related to how these activities should be reported. The University is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement are effective for the University's financial statements for the year ending September 30, 2020.

#### Notes to Financial Statements September 30, 2019 and 2018

#### **Note 17 - Future Accounting Pronouncements (Continued)**

In June 2017, the Governmental Accounting Standards Board issued GASB Statement No. 87, *Leases*, which aims to improve accounting and financial reporting for leases. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. The University is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement are effective for the University's financial statements for the year ending September 30, 2021.

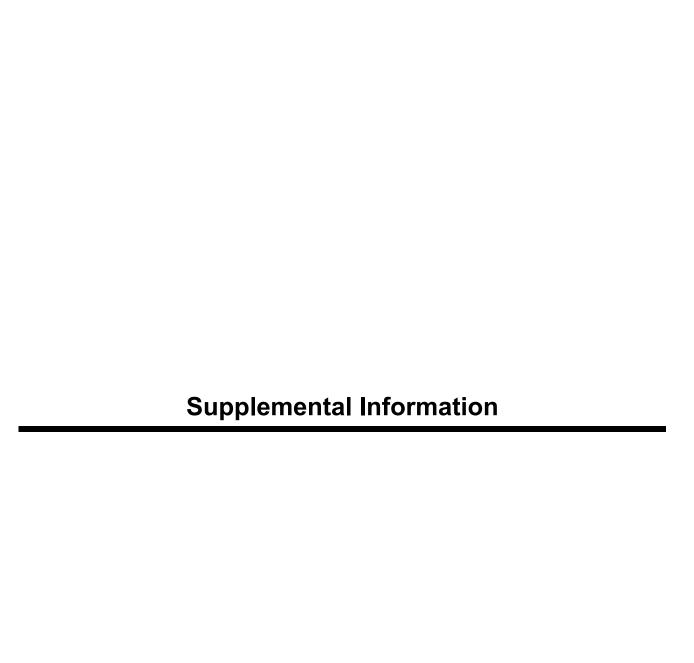


# Schedule of Changes in the University's Total OPEB Liability and Related Ratios September 30, 2019

The historical reconciliation of the total reported liability for postemployment benefits obligations for the year ended September 30 is summarized as follows:

		2019		2018
Service cost	\$	215,000	\$	380,000
Interest cost		296,000		254,000
Effect of economic/demographic gains or losses		(393,000)		(385,000)
Changes in assumptions		(510,000)		(627,000)
Difference between expected and actual plan experience		-		-
Benefit payments		(10,000)		(11,000)
Net changes	<u>\$</u>	(402,000)	\$	(389,000)
Total liability - Beginning of year	\$	7,932,000	\$	8,321,000
Total liability - End of year	\$	7,530,000	\$	7,932,000
Covered employee payroll	No	t applicable	No	ot applicable
Total liability as a percentage of covered employee payroll	No	t applicable	No	ot applicable

Discount rates used in determining the total reported liability for postemployment benefits obligations were 4.18 percent and 3.64 percent at the measurement dates of September 30, 2019 and 2018, respectively.



#### Combining Statement of Net Position (Deficit) September 30, 2019

(with comparative total for the year ended September 30, 2018) (in thousands)

				2019										2018
			Auxiliary		Expendable	Subtotal		Student	Endowment			Wayne State		
	General Fund	Designated Fund	Activities Fund	Operations Fund	Restricted Fund	Current Funds	Plant Fund	Loan Fund	and Similar Funds	Agency Fund	University Total	University Foundation Total	Total	Total
Assets														
Current Assets														
Cash, cash equivalents, and investments	\$ 206,883				\$ 55,767 \$				\$ 1,478	\$ 21,451			421,766 \$	
Current receivables - Net Inventories	68,922 863	19,030	3,878 268	767	25,732	118,329 1.131	1,514	104	-	4,265	124,212 1.131	736	124,948 1.131	127,561 1.204
Prepaid expenses and deposits	44,124	- 142	268 131	- 4	- 82	44,483	14.1	-	-	324	44,948	-	44,948	41,270
·	320,792	86,901	12,982	771	81,581	503,027	40,083	16,713	1,478	26,040	587,341	5,452	592,793	599,769
Total current assets	020,702	00,001	12,002		0 1,00 1	000,021	10,000	10,1 10	,,,,,	20,010	007,011	0,102	002,700	000,700
Noncurrent Assets							70.500		0.040		70.740	204.202	470.075	404.070
Investments Noncurrent receivables - Net	-	6,616	-	- 4	- 877	- 7,497	72,533 267	- 22,967	6,213	-	78,746 30,731	394,329 30	473,075 30,761	494,870 33,541
Derivative instruments	-	0,010	-	4	-	7,497	677	22,907	-		677	-	677	265
Capital assets - Net	<u></u> _						996,321	<u> </u>			996,321	<u> </u>	996,321	926,169
Total noncurrent assets	-	6,616	-	4	877	7,497	1,069,798	22,967	6,213	-	1,106,475	394,359	1,500,834	1,454,845
Total assets	320,792	93,517	12,982	775	82,458	510,524	1,109,881	39,680	7,691	26,040	1,693,816	399,811	2,093,627	2,054,614
Deferred Outflows of Resources	12	-	-	-	-	12	13,723	-	-	-	13,735	-	13,735	14,405
Liabilities														
Current Liabilities														
Accounts payable and accrued liabilities	49,551	3,883	2,235	206	8,910	64,785	24,372	-	107	21,899	111, 163	591	111,754	115,792
Uneamed revenue	165,500	1,233	2,571	-	10,625	179,929	52	-	-	-	179,981	-	179,981	176,265
Deposits	2,080	200	56	-	3	2,339	-	-	-	4,141	6,480	-	6,480	6,461
Long-term debt - Current portion	<del></del>		<del></del>			<del></del>	16,026	<del>-</del>		<del></del> -	16,026		16,026	14,092
Total current liabilities	217,131	5,316	4,862	206	19,538	247,053	40,450	-	107	26,040	313,650	591	314,241	312,610
Noncurrent Liabilities								29.092			29.092		29.092	00.007
Federal portion of student loan funds  Accrued employee benefits and other liabilities	21,336	-	4,301	-	-	25,637	-	29,092	- 2,297	-	29,092	-	29,092 27,934	28,097 28,282
Long-term debt - Net of current portion	2 1,330	-	4,301	-	-	-	448,816	-	2,291	-	448,816	-	448,816	464,735
Total noncurrent liabilities	21,336	_	4,301	-	-	25,637	448,816	29,092	2,297	-	505,842	-	505,842	521,114
Total liabilities	238,467	5,316	9,163	206	19,538	272,690	489,266	29,092	2,404	26,040	819,492	591	820,083	833,724
Totaliabilites														
Deferred Inflow of Resources	1,387	-	11,524	-	-	12,911	212,835	-	491	-	226,237	-	226,237	176,967
Net Position (Deficit)														
Net investment in capital assets	-	-	-	-	-	-	391,506	-	-	-	391,506	-	391,506	391,412
Restricted: Nonexpendable						_	_	9,022	2,290		11,312	228,178	239,490	225,251
Expendable	-	-	-	-	62,920	62,920	8,994	9,022	2,290	-	74,420	163,218	239,490	243,187
Unrestricted	80,950	88,201	(7,705)	569	-	162,015	21,003	1,566			184,584	7,824	192,408	198,478
Total net position (deficit)	\$ 80,950	\$ 88,201	\$ (7,705)	\$ 569	\$ 62,920	\$ 224,935	421,503	10,588	\$ 4,796	\$ -	\$ 661,822	\$ 399,220 \$	1,061,042	\$ 1,058,328

# Combining Statement of Revenues, Expenses, Transfers, and Changes in Net Position (Deficit) Year Ended September 30, 2019

Year Ended September 30, 2019
(with comparative totals for the year ended September 30, 2018)
(in thousands)

	Year Ended September 30													
							20	19						2018
	General Fund	Designated Fund	Auxiliary Activities Fund	Independent Operations Fund	Expendable Restricted Fund	Subtotal Current Funds	Plant Fund	Student Loan Fund	Endowment and Similar Funds	Adjustments	University Total	Wayne State University Foundation Total	Total	Total
Operating Revenues														
Student tuition and fees	\$ 397,901	\$ -	\$ 6,060	\$ -	\$ -	\$ 403,961 \$	144	\$ -	\$ -	•	\$ 404,105	\$ -	\$ 404,105 \$	393,769
Less scholarship allowances										(121,215)	(121,215)		(121,215)	(110,948)
Net student tuition and fees	397,901	-	6,060	-	-	403,961	144	-	-	(121,215)	282,890	-	282,890	282,821
Federal grants and contracts	-	-	-	-	108,146	108,146	505	-	-	-	108,651	-	108,651	105,128
State and local grants and contracts	-	-	-	-	25,745	25,745	-	-	-	-	25,745	-	25,745	22,822
Nongovernmental grants and contracts	2,531	61,136	-	-	49,526	113,193	-	-	-	-	113,193	-	113,193	127,928
Departmental activities	10,910	10,032	-	1,266	1,388	23,596	-	-	-	-	23,596	-	23,596	22,569
Auxiliary enterprises - Net of														
scholarship allowances	-	-	28,119	-	-	28,119	-	-	-	(1,670)	26,449	-	26,449	30,143
Recovery of indirect costs of sponsored programs	36,296	-	-	-	(36,296)	-	-	-	-	-	-	-	-	-
Other operating revenues	4,980					4,980		61			5,041		5,041	5,329
Total operating revenues	452,618	71,168	34,179	1,266	148,509	707,740	649	61	-	(122,885)	585,565	-	585,565	596,740
Operating Expenses														
Instruction	230,427	34,452	-	-	15,645	280,524	-	-	-	(2,709)	277,815	-	277,815	276,255
Research	43,416	3,666	-	-	113,883	160,965	-	-	-	(5,753)	155,212	-	155,212	157,281
Public service	3,539	31,091	-	1,709	29,585	65,924	-	-	-	(357)	65,567	-	65,567	62,021
Academic support	76,845	5,123	-	-	1,002	82,970	-	-	-	(9,586)	73,384	-	73,384	68,160
Student services	41,273	706	-	-	299	42,278	-	-	-	(69)	42,209	-	42,209	39,608
Institutional support	82,439	12,995	-	-	157	95,591	-	-	-	(659)	94,932	-	94,932	92,738
Operation and maintenance of plant	58,367	1,681	-	-	33	60,081	6,431	-	-	(506)	66,006	-	66,006	62,020
Scholarships and fellowships	89,902	46	-	-	51,178	14 1,126	-	-	-	(122,885)	18,241	-	18,241	14,721
Auxiliary enterprises	-	-	22,245	-	-	22,245	-	-	-	(91)	22,154	-	22,154	23,831
Depreciation	-	-	-	-	-	-	59,750	-	-	-	59,750	-	59,750	59,147
Capital additions - Net	-	-	-	-	-	-	(19,730)	-	-	19,730	-	-	-	-
Transfers out (in):														
Debt service	22,465	986	5,708	-	-	29,159	(29,159)	-	-		-	-	-	-
Loan matching	124	-	-	-	-	124	-	(124)	-		-	-	-	-
Plant improvement and extension	8,861	6,778	12,498	-	36	28,173	(28,173)	-	-	-	-	-	-	-
Other	271				(281)	(10)		10		·			<del></del> -	
Total operating expenses	657,929	97,524	40,451	1,709	211,537	1,009,150	(10,881)	(114)		(122,885)	875,270		875,270	855,782
Operating (Loss) Income	(205,311)	(26,356)	(6,272)	(443)	(63,028)	(301,410)	11,530	175	-	-	(289,705)	-	(289,705)	(259,042)

## Combining Statement of Revenues, Expenses, Transfers, and Changes in Net Position (Deficit) (Continued) Year Ended September 30, 2019 (with comparative totals for the year ended September 30, 2018)

(in thousands)

							Yea	r Ended Sep	tember 30					
							20	019						2018
	General Fund	Designated Fund	Auxiliary Activities Fund	Independent Operations Fund	Expendable Restricted Fund	Subtotal Current Funds	Plant Fund	Student Loan Fund	Endowment and Similar Funds	Adjustments	University Total	Wayne State University Foundation Total	Total	Total
Nonoperating Revenues (Expenses)				,										
State operating appropriation	\$ 202,115 \$	-	\$ -	\$ -	\$ 248	\$ 202,363 \$	-	\$ -	\$ -	\$ -	\$ 202,363	\$ - 5	\$ 202,363 \$	199,170
Federal Pell grant	-	-	-	-	38,941	38,941	-	-	-	-	38,941	-	38,941	33,882
Gifts	-	8,866	16	2,035	10,590	21,507	-	3	951	-	22,461	342	22,803	28,736
Investment income (loss):														
Change in fair value of derivatives	-	-	-	-	-	-	412	-	-	-	412	-	412	88
Endowment and similar funds	-	-	-	-	120	120	-	-	(120)		-	-	-	-
Other	5,017	13,370	12	-	689	19,088	2,550	131	323	-	22,092	5,633	27,725	24,221
Net distributions from the Foundation	932	40	-	6	11,532	12,510	39	10	(74)	-	12,485	(12,485)	-	-
Interest on capital asset - Related debt	-	-	-	-	-	-	(20,340)	-	-	-	(20,340)	-	(20,340)	(18,960)
Gain (loss) on capital assets retired	-	-	-	-	-	-	(681)	-	-	-	(681)	-	(681)	3,862
Other							7,011	(122)	(977)		5,912		5,912	4,909
Net nonoperating revenues (expenses)	208,064	22,276	28	2,041	62,120	294,529	(11,009)	22	103		283,645	(6,510)	277,135	275,908
Income (Loss) Before Other	2,753	(4,080)	(6,244)	1,598	(908)	(6,881)	521	197	103	-	(6,060)	(6,510)	(12,570)	16,866
Other														
Capital gifts	-	-	-	-	-	-	1,208	-	-	-	1,208	-	1,208	1,014
Gifts for permanent endowments						<u> </u>						14,076	14,076	18,986
Total other						<u> </u>	1,208				1,208	14,076	15,284	20,000
Increase (Decrease) in Net Position	2,753	(4,080)	(6,244)	1,598	(908)	(6,881)	1,729	197	103	-	(4,852)	7,566	2,714	36,866
Net Position (Deficit) - Beginning of year	78,197	92,281	(1,461)	(1,029)	63,828	231,816	419,774	10,391	4,693		666,674	391,654	1,058,328	1,021,462
Net Position (Deficit) - End of year	\$ 80,950	\$ 88,201	\$ (7,705)	\$ 569	\$ 62,920	\$ 224,935	421,503	\$ 10,588	\$ 4,796	\$ -	\$ 661,822	\$ 399,220	\$ 1,061,042	1,058,328

#### Combining Statement of Net Position (Deficit) Year Ended September 30, 2018

(in thousands)

	2018												
			Auxiliary	Independent	Expendable	Subtotal		Student	Endowment			Wayne State	
	General Fund	Designated Fund	Activities Fund	Operations Fund	Restricted Fund	Current Funds	Plant Fund	Loan Fund	and Similar Funds	Agency Fund	University Total	University Foundation Total	Total
Assets													
Current Assets													
Cash, cash equivalents and investments	\$ 194,886			. ( , ,		\$ 342,084			\$ 1,443	,	\$ 426,104		
Current receivables - Net Inventories	74,452 870	16,563	3,681 334	657	26,667	122,020 1,204	1,023	103	-	4,162	127,308 1,204	253	127,561 1,204
Prepaid expenses and deposits	40.266		124	23	79	40,685	207	-	-	378	41,270	-	41,270
·	310,474	93,840	20,149	(902)	82,432	505,993	41.612	12.419	1.443	34.419	595,886	3,883	599,769
Total current assets	2.2,	,		()	,	,	. ,	_,	4	- 1,110	223,222	-,	,
Noncurrent Assets Investments						_	10 1,664	_	5,183		106,847	388,023	494,870
Noncurrent receivables - Net	-	5,769	-	- 4	930	6,703	731	26,069	5, 105	-	33,503	380,023	33,541
Derivative instruments	_	-	_	-	-	-	265	-	_	_	265	-	265
Capital assets - Net	-	-	-	-	-	-	926,169	-	-	-	926,169	-	926,169
Total noncurrent assets	-	5,769		4	930	6,703	1,028,829	26,069	5,183	_	1,066,784	388,061	1,454,845
Total assets	310,474	99,609	20,149	(898)	83,362	512,696	1,070,441	38,488	6,626	34,419	1,662,670	391,944	2,054,614
Deferred Outflows of Resources	9	-	-	-	-	9	14,396	-	-	-	14,405	-	14,405
Liabilities													
Current Liabilities													
Accounts payable and accrued liabilities	47,175	-,	2,142	131	7,982	62,550	22,289	-	101	30,562	115,502	290	115,792
Unearned revenue	159,917	,	2,737	-	11,549	176,211	54	-	-	-	176,265	-	176,265
Deposits	2,348		53	-	3	2,604	-	-	-	3,857	6,461	-	6,461
Long-term debt - Current portion			<u>-</u>				14,092				14,092	-	14,092
Total current liabilities	209,440	7,328	4,932	131	19,534	241,365	36,435	-	101	34,419	312,320	290	312,610
Noncurrent Liabilities													
Federal portion of student loan funds	22,006	-	- 4,851	-	-	- 26,857	-	28,097	- 1,425	-	28,097 28,282	-	28,097 28,282
Accrued employee benefits and other liabilities  Long-term debt - Net of current portion	22,006	-	4,001	-	-	20,037	464,735	-	1,425		464,735	-	464,735
Total noncurrent liabilities	22,006		4,851			26,857	464,735	28,097	1,425		521,114		52 1,114
	231,446		9,783	131	19,534	268,222	50 1,170	28,097	1,526	34,419	833,434	290	833,724
Total liabilities	231,440	7,020	3,703		15,554	200,222	30 1, 170	20,091	1,020	34,418	000,404		000,724
Deferred Inflow of Resources	840	-	11,827	-	-	12,667	163,893	-	407	-	176,967	-	176,967
Net Position (Deficit)													
Net investment in capital assets Restricted:	-	-	-	-	-	-	391,412	-	-	-	391,412	-	391,412
Nonexpendable	-	-	-	-	-	-	-	8,883	2,234		11,117	214,134	225,251
Expendable					63,828	63,828	7,007	-	2,459	-	73,294	169,893	243,187
Unrestricted	78,197	92,281	(1,461)	(1,029)		167,988	21,355	1,508			190,851	7,627	198,478
Total net position (deficit)	\$ 78,197	\$ 92,281	\$ (1,461)	\$ (1,029)	\$ 63,828	\$ 231,816	\$ 419,774	\$ 10,391	\$ 4,693	<u>\$ -</u>	\$ 666,674	\$ 391,654	\$ 1,058,328

# Combining Statement of Revenues, Expenses, Transfers, and Changes in Net Position (Deficit) Year Ended September 30, 2018 (in thousands)

	Year Ended September 30												
							20	18					
	General Fund	Designated Fund	Auxiliary Activities Fund	Independent Operations Fund	Expendable Restricted Fund	Subtotal Current Funds	Plant Fund	Student Loan Fund	Endowment and Similar Funds	Adjustments	University Total	Wayne State University Foundation Total	Total
Operating Revenues													
Student tuition and fees	\$ 387,558	\$ -	\$ 6,066	\$ -	\$ -	\$ 393,624	\$ 145	\$ -	\$ -	\$ -	\$ 393,769	\$ -	\$ 393,769
Less scholarship allowances										(110,948)	(110,948)		(110,948)
Net student tuition and fees	387,558	-	6,066	-	-	393,624	145	-	-	(110,948)	282,821	-	282,821
Federal grants and contracts	-	-	-	-	104,613	104,613	515	-	-		105,128	-	105,128
State and local grants and contracts	-	-	-	-	22,822	22,822	-	-	-		22,822	-	22,822
Nongovernmental grants and contracts	1,836	76,831	-	-	49,261	127,928	-	-	-		127,928	-	127,928
Departmental activities	10,483	9,798	-	1,149	1,139	22,569	-	-	-		22,569	-	22,569
Auxiliary enterprises - Net of													
scholarship allowances	-	-	31,808	-	-	31,808	-	-	-	(1,665)	30,143	-	30,143
Recovery of indirect costs of sponsored programs	36,136	-	-	-	(36,136)	-	-	-	-	-	-	-	-
Other operating revenues	5,263					5,263		66			5,329		5,329
Total operating revenues	441,276	86,629	37,874	1,149	141,699	708,627	660	66	-	(112,613)	596,740	-	596,740
Operating Expenses													
Instruction	223,516	40,536	-	-	13,841	277,893	-	-	-	(1,638)	276,255	-	276,255
Research	46,842	2,083	-	-	112,864	161,789	-	-	-	(4,508)	157,281	-	157,281
Public service	1,933	30,869	-	2,873	27,032	62,707	-	-	-	(686)	62,021	-	62,021
Academic support	70,641		-	-	800	76,597	-	-	-	(8,437)	68,160	-	68,160
Student services	38,538	794	-	-	3 11	39,643	-	-	-	(35)	39,608	-	39,608
Institutional support	85,533	7,226	-	-	129	92,888	-	-	-	(150)	92,738	-	92,738
Operation and maintenance of plant	55,073	1,161	-	-	7	56,241	6,593	-	-	(814)	62,020	-	62,020
Scholarships and fellowships	81,930	245		-	45,159	127,334	-	-	-	(112,613)	14,721	-	14,721
Auxiliary enterprises	-	-	23,895	-	-	23,895	-	-	-	(64)	23,831	-	23,831
Depreciation	-	-	-	-	-	-	59,147	-	-		59,147	-	59,147
Capital additions - Net	-	-	-	-	-	-	(16,332)	-	-	16,332	-	-	-
Transfers out (in):													
Debt service	17,667	986	5,441	-	-	24,094	(24,094)	-	-		-	-	-
Loan matching	-	-	-	-	-	-	-	-	-		-	-	-
Plant improvement and extension	10,882	(1,313)	2,852	-	(42)	12,379	(12,379)	-	-	-	-	-	-
Other		11		<del></del>	(49)	(35)	<del>-</del>	35		<del></del>			<del></del>
Total operating expenses	632,558	87,754	32,188	2,873	200,052	955,425	12,935	35		(112,613)	855,782		855,782
Operating (Loss) Income	(191,282)	(1,125)	5,686	(1,724)	(58,353)	(246,798)	(12,275)	31	-	-	(259,042)	-	(259,042)

## Combining Statement of Revenues, Expenses, Transfers, and Changes in Net Position (Deficit) (Continued) Year Ended September 30, 2018 (in thousands)

	Year Ended September 30												
							20	18					
	General Fund	Designated Fund	Auxiliary Activities Fund	Independent Operations Fund	Expendable Restricted Fund	Subtotal Current Funds	Plant Fund	Student Loan Fund	Endowment and Similar Funds	Adjustments	University Total	Wayne State University Foundation Total	Total
Nonoperating Revenues (Expenses)													
State operating appropriation	\$ 198,924	\$ -	\$ -	\$ -	\$ 246	\$ 199,170 \$		\$ -	\$ -	\$ -	\$ 199,170	\$ - \$	199,170
Federal Pell grant	-	-	-	-	33,882	33,882	-	-	-	-	33,882	-	33,882
Gifts	-	12,142	70	1,808	13,162	27,182	-	3	541	-	27,726	1,010	28,736
Investment income (loss):													
Change in fair value of derivatives	-	-	-	-	-	-	88	-	-	-	88	-	88
Endowment and similar funds	-	-	-	-	120	120	-	-	(120)	-	-	-	-
Other	5,433	(5,249)	12	-	708	904	2,016	111	248	-	3,279	20,942	24,221
Net distributions from the Foundation	1,427	(2,602)	-	5	12,635	11,465	38	7	123	-	11,633	(11,633)	-
Interest on capital asset - Related debt	-	-	-	-	-	-	(18,960)	-	-	-	(18,960)	-	(18,960)
Gain (loss) on capital assets retired	-	-	-	-	-	-	3,862	-	-	-	3,862	-	3,862
Other							5,683	(92)	(682)		4,909		4,909
Net nonoperating revenues (expenses)	205,784	4,291	82	1,813	60,753	272,723	(7,273)	29	110		265,589	10,319	275,908
Income (Loss) Before Other	14,502	3,166	5,768	89	2,400	25,925	(19,548)	60	110	-	6,547	10,319	16,866
Other													
Capital gifts	-	_	-	-	_	_	1,014	-	-	_	1,014	-	1,014
Gifts for permanent endowments												18,986	18,986
Total other							1,014				1,014	18,986	20,000
Increase (Decrease) in Net Position	14,502	3,166	5,768	89	2,400	25,925	(18,534)	60	110	-	7,561	29,305	36,866
Net Position (Deficit) - Beginning of year	63,695	89,115	(7,229)	(1,118)	61,428	205,891	438,308	10,331	4,583		659,113	362,349	1,021,462
Net Position (Deficit) - End of year	\$ 78,197	\$ 92,281	\$ (1,461)	\$ (1,029)	\$ 63,828	\$ 231,816	419,774	\$ 10,391	\$ 4,693	\$ -	\$ 666,674	\$ 391,654 \$	1,058,328



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Federal Awards
Supplemental Information
September 30, 2019

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Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

#### **Independent Auditor's Report**

To the Board of Governors Wayne State University

We have audited the financial statements of the business-type activities and the discretely presented component unit of Wayne State University (the "University") as of and for the year ended September 30, 2019 and the related notes to the financial statements, which collectively comprise Wayne State University's basic financial statements. We issued our report thereon dated February 13, 2020, which contained unmodified opinions on those basic financial statements of the University. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. We have not performed any procedures with respect to the audited financial statements subsequent to February 13, 2020.

The accompanying schedule of expenditures of federal awards is presented for the purpose 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 in the audit of the 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, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Flante & Moran, PLLC

February 13, 2020





Suite 100 1111 Michigan Ave. East Lansing, MI 48823 Tel: 517.332.6200 Fax: 517.332.8502 plantemoran.com

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**

To Management and the Board of Governors Wayne State University

We have audited, 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 business-type activities and the discretely presented component unit of Wayne State University (the "University") as of and for the year ended September 30, 2019 and the related notes to the financial statements, which collectively comprise Wayne State University's basic financial statements, and have issued our report thereon dated February 13, 2020.

#### **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the University'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 University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University'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 University'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. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

#### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we 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 no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.



To Management and the Board of Governors Wayne State University

#### **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 University'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 University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Plante & Moran, PLLC

February 13, 2020



Suite 100 1111 Michigan Ave. East Lansing, MI 48823 Tel: 517.332.6200 Fax: 517.332.8502 plantemoran.com

Report on Compliance for Each Major Federal Program and Report on Internal Control Over Compliance Required by the Uniform Guidance

#### **Independent Auditor's Report**

To the Board of Governors Wayne State University

#### Report on Compliance for Each Major Federal Program

We have audited Wayne State University's (the "University") compliance with the types of compliance requirements described in the U.S. Office of Management and Budget (OMB) Compliance Supplement that could have a direct and material effect on each of the University's major federal programs for the year ended September 30, 2019. The University'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 University's major federal programs based on our audit of the types of compliance requirements referred to above.

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* (the "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 University'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 University's compliance.

#### Opinion on Each Major Federal Program

In our opinion, the University 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 the major federal programs for the year ended September 30, 2019.

#### **Report on Internal Control Over Compliance**

Management of the University 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 University'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 University's internal control over compliance.



## To the Board of Governors Wayne State University

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 requirement 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 were not identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we identified a certain deficiency in internal control over compliance, as described in the accompanying schedule of findings and questioned costs as Finding 2019-001, that we consider to be a significant deficiency.

The University's response to the internal control over compliance finding identified in our audit is described in the accompanying schedule of findings and questioned costs. The University's response was not subjected to the auditing procedures applied in the audit of compliance, and, accordingly, we express no opinion on the response.

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.

Plante & Moran, PLLC

February 13, 2020

## Schedule of Expenditures of Federal Awards

## Year Ended September 30, 2019

Total Amount
Provided to

			Provided to		
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures	
Research and Development Cluster:					
Department of Agriculture:					
USDA AP19PPQS&T00C167	Direct	10.025	\$ -	\$ 16,429	
NIFA 2016 70001-24639	Direct	10.326	6,626	97,780	
NIFA 2018-70001-28938	Direct	10.326	11,016	65,336	
NIFA 2018-70001-28938 Univ West Virginia	Direct	10.326	13,155	20,259	
Michigan State University RC104605	Pass Through	10.310		12,629	
Total Department of Agriculture	· ·		30,797	212,433	
Department of Commerce:					
University of Michigan 3004897532	Pass Through	11.417	-	24,943	
MIT PO#700034245	Pass Through	11.609		53,505	
Total Department of Commerce	· ·		-	78,448	
Department of Defense:					
USAMRAA W81XWH-12-2-0036	Direct	12.116	-	343,057	
USAMRAA W81XWH-13-1-0477	Direct	12.420	-	4,239	
USAMRAA W81XWH-14-1-0597	Direct	12.420	-	71,893	
USAMRAA W81XWH-15-1-0226	Direct	12.420	_	81,507	
USAMRAA W81XWH-12-1-0340	Direct	12.420	228	23,402	
		12.420	_	383,530	
USAMRAA W81XWH-15-1-0357	Direct		_	198,617	
USAMRAA W81XWH-15-1-0171	Direct	12.420	-	•	
USAMRAA W81XWH-15-1-0468	Direct	12.420	-	11	
USAMRAA W81XWH-16-1-0046	Direct	12.420	-	81,055	
USAMRAA W81XWH-16-1-0045	Direct	12.420	19,366	87,703	
USAMRAA W81XWH-16-1-0102	Direct	12.420	-	245,762	
USAMRAA W81XWH-16-10516	Direct	12.420	-	479,181	
USAMRRA W81XWH-16-1-0175	Direct	12.420	488,093	1,214,510	
USSMRAA W81XWH-16-1-0436	Direct	12.420	-	717,859	
USAMRAA W81XWH-17-1-0114	Direct	12.420	17,581	190,365	
USAMRAA W81XWH-17-1-0242	Direct	12.420	-	386,127	
USAMRAA W81XWH-17-2-0022	Direct	12.420	-	393,485	
USAMRRA W81XWH-17-1-0337	Direct	12.420	-	103,761	
USAMRRA W81XWH-17-1-0338	Direct	12.420	-	86,312	
USAMRAA W81XWH-17-1-0172	Direct	12.420	-	410,127	
USAMRAA W81XWH-18-1-0426	Direct	12.420	85,992	152,101	
USAMRAA W81XWH-18-1-0471	Direct	12.420	40.045	146,349	
USAMRAA W81XWH-18-1-0039	Direct	12.420	16,215	162,862 18,347	
USAMRRA W81XWH-18-1-0791 USAMRRA W81XWH-18-1-0791 Oregon Health	Direct Direct	12.420 12.420	57,344	63,844	
USAMRAA W81XWH-15-1-0791 Oregon Health	Direct	12.420	57,544 -	159,157	
USAMRAA W81XWH-19-1-0380	Direct	12.420	<u>-</u>	24,668	
USAMRAA W81XWH-19-1-0368	Direct	12.420	_	3,458	
US Army W911NF-12-1-0598	Direct	12.431	-	16,054	
US Army W911NF-15-1-0218	Direct	12.431	-	1,691	
US Army W911NF-18-2-0042	Direct	12.431	-	48,262	
US Army W911NF-19-1-0176	Direct	12.431	-	49,672	
US Army W911NF-19-1-0176	Direct	12.431	-	19,795	
USAF FA9550-16-1-0178	Direct	12.800	-	36,369	
USAF FA9550-19-1-0231	Direct	12.800	-	92,465	
USAF FA9550-19-1-0059	Direct Direct	12.800 12.RD	-	40,101 83,439	
Navy N6264518C4011 Contract RFSUNY #R1130057	Pass Through	12.RD 12.300	-	21,871	
DCS Corporation 181720	Pass Through	12.420	- -	1,411	
Vanderbilt Univ Med Ctr VUMC66229	Pass Through	12.420	-	330,493	
Duke University 3130895	Pass Through	12.420	-	113,357	

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Defense (continued):				
Henry Ford Health System B700096	Pass Through	12.420	\$ -	\$ 10,552
UCSD 107691952 S9002069	Pass Through	12.800	-	58,170
UCSD 107691952 S9002069 SubK	Pass Through	12.800	-	29,682
University of Michigan 3003058760	Pass Through	12.910	-	43,345
University of Michigan 3003058760 Proj 4.31	Pass Through	12.910	-	81,618
University of Michigan 3003058760 Proj 4.30	Pass Through	12.910	-	83,103
NYU #F7315-03 IB00214728	Pass Through	12.910	-	52,671
University of Michigan 3005466535	Pass Through	12.910	_	25,741
University of Michigan 3005489988	Pass Through	12.910	_	8,660
University of Michigan 3005570225	Pass Through	12.910	-	32,153
Johns Hopkins University 115231	Pass Through	12.RD	-	675
Applied Nanotech PO#46852	Pass Through	12.RD	21,826	64,126
University of Michigan 3004451556	Pass Through	12.RD	21,020	33,612
Detroit Engineered Products W56HZV-17-C-0094	Pass Through	12.RD	_	120,103
Johns Hopkins University W911QX-17-D-0006	Pass Through	12.RD	_	474,030
Stevens Institute of Technology 2102876-06	Pass Through	12.RD	_	52,405
Brookhaven Science Associates 0000352798	Pass Through	12.RD	_	20,000
	•	12.RD 12.RD	-	16,323
Stevens Institute of Technology 2102929	Pass Through	12.KD		
Total Department of Defense			706,645	8,295,238
Department of Housing and Urban Development -				
Michigan State University RC107850	Pass Through	14.267	-	453
Department of Interior:				
BLM L15AC00164 Project 15-1-07-15 A	Direct	15.232	-	108,485
Bureau of Reclamation R13AC30016	Direct	15.517	13,587	99,528
Bureau of Reclamation R16AP00174	Direct	15.517	-	104,956
Bureau of Reclamation R14AC00004	Direct	15.538	35,674	97,542
US Fish & Wildlife F17AC00176	Direct	15.658	-	30,467
USGS G15AC00035 2019	Direct	15.808	-	53,599
USGS G15AC00035 2020	Direct	15.808	-	122,427
Total Department of Interior	2660	10.000	49,261	617,004
•			43,201	017,004
Department of Justice:	Dinast	40 500		740
DOJ 2014-MU-CX-001	Direct	16.560	-	743
DOJ 2017-R2-CX-0045	Direct	16.560	-	262,507 7,522
Rutgers University 0064 PO#507382	Pass Through	16.560		
Total Department of Justice			-	270,772
Department of Transportation:				
FHA 693JJ31750007 2016	Direct	20.215	-	161,015
AECOM 60515954 PO#83586	Pass Through	20.200	-	2,228
AECOM 60530612 PO#86645	Pass Through	20.200	-	15,470
MDOT 2016-0070 Z3	Pass Through	20.505	-	62,939
MDOT 2016-0070 Z5	Pass Through	20.505	93,396	157,001
MDOT 2016-0070 Z6	Pass Through	20.505	-	29,844
MDOT 2016-0070 Z7	Pass Through	20.505	-	77,837
Western Michigan University 17-7/8823-WSU-1	Pass Through	20.701		9,024
Total Department of Transportation	Ç		93,396	515,358
Office of Personnel Management:			22,230	,
VAMC IPA A. Harutyanyan	Direct	27.011	_	31,213
VAMC IPA A. Hardiyanyan VAMC IPA Amanda Bolton-Hall	Direct	27.011	<b>-</b>	(672)
VAMC IPA Amanda Bolloff-Hall VAMC IPA Anthony Cacace	Direct	27.011	- -	1,184
VAIVIO II A AIIIIIUIIY CACACE	Direct	21.011	-	1,104

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Office of Personnel Management (continued):				
VAMC IPA Bo Hu	Direct	27.011	\$ -	\$ 43,101
VAMC IPA Brandy Schneider	Direct	27.011	Ψ -	14,107
VAMC IPA Branislava Zagorac	Direct	27.011	_	20,773
VAMC IPA Branislava Zagorac	Direct	27.011	_	26,679
VAMC IPA Changya Peng	Direct	27.011	_	49,603
VAMC IPA Chen Liang	Direct	27.011	_	60,744
VAMC IPA D. Moiseev	Direct	27.011	_	43,537
VAMC IPA Dina Francescutti	Direct	27.011	_	76,391
VAMC IPA Dragana Komnenov	Direct	27.011	_	27,663
VAMC IPA Dragana Komnenov	Direct	27.011	_	55,640
VAMC IPA E. Kruppe	Direct	27.011	_	309
VAMC IPA Fayi Yao	Direct	27.011	_	3,239
VAMC IPA Geoffrey Ginter	Direct	27.011	_	720
VAMC IPA Gino Panza	Direct	27.011	_	56,495
VAMC IPA Harvinder Talwar	Direct	27.011	_	13,656
VAMC IPA J. Venkatesh	Direct	27.011	_	46,521
VAMC IPA James Warila	Direct	27.011	_	365
VAMC IPA Janet Wolforth	Direct	27.011	_	43,504
VAMC IPA Kelly Bosse	Direct	27.011	_	28,815
VAMC IPA Kelsey Arvai	Direct	27.011	_	53,516
VAMC IPA Keisey Aivai VAMC IPA Krystal Bakkila	Direct	27.011	_	28,273
VAMC IPA Lauren Chaby	Direct	27.011		68,550
VAMC IPA Ladien chaby VAMC IPA Li Tao	Direct	27.011	_	14,611
VAMC IPA Li Tao	Direct	27.011	_	5,290
VAMC IPA Li Hall VAMC IPA Longfei Guan	Direct	27.011	_	53,934
VAMC IPA Lulu Farhana	Direct	27.011	-	8,620
VAMC IPA Lulu Famana VAMC IPA Mallika Somayajulu	Direct	27.011	-	39,205
VAMC IPA Mansour, Wafee	Direct	27.011	-	59,203 521
,	Direct	27.011	-	70,556
VAMC IPA Mahdi Fahraghi	Direct	27.011	-	69,218
VAMC IPA Mehdi Eshraghi VAMC IPA Min Wu	Direct	27.011	-	68,058
			-	30,144
VAMC IPA Newer Alivedi	Direct	27.011 27.011	-	766
VAMC IPA Nawar Aljundi VAMC IPA Pershang Farshi	Direct Direct	27.011	-	33,584
VAMC IPA Peter Levanovich	Direct	27.011	-	40,268
			-	51,054
VAMC IPA Reith Perite	Direct	27.011	-	17,552
VAMC IPA Ragib Barua	Direct	27.011	-	18,394
VAMC IPA Radney Broun	Direct Direct	27.011	-	17,753
VAMC IPA Bushi Besteri		27.011	-	67,787
VAMC IPA S. Kollekuri	Direct	27.011	-	32,647
VAMC IPA S. Sau	Direct	27.011	-	32,647 31,140
VAMC IPA S. Kigugia	Direct Direct	27.011	-	35,264
VAMC IPA Scott Alon Marco		27.011	-	66,458
VAMC IPA Scott Lloyd	Direct	27.011	-	
VAMC IPA Scott Lloyd	Direct	27.011	-	26,684 64,366
VAMC IPA Sigher Cure	Direct	27.011	-	
VAMC IPA Sreaia Sakhar	Direct	27.011	-	50,629 20,295
VAMC IPA Subadinio Ca	Direct	27.011	-	
VAMC IPA Tong Shi	Direct	27.011	-	29,754 45,936
VAMC IPA Toni Azor	Direct	27.011	-	45,936 14,547
VAMC IPA V. Themileelven	Direct	27.011	-	14,547
VAMC IPA Verenies Birestt/Chir)	Direct	27.011	-	63,095
VAMC IPA Whorrow	Direct	27.011	-	21,096
VAMC IPA Vin lin	Direct	27.011 27.011	-	23,428
VAMC IPA Xin Jin	Direct	27.011	-	(39,781)

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

Pederal Agency/Pass-through Agency/Pass-through ID		Provided to			
Direct   Personnel Management	Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	<b>CFDA Number</b>	Subrecipients	Federal Expenditures
Total Office of Personnel Management	Research and Development Cluster (continued):				
Total Office of Personnel Management	Office of Personnel Management (continued):				
Total Office of Personnel Management   1,916,927	,	Direct	27 011	\$ -	\$ 30,128
National Aeronautics and Space Administration:  NASA NNX17AB066  Direct 43.001 - 28.264 Arzona State University 17212 NNX17AF706 Arzona State University 17212 N	_	2551	27.011	·	
NASA NNX17AB66G NASA GNRSCO 190150 NASA GNRSCO 1901	Total Office of Forsonite Management			_	1,310,321
NASA BONSSC 19K0150 Alfazon State University 1712 NNX17AF70G Pasa Through Ala 201 Space Telescope Science HST-GO-1412 001 Pasa Through Ala 70 Total National Automatuks and Space Administration  NEAS Space Telescope Science HST-GO-15413,001 Pasa Through Ala 70 Total National Automatuks and Space Administration  NEAS Space Telescope Science HST-GO-15413,001 Pasa Through Ala 70 Total National Automatuks and Space Administration  NEAS Space Telescope Science HST-GO-15413,001 Pasa Through Ala 70 Total National Automatuks and Space Administration  NEAS Space Telescope Science HST-GO-15413,001 Pasa Through NSF-GBET-1326764 Pasa Through NSF-GBET-1326764 Pasa Through NSF-GBET-1350623 Pasa Through NSF-GBET-1350623 Pasa Direct 47.041 Pasa Through NSF-GBET-1350623 Pasa Through NSF-GBET-1360624 Pasa Through NSF-GBET-1360	·				
Actional State University 1/721 NNX17AF70G				-	
Space Telescope Science HST-QO-14121.001				-	
Space Telescope Science HST-GO-15413.001   Pass Through   43.RD   . 37.767   Total National Aeronautics and Space Administration   215,287   National Endowment for the Arts and Humanities:	-	_		-	
Total National Aeronautics and Space Administration	·	•		-	
NEA-1850087-38-19 Direct 45.024 . 2.53 NEA-1850087-38-19 Direct 45.061 . 34.307 Total National Endowment for the Arts and Humanities  NEA-1850087-38-19 . 36.339 National Science Foundation:  NSF CBET-1236764 Direct 47.041 . 83.3941 NSF CBET-1350823 Direct 47.041 . 83.3941 NSF CBET-1350823 Direct 47.041 . 7.937 NSF CBET-1434696 Direct 47.041 . 7.937 NSF CBET-1434696 Direct 47.041 . 7.941 NSF CBET-1434696 Direct 47.041 . 1.15.432 NSF CBET-1436893 Direct 47.041 . 1.15.432 NSF CBET-1903329 Sub Direct 47.041 . 1.15.4324 NSF CBET-1903329 Direct 47.041 .	·	Pass Through	43.RD		
NEH RZ-61674-14 45.161 - 34.307 Total National Endowment for the Arts and Humanities - 36.839  National Science Foundation: NSF ○BET-1236764	Total National Aeronautics and Space Administration			-	215,287
NER RZ-51674-14 Total National Endowment for the Arts and Humanities  National Science Foundation:  NISF CBET-1236764 NBC CBET-1350623 Direct 47,041 NBC CBET-1436666 Direct 47,041 NBC CBET-1436666 Direct 47,041 NBC CBET-1436666 Direct 47,041 NBC CBET-1463666 Direct 47,041 NBC CBET-1463666 Direct 47,041 NBC CBET-1642600 NBC CBET-16426400 Direct 47,041 NBC CBET-1768667 Direct 47,041 NBC CBET-1933329 Direct 47,041 NBC CBET-1933329 Direct 47,041 NBC CBET-1933329 Direct 47,041 NBC CBET-1933329 Direct 47,041 NBC CBET-1926863 DIRECT 47,041 DIRECT 47,041 DIRECT 47,041 DIRECT 47,041 DIRECT 47,041 DIRECT 47	National Endowment for the Arts and Humanities:				
Total National Endowment for the Arts and Humanities	NEA-1856087-38-19	Direct	45.024	-	2,532
National Science Foundation:  NSF CBET-1236764  NSF CBET-1350623  Direct 47,041 - 8,3,941  NSF CBET-1350623  Direct 47,041 - 7,937  NSF CBET-1350623  Direct 47,041 - 7,937  NSF CBET-1350623  Direct 47,041 - 7,937  NSF CBET-1350623  Direct 47,041 - 3,256  NSF CBET-1434696  Direct 47,041 - 79,241  NSF CBET-1434696  Direct 47,041 - 79,241  NSF CBET-1512544  Direct 47,041 - 67,609  NSF CBET-1612544  Direct 47,041 - 115,432  NSF CBET-1612540  Direct 47,041 - 115,432  NSF CBET-1642400  Direct 47,041 - 12,482  NSF CBET-1642400  Direct 47,041 - 12,482  NSF CBET-1740363  Direct 47,041 - 14,876  NSF CBET-1740363  Direct 47,041 - 48,763  NSF CBET-1750607  Direct 47,041 - 74,192  NSF CBET-1750607  Direct 47,041 - 74,192  NSF CBET-1839675  Direct 47,041 - 33,596  NSF CBET-1963329  NSF CBET-1963329  Direct 47,041 - 3,7599  NSF CBET-1963329  NSF CBET-1963329  NSF CBET-1963329  Direct 47,041 - 3,3590  NSF CBET-196364  NSF CBET-196365  Direct 47,041 - 3,3590  NSF CBET-196366  Direct 47,041 - 1,200  NSF CBET-1963693  Direct 47,041 - 3,340  NSF CBET-1926983  Direct 47,041 - 4,000  NSF CBET-1926983  NSF CBET-1926983  Direct 47,041 - 4,000  NSF CBET-1926983  NSF CBET-1926983  DIRECT 47,041 - 4,000  NSF CBET-1926983  NSF CBET-1926983  DIRECT 47,041 - 4,000  NSF CBET-1926983  DIRECT 47,041 - 4,000  NSF CBET-19	NEH RZ-51674-14	Direct	45.161		34,307
National Science Foundation:   NSF CBET-1236764   Direct 47.041 - 8.3.441     NSF CBET-1250623   Direct 47.041 - 8.3.441     NSF CBET-1350623   Direct 47.041 - 7.937     NSF CBET-1350623   Direct 47.041 - 7.937     NSF CBET-1350623   Direct 47.041 - 8.3.441     NSF CBET-1350623   Direct 47.041 - 3.256     NSF CBET-1436966   Direct 47.041 - 79.241     NSF CBET-1436963   Direct 47.041 - 79.241     NSF CBET-1636786   Direct 47.041 - 67.099     NSF CBET-1642400   Direct 47.041 - 115.432     NSF CBET-1642400   Direct 47.041 - 112.482     NSF CBET-1642400   Direct 47.041 - 12.482     NSF CBET-1642400   Direct 47.041 - 12.482     NSF CBET-1750607   Direct 47.041 - 14.482     NSF CBET-1750607   Direct 47.041 - 48.763     NSF CBET-1750607   Direct 47.041 - 48.763     NSF CBET-1750607   Direct 47.041 - 48.763     NSF CBET-1903329   Direct 47.041 - 57.521     NSF CBET-1903329 Sub   Direct 47.041 - 43.285     NSF CBET-1903329 Sub   Direct 47.041 - 43.285     NSF CBET-1903329 Sub   Direct 47.041 - 37.599     NSF CBET-1903329 Sub   Direct 47.041 - 33.400     NSF CBET-1903329 Sub   Direct 47.041 - 33.400     NSF CBET-1903329 Sub   Direct 47.041 - 33.400     NSF CBET-1926983   Direct 47.041 - 33.400     NSF CBET-1926983   Direct 47.041 - 40.000     NSF CBET-	Total National Endowment for the Arts and Humanities			_	36,839
NSF CBET-1350623 Direct 47,041 - 83,941 AU NSF CBET-1436966 Direct 47,041 - 3,256 NSF CBET-1436966 Direct 47,041 - 3,256 NSF CBET-1436993 Direct 47,041 - 79,241 NSF CBET-1512544 Direct 47,041 - 67,009 NSF CBET-1612545 Direct 47,041 - 115,432 NSF CBET-1624700 Direct 47,041 - 115,432 NSF CBET-1642400 Direct 47,041 - 12,482 NSF CBET-1642400 Direct 47,041 - 12,482 NSF CBET-1642400 Direct 47,041 - 14,8763 NSF CBET-176363 Direct 47,041 - 48,763 NSF CBET-176363 Direct 47,041 - 74,192 NSF CBET-1763667 Direct 47,041 - 74,192 NSF CBET-176367 Direct 47,041 - 74,192 NSF CBET-176367 Direct 47,041 - 74,192 NSF CBET-176367 Direct 47,041 - 74,192 NSF CBET-1903329 Direct 47,041 - 43,285 NSF CBET-1903329 Sub Direct 47,041 - 43,285 NSF CBET-1903329 Sub Direct 47,041 - 33,460 NSF CBET-1903329 Sub Direct 47,041 - 3,840 NSF CBET-1903329 Sub Direct 47,041 - 4,000 NSF CBET-1926983 DIR	National Science Foundation:				,
NSF CBET-1350623 NSF CBET-1350623 Direct 47,041 SF CBET-1350623 Direct 47,041 SF CBET-1350623 Direct 47,041 SF CBET-1350623 Direct 47,041 SF CBET-143696 NSF CBET-1436963 Direct 47,041 SF CBET-1436193 Direct 47,041 SF CBET-163593 Direct 47,041 SF CBET-163593 Direct 47,041 SF CBET-1604756 Direct 47,041 SF CBET-1604756 Direct 47,041 SF CBET-1604756 Direct 47,041 SF CBET-1642400 Direct 47,041 SF CBET-1642400 Direct 47,041 SF CBET-1642400 Direct 47,041 SF CBET-1743833 NSF CBET-1743833 NSF CBET-17548363 Direct 47,041 SF CBET-1754872 Direct 47,041 SF CBET-175697 Direct 47,041 SF CBET-195329 SF CBET-195329 Direct 47,041 SF CBET-195337 DIRECT 47,041 SF CBET-195337 DIRECT 47,041 SF CBET-195337 DIRECT 47,041 SF CBET-195337 DIRECT 47,041 SF CB		Direct	47 041	_	2 815
NSF CBET-1350623 NSF CBET-1434696 NSF CBET-1612544 Direct 47.041 - 79.241 NSF CBET-1612544 Direct 47.041 - 115.432 NSF CBET-1642400 NSF CBET-1642400 Direct 47.041 - 12.482 NSF CBET-1642400 Direct 47.041 - 12.482 NSF CBET-1754067 Direct 47.041 - 48.763 NSF CBET-1754067 Direct 47.041 - 74.192 NSF CBET-1754067 Direct 47.041 - 57.521 NSF CBET-175407 Direct 47.041 - 57.521 NSF CBET-1751472 Direct 47.041 - 57.521 NSF CBET-1751472 Direct 47.041 - 57.521 NSF CBET-193399 Direct 47.041 - 37.599 NSF CBET-193399 Direct 47.041 - 37.599 NSF CBET-1933939 Direct 47.041 - 33.490 NSF CBET-1930329 Direct 47.041 - 1.200 NSF CBET-1936983 Direct 47.041 - 1.200 NSF CBET-1926983 Direct 47.041 - 1.200 NSF CBET-1926983 Direct 47.041 - 3.3400 NSF CBET-1926983 Direct 47.041 - 4.000 NSF CBMI-1404276 Direct 47.041 - 4.000 NSF CMMI-1404276 Direct 47.041 - 4.000 NSF CMMI-1404276 Direct 47.041 - 4.000 NSF CMMI-1404276 Direct 47.041 - 4.000 NSF CMMI-1832692 Direct 47.041 - 6.024 NSF CMMI-1832693 Direct 47.041 - 6.024 NSF CMMI-1832693 Direct 47.041 - 6.024 NS				_	
NF CBET-14360823				_	
NSF CBET-1434696         Direct         47.041         -         3.256           NSF CBET-1436193         Direct         47.041         -         79.241           NSF CBET-1512544         Direct         47.041         -         67.609           NSF CBET-1604756         Direct         47.041         -         115,432           NSF CBET-1642400         Direct         47.041         -         (10,363)           NSF CBET-1743863         Direct         47.041         -         (10,363)           NSF CBET-1750807         Direct         47.041         -         74,192           NSF CBET-1750807         Direct         47.041         -         74,192           NSF CBET-1750807         Direct         47.041         -         74,192           NSF CBET-19339875         Direct         47.041         -         37,599           NSF CBET-1903329 Sub         Direct         47.041         -         37,599           NSF CBET-1926983         Direct         47.041         -         3,840           NSF CBET-1926983         Direct         47.041         -         4,000           NSF CMM-1761418         Direct         47.041         -         4,000           NS				_	
NSF CBET-1612544 NSF CBET-1604756 NSF CBET-1642400 NSF CBET-1642400 NSF CBET-1642400 NSF CBET-17540833 NSF CBET-17540873 NSF CBET-17540873 NSF CBET-1754087 NSF CBET-1750607 NSF CBET-1750607 NSF CBET-1750607 NSF CBET-1751472 Direct 47.041 - 77,192 NSF CBET-1751472 Direct 47.041 - 77,521 NSF CBET-1839375 NSF CBET-193329 NSF CBET-193329 NSF CBET-193329 NSF CBET-1903329 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1832692 NSF CMMI-1832693 NSF CMMI-1832693 NSF CMMI-1933269 NSF CMMI-1933269 NSF CMMI-1933269 NSF CMMI-1933870 NSF CMMI-1833870 NSF CMMI-1833870 NSF CMMI-1833870 NSF IP-1333870 NSF IP-				-	
NSF CBET-1604756 NSF CBET-1642400 NSF CBET-17458363 NSF CBET-17458363 NSF CBET-1750607 NSF CBET-1750607 NSF CBET-175047 NSF CBET-175047 NSF CBET-175047 NSF CBET-1839675 NSF CBET-1839675 NSF CBET-1930329 NSF CBET-1930329 NSF CBET-1930329 NSF CBET-1930329 NSF CBET-1903329 NSF CBET-1903329 NSF CBET-1903329 NSF CBET-1903630 NSF CBET-1926983 NSF CBET-1926983 NSF CBET-1926983 NSF CBET-1926983 NSF CBET-1926983 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1761418 NSF CMMI-1832692 NSF CMMI-1832692 NSF CMMI-1832692 NSF CMMI-1832692 NSF CMMI-1832692 NSF CMMI-1832692 NSF CMMI-1832690 NSF CMM		Direct		-	
NSF CBET-1642400	NSF CBET-1512544	Direct	47.041	-	67,609
NSF CBET-1542400	NSF CBET-1604756	Direct		-	
NSF CBET-1748363         Direct         47.041         -         48.763           NSF CBET-1750607         Direct         47.041         -         74.192           NSF CBET-1751472         Direct         47.041         -         57.521           NSF CBET-189339675         Direct         47.041         -         43.285           NSF CBET-1903329         Direct         47.041         -         37.599           NSF CBET-1926983         Direct         47.041         -         3.840           NSF CBET-1926983         Direct         47.041         -         4.000           NSF CMMI-1404276         Direct         47.041         -         4.000           NSF CMMI-1761418         Direct         47.041         -         4.040           NSF CMMI-1761418         Direct         47.041         -         4.0245           NSF CMMI-1832692         Direct         47.041         -         4.024           NSF CMMI-1832692         Direct         47.041         -         47.03           NSF CCSCS-1507096         Direct         47.041         -         47.041           NSF ECCS-1507096         Direct         47.041         -         47.041           NSF ECCS-1		Direct		-	
NSF CBET-1750607         Direct         47.041         -         74,192           NSF CBET-1751472         Direct         47.041         -         57,521           NSF CBET-1903329         Direct         47.041         -         37,599           NSF CBET-1903329 Sub         Direct         47.041         -         1,200           NSF CBET-1926983         Direct         47.041         -         3,840           NSF CBET-1926983         Direct         47.041         -         4,000           NSF CMH-140476         Direct         47.041         -         4,000           NSF CMM-140476         Direct         47.041         -         6,024           NSF CMM-1761418         Direct         47.041         -         47.041         -         47.041				-	
NSF CBET-1751472         Direct         47.041         -         57,521           NSF CBET-1839675         Direct         47.041         -         43,285           NSF CBET-1903329         Direct         47.041         -         37,599           NSF CBET-1903329 Sub         Direct         47.041         -         1,200           NSF CBET-1926983         Direct         47.041         -         4,000           NSF CMMI-1404276         Direct         47.041         -         394           NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1832692         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CCS-1507096         Direct         47.041         -         2,286           NSF ECCS-1507096         Direct         47.041         -         2,286           NSF ECCS-1507096         Direct         47.041         -         33,486           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-160				-	
NSF CBET-1839675         Direct         47.041         -         43.285           NSF CBET-1903329         Direct         47.041         -         37.599           NSF CBET-1926983         Direct         47.041         -         3.840           NSF CBET-1926983         Direct         47.041         -         4.000           NSF CMMI-140276         Direct         47.041         -         4.000           NSF CMMI-1761418         Direct         47.041         -         42.045           NSF CMMI-1761418         Direct         47.041         -         6.024           NSF CMMI-1832692         Direct         47.041         -         40.030           NSF CMMI-1832692         Direct         47.041         -         47.081           NSF CCS-1507096         Direct         47.041         -         2.286           NSF ECCS-1507096 </td <td></td> <td></td> <td></td> <td>-</td> <td></td>				-	
NSF CBET-1903329         Direct         47.041         -         37,599           NSF CBET-1903329 Sub         Direct         47.041         -         1,200           NSF CBET-1926983         Direct         47.041         -         3,840           NSF CBET-1926983         Direct         47.041         -         4,000           NSF CMMI-1404276         Direct         47.041         -         394           NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1761418         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         2,286           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF ECC-14610				-	
NSF CBET-1903329 Sub         Direct         47.041         -         1,200           NSF CBET-1926983         Direct         47.041         -         3,840           NSF CBET-1926983         Direct         47.041         -         4,000           NSF CBMI-1404276         Direct         47.041         -         394           NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1761418         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         42,045           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-191436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         2,286           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1508				-	
NSF CBET-1926983         Direct         47.041         -         3.840           NSF CBET-1926983         Direct         47.041         -         4.000           NSF CMMI-1404276         Direct         47.041         -         394           NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1832692         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         47,030           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1507096         Direct         47.041         -         2,226           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF ECCS-160031         Direct         47.041         -         501,200           NSF EEC-1461031				_	
NSF CBET-1926983         Direct         47.041         -         4,000           NSF CMMI-1404276         Direct         47.041         -         394           NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1761418         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-194436         Direct         47.041         -         2,286           NSF ECCS-1507096         Direct         47.041         -         225           NSF ECCS-1507096         Direct         47.041         -         33,046           NSF ECCS-1507096         Direct         47.041         -         35,094           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF ECCS-14661031         Direct         47.041         -         501,200           NSF EEC-1461031 Huang Part. Supp.         Direct         47.041         -         6,041				_	
NSF CMMI-1404276         Direct         47.041         -         394           NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1761418         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         141,500           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         225           NSF ECCS-1507096         Direct         47.041         -         33,346           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-15080910         Direct         47.041         -         35,009           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF ECCS-1608910         Direct         47.041         -         5,940           NSF EEC-1461031         Direct         47.041         -         9,144           NSF EEC-1461031 Huang Part. Supp.         Direct         47.041         -         9,144           N					
NSF CMMI-1761418         Direct         47.041         -         42,045           NSF CMMI-1761418         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         141,500           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         22,286           NSF ECCS-1507096         Direct         47.041         -         33,346           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF EEC-1461031         Direct         47.041         -         501,200           NSF EEC-1461031         Direct         47.041         -         9,144           NSF EEC-1461031 Huang Part. Supp.         Direct         47.041         -         815           NSF EEC-1461031 Huang Sub         Direct         47.041         -         47.061				_	
NSF CMMI-1761418         Direct         47.041         -         6,024           NSF CMMI-1832692         Direct         47.041         -         141,500           NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         47,083           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         33,346           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1508910         Direct         47.041         -         5,909           NSF ECCS-1508910         Direct         47.041         -         5,909           NSF ECCS-1849578         Direct         47.041         -         9,144           NSF EEC-1461031 Huang Part. Supp.         Direct         47.041         -         9,144           NSF EEC-1461031 Huang Sub         Direct         47.041         -         (706)           NSF EEC-1461031 Rickli Part. Supp.         Direct         47.041         -         (2,706)				_	
NSF CMMI-1832692         Direct         47.041         -         40,030           NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         325           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1507096         Direct         47.041         -         59,009           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF ECCS-1849578         Direct         47.041         -         501,200           NSF EEC-1461031         Direct         47.041         -         9,144           NSF EEC-1461031 Huang Part. Supp.         Direct         47.041         -         9,144           NSF EEC-1461031 Rickli Part. Supp.         Direct         47.041         -         815           NSF EEC-1461031 Rickli Part. Supp.         Direct         47.041         -         (2,706)           NSF IIP-1338780         Direct         47.041         -         40,855<				-	
NSF CMMI-1832692         Direct         47.041         -         47,783           NSF CMMI-1914436         Direct         47.041         -         2,286           NSF ECCS-1232226         Direct         47.041         -         225           NSF ECCS-1507096         Direct         47.041         -         36,094           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1507096         Direct         47.041         -         35,009           NSF ECCS-1508910         Direct         47.041         -         5,940           NSF ECCS-1849578         Direct         47.041         -         501,200           NSF EEC-1461031 Huang Part. Supp.         Direct         47.041         -         9,144           NSF EEC-1461031 Huang Sub         Direct         47.041         -         (706)           NSF EEC-1461031 Rickli Part. Supp.         Direct         47.041         -         (2,706)           NSF IIP-1338780         Direct         47.041         -         40,855           NSF IIP-1338780         Direct         47.041         -         40,855	NSF CMMI-1832692	Direct	47.041	-	141,500
NSF CMMI-1914436       Direct       47.041       -       2,286         NSF ECCS-1232226       Direct       47.041       -       225         NSF ECCS-1507096       Direct       47.041       -       33,346         NSF ECCS-1507096       Direct       47.041       -       35,009         NSF ECCS-1508910       Direct       47.041       -       5,940         NSF ECCS-1849578       Direct       47.041       -       501,200         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Sub       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       40,855	NSF CMMI-1832692	Direct	47.041	-	
NSF ECCS-1232226       Direct       47.041       -       225         NSF ECCS-1507096       Direct       47.041       -       33,346         NSF ECCS-1507096       Direct       47.041       -       36,094         NSF ECCS-1507096       Direct       47.041       -       5,940         NSF ECCS-1508910       Direct       47.041       -       5,940         NSF ECCS-1849578       Direct       47.041       -       9,144         NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Huang Sub       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       40,855		Direct		-	
NSF ECCS-1507096       Direct       47.041       -       33,346         NSF ECCS-1507096       Direct       47.041       -       36,094         NSF ECCS-1507096       Direct       47.041       -       35,009         NSF ECCS-1508910       Direct       47.041       -       5,940         NSF ECCS-1849578       Direct       47.041       -       9,144         NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       40,855				-	
NSF ECCS-1507096       Direct       47.041       -       36,094         NSF ECCS-1507096       Direct       47.041       -       35,009         NSF ECCS-1508910       Direct       47.041       -       5,940         NSF ECCS-1849578       Direct       47.041       -       501,200         NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				-	
NSF ECCS-1507096       Direct       47.041       -       35,009         NSF ECCS-1508910       Direct       47.041       -       5,940         NSF ECCS-1849578       Direct       47.041       -       501,200         NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				-	
NSF ECCS-1508910       Direct       47.041       -       5,940         NSF ECCS-1849578       Direct       47.041       -       501,200         NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				-	
NSF ECCS-1849578       Direct       47.041       -       501,200         NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Huang Sub       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				-	
NSF EEC-1461031       Direct       47.041       -       9,144         NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Huang Sub       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				_	
NSF EEC-1461031 Huang Part. Supp.       Direct       47.041       -       (706)         NSF EEC-1461031 Huang Sub       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				_	
NSF EEC-1461031 Huang Sub       Direct       47.041       -       815         NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27				_	
NSF EEC-1461031 Rickli Part. Supp.       Direct       47.041       -       (2,706)         NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27	<u> </u>			_	
NSF IIP-1338780       Direct       47.041       -       40,855         NSF IIP-1338780       Direct       47.041       -       27	· · · · · · · · · · · · · · · · · · ·			_	
NSF IIP-1338780 Direct 47.041 - 27	··			-	,
NSE IIP-1338780 Direct 47 0/1 - 36 316				-	
110 III - 1000100	NSF IIP-1338780	Direct	47.041	-	36,316

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):		Of B/(Trainber	- Cubi Colpionio	1 Guorai Exponditareo
·				
National Science Foundation (continued):	Direct	47.044	\$ -	\$ 13,727
NSF IIP-1500253 NSF IIP-1500253	Direct Direct	47.041 47.041	φ -	2,386
NSF IIP-1500253	Direct		-	15,739
NSF IIP-1500253 NSF IIP-1500253	Direct	47.041 47.041	-	34,034
NSF IIP-190255 NSF IIP-1925692	Direct	47.041 47.041	-	10,871
NSF AST-1351222	Direct	47.041	-	84,494
NSF CHE-1349048	Direct	47.049	-	94,928
NSF CHE-1361741	Direct	47.049 47.049	-	153
NSF CHE-1301741 NSF CHE-1404285	Direct	47.049	-	153,108
NSF CHE-1464450	Direct	47.049	_	33,753
NSF CHE-1500201	Direct	47.049	_	99,191
NSF CHE-1500201 NSF CHE-1554752	Direct	47.049	-	270,902
NSF CHE-1564755	Direct	47.049	-	98,547
NSF CHE-1504733 NSF CHE-1607973	Direct	47.049	_	74,169
NSF CHE-1665331	Direct	47.049	_	172,010
NSF CHE-1709776	Direct	47.049	_	173,562
NSF CHE-1709776 NSF CHE-1709789	Direct	47.049	-	162,702
NSF CHE-1709769 NSF CHE-1836308	Direct	47.049	-	87,518
NSF CHE-1855681	Direct	47.049 47.049	-	11,411
			-	28,901
NSF CHE-1856437	Direct Direct	47.049 47.049	-	6,285
NSF CHE-1904584			-	19,988
NSF CHE-1904775	Direct	47.049 47.040	-	
NSF CHE-1904780	Direct	47.049	-	6,284
NSF DMR-1410302	Direct	47.049 47.040	-	7,329
NSF DMR-1410853	Direct	47.049	-	1,061
NSF DMR-1606917	Direct	47.049	-	43,564
NSF DMR-1609625	Direct	47.049	-	64,574
NSF DMR-1609625	Direct	47.049 47.040	-	1,950
NSF DMR-1652316	Direct	47.049	-	106,215
NSF DMR-1743041	Direct	47.049 47.040	-	56,512
NSF DMR-1809229	Direct	47.049	-	42,605
NSF DMR-1809229	Direct	47.049 47.040	-	2,448
NSF DMS-1207667	Direct	47.049	-	(6,743) 6,088
NSF DMS-1207667	Direct	47.049 47.040	-	61,759
NSF DMS-1512846	Direct	47.049 47.040	-	51,739 51,726
NSF DMS-1606290 NSF DMS-1710827	Direct Direct	47.049 47.049	-	129,450
	Direct	47.049 47.049	-	44,885
NSF DMS-1808978 NSF DMS-1819041		47.049 47.049	-	11,621
NSF PHY-1460853	Direct	47.049	-	(357)
NSF PHY-1460853 Participant support	Direct	47.049 47.049	-	2,300
· · · · · · · · · · · · · · · · · · ·	Direct	47.049 47.050	-	54,861
NSF EAR-1454829 NSF EAR-1755722	Direct	47.050 47.050	-	4,287
NSF OCE-1923014	Direct Direct	47.050 47.050	-	4,267 29,177
NSF PLR-1434578	Direct	47.050	-	27,925
			-	8,803
NSF PLR-1434578	Direct	47.050 47.070	-	321,087
NSF ACI-1550300	Direct	47.070 47.070	-	12,277
NSF ACI-1550300	Direct	47.070 47.070	2 900	
NSF ACI 1643406	Direct	47.070 47.070	2,890	3,642
NSF ACI 1657364	Direct	47.070 47.070	-	189,788 50,614
NSF ACI-1657364	Direct	47.070 47.070	-	59,614
NSF CCF-1561216	Direct	47.070	-	62,318
NSF CCF-1563728	Direct	47.070	-	49,046
NSF CFF-1850475	Direct	47.070	-	25,819

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

National Science Foundation (continued):	Provided to				
National Science Foundation (continued):  NSF ONS-1681851	Federal Agency/Pass-through Agency/Program Title/Pass-through ID		CFDA Number	Subrecipients	Federal Expenditures
NSF CNS-1618185   Direct 47,070   S	Research and Development Cluster (continued):				
NSF CNS-1624177 NSF CNS-1637312 Direct 47,070 - NSF CNS-1836629 Direct 47,070 - NSF CNS-1836629 Direct 47,070 - NSF CNS-1836629 Direct 47,070 - NSF ISS-1524264 Direct 47,070 - NSF ISS-1524264 Direct 47,070 - NSF ISS-1524264 Direct 47,070 - NSF ISS-1524267 Direct 47,070 - NSF ISS-1524267 Direct 47,070 - NSF ISS-154563713 Direct 47,070 - NSF OAC-1843962 Direct 47,070 - NSF OES-1854633 Direct 47,070 - NSF OES-1854633 Direct 47,070 - NSF OES-1854633 Direct 47,070 - NSF OES-185463 Direct 47,074 - NSF NSF DES-185463 Direct 47,074 - NSF NSF NSS-1853255 Direct 47,074 - NSF MSS-1843577 Direct 47,074 - NSF SSS-1853255 Direct 47,074 - NSF SSS-1853255 Direct 47,075 - NSF SSS-18546977 Direct 47,075 - NSF SSS-18546977 Direct 47,075 - NSF SSS-18500723 Direct 47,075 - NSF SSS-18500733 Direct 47,076 - NSF DRL-1812400 Direct 47,	National Science Foundation (continued):				
NSF CNS-1637312 NSF CNS-1637312 NSF CNS-1637312 NSF CNS-1637312 NSF CNS-1637312 NSF CNS-1838629 Direct 47,070 - NSF SNS-1838629 Direct 47,070 - NSF ISS-154264 Direct 47,070 - NSF ISS-154264 Direct 47,070 - NSF ISS-154264 NSF ISS-1646511 Direct 47,070 - NSF ISS-1646511 NSF OAC-1835713 Direct 47,070 - NSF OAC-1835713 Direct 47,070 - NSF OAC-1825467 NSF OAC-1825467 NSF OAC-1825467 NSF OAC-1825467 NSF ISS-154668 Direct 47,070 - NSF ISS-154668 Direct 47,074 - NSF ISS-154668 Direct 47,074 - NSF ISS-154669 NSF ISS-154669 DIrect 47,074 - NSF ISS-154669 NSF ISS-154669 DIrect 47,075 - NSF ISS-154669 NSF ISS-15466977 Direct 47,075 - NSF SES-1646977 Direct 47,076 - NSF DEL-1612400 Direct 47,076 - NSF DEL-	NSF CNS-1618185	Direct	47.070	\$ -	\$ 49,293
NSF CNS-1637312 NSF CNS-1836829 NSF CNS-18368629 NSF INS-1836829 NSF INS-18368629 NSF INS-1854284 Direct 47 070 - NSF INS-18724227 Direct 47 070 - NSF INS-18724227 Direct 47 070 - NSF INS-18724227 NSF INS-1872427 NSF INS-1872427 NSF INS-187247 NSF INS	NSF CNS-1624177	Direct	47.070	-	6,328
NSF CNS-1741635 NSF CNS-1836629 NSF CNS-1836629 NSF CNS-1836629 NSF INS-1836629 NSF INS-1854264 Direct 47,070 - NSF IIS-1854264 Direct 47,070 - NSF IIS-1854264 Direct 47,070 - NSF IIS-18542617 Direct 47,070 - NSF IIS-18542617 Direct 47,070 - NSF IIS-18635713 Direct 47,070 - NSF OAC-1845962 Direct 47,070 - NSF OAC-1845962 Direct 47,070 - NSF OAC-1845962 Direct 47,070 - NSF OAC-1845963 Direct 47,070 - NSF OAC-1845963 Direct 47,074 - NSF IOS-1854063 Direct 47,074 - NSF IOS-1854063 Direct 47,074 - NSF IOS-1853291 Direct 47,074 - NSF IOS-1853295 Direct 47,074 - NSF MCB-1453579 Direct 47,074 - NSF MCB-1453579 Direct 47,074 - NSF SES-1853255 Direct 47,074 - NSF SES-1864977 Direct 47,075 - NSF SES-1864977 Direct 47,075 - NSF SES-1845977 Direct 47,076 - NSF SES-1845970 Direct 47,076 - NSF SES-1845970 Direct 47,076 - NSF SES-1845900 Direct 47,076 - NSF SES-1845900 Direct 47,076 - NSF SES-185038 Direct 47,076 - NSF SES-185039 Direct 47,076 - NSF DRL-1612400 Mohawk Valley Comm College Direct 47,076 - NSF DRL-1612400 Mohawk Valley Comm College Direct 47,076 - NSF DRL-1612400 Direct 47,076 - NSF DRL-1612400 Mohawk Valley Comm College Direct 47,076 - NSF DRL-1612400 Direct 47,07	NSF CNS-1637312	Direct	47.070	-	45,661
NSF CNS-1836629 NSF CNS-1836629 NSF IS-1554264 NSF IS-1554264 NSF IIS-1554264 NSF IIS-17224227 NSF IIS-1554264 NSF IIS-17224227 NSF IIS-1722427 NSF IIS-1724227 NSF IIS-1724267 NSF IIS-172427 NSF IIS-172427 NSF IIS-172427 NSF IIS-172427 NSF IIS-1836151 Direct 47.070 - NSF OAC-1835713 Direct 47.070 - NSF OAC-1835713 Direct 47.070 - NSF OAC-1825467 Direct 47.070 - NSF OAC-1925467 NSF OAC-1925467 Direct 47.074 - NSF IIS-183603 Direct 47.074 - NSF IIS-183603 Direct 47.074 - NSF IIS-1836291 Direct 47.075 - NSF MCB-1453579 Direct 47.075 - NSF SES-1763218 Direct 47.075 - NSF SES-1845977 Direct 47.076 - NSF SES-1845970 Direct 47.076 - NSF SES-1845970 Direct 47.076 - NSF DIR-1612400 Direct 47.076 - NSF	NSF CNS-1637312	Direct	47.070	-	100
NSF CNS-1836629 NSF IIS-15422427 NSF IIS-15422427 NSF IIS-1654264 NSF OAC-1825713 NSF OAC-1825713 NSF OAC-1825713 NSF OAC-1825713 NSF OAC-1825767 NSF OAC-1825	NSF CNS-1741635	Direct	47.070	-	6,284
NSF IIS-1554264 NSF IIS-17224227 Direct 47,070 SF IIS-1816511 Direct 47,070 SF IIS-1816511 Direct 47,070 SF OAC-1845962 Direct 47,070 SF OAC-1845962 Direct 47,070 SF OAC-1845962 Direct 47,070 SF OAC-1825467 Direct 47,070 SF OAC-1825467 Direct 47,074 SF OAC-1925467 DIRECT 47,075 SF OAC-1925467 DIRECT 47,076 SF OAC-1925467 DIRECT 47,07	NSF CNS-1836629	Direct	47.070	-	75,800
NSF IIS-17224227 NSF IIS-1816511 Direct 47,070 - NSF OAC-1835713 Direct 47,070 - NSF OAC-1845982 Direct 47,070 - NSF OAC-1845982 Direct 47,070 - NSF OAC-1825467 Direct 47,070 - NSF OAC-1925467 Direct 47,070 - NSF OAC-1925467 Direct 47,070 - NSF OAC-1925467 Direct 47,074 - NSF OAC-1925467 Direct 47,074 - NSF IOS-1651921 Direct 47,074 - NSF IOS-1638291 Direct 47,074 - NSF IOS-1638291 Direct 47,074 - NSF MCB-1433579 Direct 47,074 - NSF MCB-1433579 Direct 47,075 - NSF SES-1763218 Direct 47,075 - NSF SES-1763218 Direct 47,075 - NSF SES-1763218 Direct 47,075 - NSF SES-1845977 Direct 47,075 - NSF SES-194095 Direct 47,075 - NSF SES-1940995 Direct 47,075 - NSF SES-1940905 Direct 47,075 - NSF SES-1940905 Direct 47,075 - NSF SES-1940905 Direct 47,076 - NSF DGE-1735038 Direct 47,076 - NSF DGE-1735038 Direct 47,076 - NSF DGE-1735038 Direct 47,076 - NSF DRL-1612400 Direct 47,076 - NSF DRL-1612400 Cleveland State Direct 47,076 - NSF DRL-1612400 Cleveland State Direct 47,076 - NSF DRL-1612400 Mathematical Policy Research Direct 47,076 - NSF DRL-161400 Policy Research Direct 47,076 - NSF DRL-161400 Mathematical Policy Research Direct 47,076 - NSF DRL-161400 Tolicy Algority Direct 47,076 - NSF DRL-16400 Tolicy Di	NSF CNS-1836629	Direct	47.070	-	45,514
NSF IS-1816511 NSF OAC-1835713 Direct 47.070 NSF OAC-1845982 Direct 47.070 NSF OAC-1845982 NSF IOS-1651921 Direct 47.074 NSF IOS-1651921 Direct 47.074 NSF IOS-1838291 Direct 47.074 NSF IOS-1838299 Direct 47.074 NSF NCB-1433579 Direct 47.074 NSF MCB-1433579 Direct 47.075 NSF NCB-1735038 Direct 47.075 NSF SES-18353255 Direct 47.075 NSF SES-18353255 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-184597 Direct 47.075 NSF SES-184597 Direct 47.075 NSF SES-184597 Direct 47.075 NSF SES-184597 Direct 47.076 NSF DES-184597 NSF DES-184597 Direct 47.076 NSF DES-184597 NSF DES-184597 Direct 47.076 NSF DES-184597 NSF DES-184597 NSF DES-184597 Direct 47.076 NSF DES-184597 NSF DES-1845989 NSF DES-1845	NSF IIS-1554264	Direct	47.070	-	3,000
NSF OAC-1835713 NSF OAC-1845962 NSF OAC-1845962 NSF OAC-1925467 NSF OAC-1925467 NSF DEB-1354063 Direct 47.070 NSF DEB-1354063 Direct 47.074 NSF IOS-1661921 Direct 47.074 NSF IOS-161838291 Direct 47.074 NSF IOS-16382891 Direct 47.074 NSF MCB-1453579 Direct 47.074 NSF MCB-1453579 Direct 47.075 NSF SES-18352255 Direct 47.075 NSF SES-1763218 Direct 47.075 NSF SES-1763218 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1904095 Direct 47.075 NSF SES-1904095 Direct 47.075 NSF SES-1904095 Direct 47.076 NSF DIRECT-1735038 Direct 47.076 NSF DIRECT-1735038 Direct 47.076 NSF DIRECT-1735038 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Case Western Univ NSF DRL-1612400 Cleveland State Direct 47.076 NSF DRL-1612400 Mathematical Policy Research Direct 47.076 NSF DRL-1614181 Direct 47.076 NSF DRL-1614181 Direct 47.076 NSF DRL-1614406 NSF DRL-1612409 Direct 47.076 NSF DRL-1614406 NSF DRL-1614406 Direct 47.076 NSF DRL-1614406	NSF IIS-17224227	Direct	47.070	-	194,299
NSF OAC-1845962 NSF OAC-1925467 NSF OAC-1925467 NSF DEB-1354063 NSF DEB-1354063 NSF DEB-1354063 NSF DES-1651921 NSF IOS-1651921 NSF IOS-1651921 NSF IOS-1651921 NSF IOS-1651921 NSF IOS-1651921 NSF IOS-1453579 Direct 47.074 - NSF MCB-1453579 Direct 47.074 - NSF MCB-1453579 Direct 47.074 NSF MCB-1453579 Direct 47.075 NSF SES-1353255 Direct 47.075 NSF SES-135218 Direct 47.075 NSF SES-1453218 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1845970 Direct 47.076 NSF DEL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Case Western Univ Direct 47.076 NSF DRL-1612400 Drexel Direct 47.076 NSF DRL-1612400 Mathematical Policy Research NSF DRL-1612400 Mathematical Policy Research Direct 47.076 NSF DRL-1612400 Mathematical Policy Research NSF DRL-1612400 Mathematical Policy Research Direct 47.076 NSF DRL-1612400 Mathematical Policy Research NSF DRL-1612400 Mathe	NSF IIS-1816511	Direct	47.070	-	44,204
NSF OAC-1925467 NSF DB-1354063 NSF DB-1354063 NSF IDS-1651921 Direct 47.074 NSF IOS-1838291 Direct 47.074 NSF NGS-1838291 Direct 47.074 NSF MGS-1453579 Direct 47.074 NSF MGS-1453579 Direct 47.074 NSF MGS-1453579 Direct 47.075 NSF SES-1353255 Direct 47.075 NSF SES-1353255 Direct 47.075 NSF SES-1763218 Direct 47.075 NSF SES-1845977 Direct 47.075 NSF SES-1904095 Direct 47.076 NSF DES-1903095 Direct 47.076 NSF DES-1903095 Direct 47.076 NSF DES-1735038 Direct 47.076 NSF DCE-1735038 Direct 47.076 NSF DCE-1735038 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Case Western Univ NSF DRL-1612400 Cleveland State Direct 47.076 NSF DRL-1612400 Drexel Direct 47.076 Direct 47.076 NSF DRL-1612400 Drexel DIRECT 47.076 NSF DRL-1612400 Drexel DIRECT 47.07	NSF OAC-1835713	Direct	47.070	-	12,415
NSF DEB-1354063 NSF IOS-1651921 Direct 47.074 NSF IOS-1838291 Direct 47.074 NSF IOS-1838291 Direct 47.074 NSF IOS-1838291 Direct 47.074 NSF MCB-1453579 Direct 47.074 NSF MCB-1453579 Direct 47.075 NSF MCB-1453579 Direct 47.075 NSF MCB-14535579 Direct 47.075 NSF MCB-1453579 Direct 47.075 NSF MCB-1352355 Direct 47.075 NSF SES-1353255 NSF SES-1845977 Direct 47.075 NSF SES-1845977 Direct 47.076 NSF DEL-135033 Direct 47.076 NSF DEL-135033 NSF DGE-1735038 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Case Western Univ Direct 47.076 NSF DRL-1612400 Cleveland State Direct 47.076 NSF DRL-1612400 Mathematical Policy Research NSF DRL-1612400 Mathematical Policy Research Direct 47.076 NSF DRL-1612400 Mathematical Policy Research NSF DRL-1612400 Mathematical Polic	NSF OAC-1845962	Direct	47.070	-	31,975
NSF   IOS-1651921	NSF OAC-1925467	Direct	47.070	-	303,374
NSF IOS-1838291		Direct	47.074	-	2,578
NSF MCB-1453579	NSF IOS-1651921	Direct	47.074	-	116,224
NSF MCB-1453579		Direct		-	85,249
NSF MCB-1453579		Direct		-	92,298
NSF SES-1363255   Direct   47.075     -   -   -   -   -   -   -   -	NSF MCB-1453579	Direct		-	9,640
NSF SES-1763218	NSF SES-1353255			-	45,876
NSF SES-1845977 NSF SES-1904095 Direct 47.075 NSF SSS-1904095 Direct 47.075 NSF SMA-1520723 Direct 47.075 NSF SMA-1520723 Direct 47.075 NSF SMA-1520723 Direct 47.076 NSF DGE-1735038 Direct 47.076 NSF DGE-1735038 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Direct 47.076 NSF DRL-1612400 Cleveland State Direct 47.076 Direct 47.076 NSF DRL-1612400 Cleveland State Direct 47.076 Direct 47.076 NSF DRL-1612400 Drexel Direct 47.076 Direct 47.076 NSF DRL-1612400 Drexel Direct 47.076 Direct 47.076 NSF DRL-1612400 Drexel Direct 47.076 Direct 47.076 NSF DRL-1612400 Mathematical Policy Research Direct 47.076 Direct 47.076 NSF DRL-1612400 Mohawk Valley Comm College Direct 47.076 Direct 47.076 NSF DRL-161487 Direct 47.076 Direct 47.076 NSF DRL-1614881 Direct 47.076 NSF DRL-161489 Direct 47.076 NSF DRL-161489 Direct 47.076 NSF DRL-1524878 NSF DUE-1524878 Direct 47.076 NSF DRL-1524878 NSF DRL-1524878 NSF DRL-1524878 Direct 47.076 NSF DRL-1524878 DIrect 47.076 NSF DRL-1524878 DIRECT 47.076 NSF DRL-1524878 NSF				-	26,706
NSF SES-1845977         Direct         47.075         -           NSF SES-1904095         Direct         47.075         -           NSF SMA-1520723         Direct         47.075         37,981           NSF DGE-1735038         Direct         47.076         30,563           NSF DGE-1735038         Direct         47.076         -           NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400 Clase Western Univ         Direct         47.076         -           NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Drexel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         49,020           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         19,553           NSF DRL-16141481         Direct         47.076         7,962           NSF DRL-16240819         Direct         47.076         -           NSF DUE-1540819         Direct         47.076         -           NSF DUE-1540819         Direct         47.076         -      <				-	613
NSF SES-1904095         Direct         47.075         -           NSF SMA-1520723         Direct         47.076         37,981           NSF DGE-1735038         Direct         47.076         30,563           NSF DGE-1735038         Direct         47.076         -           NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400 Case Western Univ         Direct         47.076         22,492           NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Direxel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         49,020           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         195,553           NSF DUE-1614187         Direct         47.076         175,952         3           NSF DUE-1431481         Direct         47.076         -           NSF DUE-1540819         Direct         47.076         -           NSF DUE-1540819         Direct         47.076         -           NSF DUE-1742486         Direct         47.076         <				-	8,311
NSF SMA-1520723         Direct         47.075         37,981           NSF DGE-1735038         Direct         47.076         30,563           NSF DGE-1735038         Direct         47.076         -           NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400 Case Western Univ         Direct         47.076         22,492           NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Drexel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         106,060           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         99,553           NSF DRL-1614187         Direct         47.076         175,952         3           NSF DUE-1431481         Direct         47.076         -           NSF DUE-1430819         Direct         47.076         9,962           NSF DUE-1540819         Direct         47.076         8,258           NSF DUE-1742486         Direct         47.076         -           NSF DUE-1742486         Direct         47.076         -           NSF OISE-1357887         Direct         47.076				-	4,093
NSF DGE-1735038         Direct         47.076         30,563           NSF DGE-1735038         Direct         47.076         -           NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400 Case Western Univ         Direct         47.076         -           NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Drexel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         106,060           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         99,553           NSF DRL-1614187         Direct         47.076         175,952         3           NSF DUE-1431481         Direct         47.076         -         4           NSF DUE-1540819         Direct         47.076         9,962         4           NSF DUE-1742486         Direct         47.076         9,962           NSF DUE-1742486         Direct         47.076         -           NSF OISE-1357887         Direct         47.076         -           NSF OISE-1357887         Direct         47.079         -           NSF OIMI-1839921 IPA Agrmnt				37.981	79,979
NSF DGE-1735038         Direct         47.076         -         2           NSF DRL-1612400         Direct         47.076         -         -           NSF DRL-1612400 Case Western Univ         Direct         47.076         22.492           NSF DRL-1612400 Cleveland State         Direct         47.076         159.782           NSF DRL-1612400 Drexel         Direct         47.076         49.020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         106.060           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         99.553           NSF DRL-1614187         Direct         47.076         175,952         3           NSF DUE-1431481         Direct         47.076         -         -           NSF DUE-1524878         Direct         47.076         -         -           NSF DUE-1540819         Direct         47.076         9.962         -           NSF DUE-1742486         Direct         47.076         -         -           NSF DUE-1736983         Direct         47.076         -         -           NSF OISE-1357887         Direct         47.076         -         -           NSF OISE-1357887         Direct				•	148,351
NSF DRL-1612400         Direct         47.076         -           NSF DRL-1612400 Case Western Univ         Direct         47.076         -           NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Drexel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         106,060           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         99,553           NSF DUE-1614187         Direct         47.076         175,952           NSF DUE-1431481         Direct         47.076         -           NSF DUE-1524878         Direct         47.076         -           NSF DUE-1540819         Direct         47.076         9,962           NSF DUE-1540819         Direct         47.076         -           NSF DUE-1742486         Direct         47.076         -           NSF DUE-1357887         Direct         47.076         -           NSF OISE-1357887         Direct         47.079         -           NSF OISE-1357887         Direct         47.079         -           NSF CMMI-1839521 IPA Agrmnt         Direct         47.079         - <td></td> <td></td> <td></td> <td>, -</td> <td>265,918</td>				, -	265,918
NSF DRL-1612400       Direct       47.076       -         NSF DRL-1612400 Case Western Univ       Direct       47.076       22,492         NSF DRL-1612400 Cleveland State       Direct       47.076       159,782         NSF DRL-1612400 Drexel       Direct       47.076       49,020         NSF DRL-1612400 Mathematical Policy Research       Direct       47.076       106,060         NSF DRL-1612400 Mohawk Valley Comm College       Direct       47.076       99,553         NSF DRL-1614187       Direct       47.076       175,952       3         NSF DUE-1431481       Direct       47.076       -       4         NSF DUE-1540819       Direct       47.076       9,962       4         NSF DUE-1540819       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.071       -         Life Magnetics NSF IIP745992				-	81,560
NSF DRL-1612400 Case Western Univ         Direct         47.076         22,492           NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Drexel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         106,060           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         99,553           NSF DRL-1614187         Direct         47.076         175,952           NSF DUE-1524878         Direct         47.076         -           NSF DUE-1540819         Direct         47.076         9,962           NSF DUE-1540819         Direct         47.076         8,258           NSF DUE-1742486         Direct         47.076         -           NSF DUE-1742486         Direct         47.076         -           NSF HRD-1305993         Direct         47.076         -           NSF OISE-1357887         Direct         47.079         -           NSF OISE-13578887         Direct         47.079         -           NSF CMMI-18399521 IPA Agrmnt         Direct         47.071         -           Life Magnetics NSF IIP745992         Pass Through         47.041 </td <td></td> <td>Direct</td> <td></td> <td>-</td> <td>177,969</td>		Direct		-	177,969
NSF DRL-1612400 Cleveland State         Direct         47.076         159,782           NSF DRL-1612400 Drexel         Direct         47.076         49,020           NSF DRL-1612400 Mathematical Policy Research         Direct         47.076         106,060           NSF DRL-1612400 Mohawk Valley Comm College         Direct         47.076         99,553           NSF DRL-1614187         Direct         47.076         175,952         3           NSF DUE-1431481         Direct         47.076         -         4           NSF DUE-1524878         Direct         47.076         -         4           NSF DUE-1540819         Direct         47.076         9,962           NSF DUE-1742486         Direct         47.076         8,258           NSF DUE-1742486         Direct         47.076         -           NSF DUE-1357887         Direct         47.076         -           NSF OISE-1357887         Direct         47.079         -           NSF OISE-1357887         Direct         47.079         -           NSF CMMI-1839521 IPA Agrmnt         Direct         47.079         -           Life Magnetics NSF IIP745992         Pass Through         47.041         -				22,492	24,234
NSF DRL-1612400 Drexel       Direct       47.076       49,020         NSF DRL-1612400 Mathematical Policy Research       Direct       47.076       106,060         NSF DRL-1612400 Mohawk Valley Comm College       Direct       47.076       99,553         NSF DRL-1614187       Direct       47.076       175,952         NSF DUE-1431481       Direct       47.076       -         NSF DUE-1524878       Direct       47.076       -         NSF DUE-1540819       Direct       47.076       9,962         NSF DUE-1540819       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -					159,782
NSF DRL-1612400 Mathematical Policy Research       Direct       47.076       106,060         NSF DRL-1612400 Mohawk Valley Comm College       Direct       47.076       99,553         NSF DRL-1614187       Direct       47.076       175,952       3         NSF DUE-1431481       Direct       47.076       -         NSF DUE-1524878       Direct       47.076       -         NSF DUE-1540819       Direct       47.076       9,962         NSF DUE-1742486       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.079       -         Life Magnetics NSF IIIP745992       Pass Through       47.041       -					58,270
NSF DRL-1612400 Mohawk Valley Comm College       Direct       47.076       99,553         NSF DRL-1614187       Direct       47.076       175,952       3         NSF DUE-1431481       Direct       47.076       -         NSF DUE-1524878       Direct       47.076       -         NSF DUE-1540819       Direct       47.076       9,962         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -					106,060
NSF DRL-1614187       Direct       47.076       175,952       3         NSF DUE-1431481       Direct       47.076       -         NSF DUE-1524878       Direct       47.076       -       4         NSF DUE-1540819       Direct       47.076       9,962         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				•	108,803
NSF DUE-1431481       Direct       47.076       -         NSF DUE-1524878       Direct       47.076       -         NSF DUE-1540819       Direct       47.076       9,962         NSF DUE-1742486       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -					302,700
NSF DUE-1524878       Direct       47.076       -       4         NSF DUE-1540819       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.079       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				-	2,727
NSF DUE-1540819       Direct       47.076       9,962         NSF DUE-1540819       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				-	465,818
NSF DUE-1540819       Direct       47.076       8,258         NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				9.962	59,840
NSF DUE-1742486       Direct       47.076       -         NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -					8,258
NSF DUE-1742486       Direct       47.076       -         NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				-	53,750
NSF HRD-1305993       Direct       47.076       -         NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				_	43,992
NSF OISE-1357887       Direct       47.079       -         NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				-	2,700
NSF OISE-1357887       Direct       47.079       -         NSF CMMI-1839521 IPA Agrmnt       Direct       47.RD       -         Life Magnetics NSF IIP745992       Pass Through       47.041       -				-	8,001
NSF CMMI-1839521 IPA Agrmnt Direct 47.RD - Life Magnetics NSF IIP745992 Pass Through 47.041 -				_	33,711
Life Magnetics NSF IIP745992 Pass Through 47.041 -				-	49,552
· · · · · · · · · · · · · · · · · · ·				_	328
MS LM Tabbul43 Pass Through 47 041 -	MSTM 1556043	Pass Through	47.041	_	8,451
Oakland University Sub 34630 Pass Through 47.041 -		_		_	8,982
Ohio State University 60053390 Pass Through 47.041 -	·	· ·		_	154
Repela Tech NSF iip1843790 Pass Through 47.041 -		•		_ _	22,347
University of Arizona 460466 Pass Through 47.041 -	·	· ·		<u>-</u>	13,412
University of Wisconsin 193405425 Pass Through 47.041 -		•		<b>-</b>	2,717
·	· · · · · · · · · · · · · · · · · · ·	_		-	2,717 77,444
Ohio State University 60066814 Pass Through 47.049 -	·	_		-	
University of Wisconsin Madison 776K204 Pass Through 47.049 -				-	81,422
University of Arizona 471714 Pass Through 47.050 -	University of Arizona 47 17 14	rass inrough	47.050	-	12,917

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				-
National Science Foundation (continued):				
University of Michigan 3004648325	Pass Through	47.050	\$ -	\$ 4,770
Carnegie Mellon University 1122188-341621CIF21	Pass Through	47.070	· -	(277)
Carnegie Mellon University 1122593-395027	Pass Through	47.070	-	54,375 <sup>°</sup>
Iowa State University 4207299A	Pass Through	47.070	-	106,748
RFSUNY 7887	Pass Through	47.070	-	216,545
University of Cincinnati 009886-002	Pass Through	47.070	-	28,437
University of Michigan 3003646556	Pass Through	47.070	-	222,350
University of Cincinnati 012086-002	Pass Through	47.074	-	4,718
Macomb Community College DUE-1801150	Pass Through	47.076	-	43,248
Macomb Community College DUE-1801150	Pass Through	47.076	_	3,129
Macomb Community College DUE-1902369	Pass Through	47.076	-	24,123
Macomb Community College NSF 1400593	Pass Through	47.076	-	1,457
Macomb Community College NSF 1400593	Pass Through	47.076	-	3,366
Oakland Community College 17001	Pass Through	47.076	-	32,021
Oakland Community College 17001	Pass Through	47.076	-	7,430
University of Michigan 3004280409	Pass Through	47.076	-	57,773
University of Michigan 3004280409	Pass Through	47.076	-	19,235
Washtenaw Community College 1601261	Pass Through	47.076	-	11,570
CGS-Understanding PhD Career	Pass Through	47.RD	-	11,733
CGS-Understanding PhD Career	Pass Through	47.RD		521
Total National Science Foundation	_		702,513	9,275,921
Environmental Protection Agency:				
EPA 83929501	Direct	66.516	_	1,174
EPA 83929501 sub	Direct	66.516	-	(172)
Total Environmental Protection Agency	511000	00.010		1,002
U.S. Department of Energy:				1,002
USDOE DE SC00014347	Direct	81.049	_	147,071
USDOE DE-EE0008236	Direct	81.086	_	92,741
USDOE DE-FE0031565	Direct	81.089	34,675	274,260
USDOE DE-FG02-92ER40713	Direct	81.049	54,075	791,787
USDOE DE-SC00013460	Direct	81.049	_	207,886
USDOE DE-SC0007983	Direct	81.049	_	59,080
USDOE DE-SC0007983	Direct	81.049	_	135,285
USDOE DE-SC0007983	Direct	81.049	_	172,509
USDOE DE-SC0012628	Direct	81.049	111,491	387,615
USDOE DE-SC0012628 Univ of California	Direct	81.049	170,030	170,030
University of Tennessee Alice Proj A16-0384S003	Pass Through	81.049	-	30,031
University of Tennessee Alice Proj A16-0384S003	Pass Through	81.049	_	899,621
Advanced Pwdr Solutions PO#2868	Pass Through	81.RD	_	139,312
Alliance for Sustainable Energy NREL AGZ-9-92105-01	Pass Through	81.RD	_	65,088
Battelle Energy #199903	Pass Through	81.RD	_	101,368
Battelle Energy #221610	Pass Through	81.RD	-	1,171
Brookhaven Science Associates 364573	Pass Through	81.RD	-	13,389
Fermi National Accelerator 655085	Pass Through	81.RD	-	3,724
Stanford University 189028	Pass Through	81.RD	-	8,477
UTBatalle 400166418	Pass Through	81.RD	-	29,845
Total U.S. Department of Energy		J 15	316,196	3,730,290
Department of Health and Human Services:			,	, , , , , , ,
FDA R01 FD004793	Direct	93.103	_	62,795
NIH F31 ES030278-01	Direct	93.113	-	30,379
NIH K01 ES028750-01	Direct	93.113	-	135,994

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH P30 ES020957-04	Direct	93.113	\$ -	\$ (2,921)
NIH P30 ES020957-04 NIH P30 ES020957-04 CAREER	Direct	93.113	Ψ -	ψ (2,321) 878
NIH P30 ES020957-04 COEC	Direct	93.113	_	(332)
NIH P30 ES020957-04 COEC NIH P30 ES020957-04 ESFC	Direct	93.113	_	(1,721)
NIH P30 ES020957-04 ESFC	Direct	93.113	_	1,678
NIH P30 ES020957-04 IHSPC NIH P30 ES020957-04 PILOT	Direct	93.113	_	17,798
NIH P30 ES020957-04 PILOT	Direct	93.113	-	(6,896)
NIH P30 ES020957-04 PILOT NIH P30 ES020957-04 PILOT	Direct	93.113	-	(3,202)
			-	
NIH P30 ES020957-04 Supplement	Direct	93.113	22 101	(373)
NIH P30 ES020957-05	Direct	93.113	32,101	171,194 142,618
NIH P30 ES020957-05 COEC	Direct	93.113	-	142,618
NIH P30 ES020957-05 Henry Ford Health System	Direct	93.113	29,959	29,959
NIH P30 ES020957-05 IHSFC	Direct	93.113	-	81,577
NIH P30 ES020957-05 PILOT	Direct	93.113	-	139,832
NIH P30 ES020957-05 PILOT	Direct	93.113	-	24,268
NIH P30 ES020957-05 PILOT	Direct	93.113	-	(10,040)
NIH P30 ES020957-05 PILOT	Direct	93.113	-	1,906
NIH P30 ES020957-05 PILOT	Direct	93.113	-	(131)
NIH P30 ES020957-05 PILOT	Direct	93.113	-	16,405
NIH P30 ES020957-05 PILOT	Direct	93.113	-	30,000
NIH P30 ES020957-05 PILOT	Direct	93.113	-	28,430
NIH P30 ES020957-05 PILOT	Direct	93.113	-	10,000
NIH P30 ES020957-05 Univ of Detroit Mercy	Direct	93.113	23,163	35,671
NIH P30 ES020957-06	Direct	93.113	9,332	144,157
NIH P30 ES020957-06 COEC	Direct	93.113	-	99,903
NIH P30 ES020957-06 IHSFC	Direct	93.113	-	54,509
NIH P30 ES020957-06 PILOT	Direct	93.113	-	12,267
NIH P30 ES020957-06 PILOT	Direct	93.113	-	1,831
NIH P30 ES020957-06 PILOT	Direct	93.113	-	980
NIH P30 ES020957-06 PILOT	Direct	93.113	-	12,358
NIH P30 ES020957-06 PILOT	Direct	93.113	-	549
NIH P30 ES020957-06 Univ of Detroit Mercy	Direct	93.113	3,776	3,776
NIH P30 ES02957-05 ESFC	Direct	93.113	<b>-</b>	157,808
NIH P30 ES02957-06 ESFC	Direct	93.113	_	79,497
NIH R00 ES028734-02	Direct	93.113	_	2,318
NIH R01 ES020137-05	Direct	93.113	_	26,933
NIH R01 ES022606-05 Univ of Pittsburgh	Direct	93.113	6,374	6,374
NIH R01 ES022606A-05	Direct	93.113	8,166	118,830
NIH R01 ES028335-01	Direct	93.113	-	131,016
NIH R01 ES029484-02	Direct	93.113	_	463,566
NIH R01 ES28263-03	Direct	93.113	_	612,008
NIH R56 ES027500-01	Direct	93.113	_	48,508
CDC U01 CE002843 002843CE16 2018	Direct	93.136	4,242	10,430
CDC U01 CE002843 002843CE16 2019	Direct	93.136	22,382	434,349
NIH R01 DC013275-03	Direct	93.173	22,002	317,459
NIH R03 DC015329-03	Direct	93.173	9,404	84,505
NIH R01 AT007566-05	Direct	93.213	107,979	172,493
AHRQ R01 HS022955	Direct	93.213	101,319	107,364
			-	9,705
AHRQ P30 HS021641-05 (UNMex)	Direct	93.226	-	9,705 16,495
AHRQ R21 HS024750-01	Direct	93.226	-	
AHRQ R21 HS024750-01 SubK	Direct	93.226	-	3,042
NIH R21 HL140447-01	Direct	93.233	33,110	114,582
NIH R56 HL142757-01	Direct	93.233	-	153,331
NIH R01 HL142757-01	Direct	93.233	-	34,265

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH 5 R34 MH103049-03	Direct	93.242	\$ -	\$ 55,027
NIH 5 R34 MH108442-04	Direct	93.242	-	190,661
NIH 5 R34 MH108442-04 CHoP	Direct	93.242	10,873	10,873
NIH 5 R34 MH108442-04 CNMC	Direct	93.242	-	31
NIH 5 R34 MH108442-04 Colorado	Direct	93.242	8,394	8,394
NIH 5 R34 MH108442-04 Johns Hopkins	Direct	93.242	52,803	66,303
NIH 5 R34 MH108442-04 Univ of Miami	Direct	93.242	77,019	77,019
NIH F31 MH120927-01	Direct	93.242	-	5,242
NIH K01 MH101123-05	Direct	93.242	-	55,412
NIH K01 MH110600-01	Direct	93.242	-	119,176
NIH K01 MH119241A-01	Direct	93.242	_	17,613
NIH R01 MH043985-28	Direct	93.242	_	9,326
NIH R01 MH059299-19	Direct	93.242	-	223,032
NIH R01 MH107512-04	Direct	93.242	20,813	426,235
NIH R01 MH110793-01	Direct	93.242		222
NIH R01 MH110793-01	Direct	93.242	_	11,943
NIH R01 MH111177-04	Direct	93.242	_	687,018
NIH R21 MH116280-01	Direct	93.242	_	155,836
NIH R61 MH111935-02	Direct	93.242	_	458,839
NIH R61 MH111935-02 Univ of Illinois	Direct	93.242	87,912	87,912
SAMHSA H79 SM080101-01	Direct	93.243	-	2,225
SAMHSA H79 SM080101-02	Direct	93.243	_	101,878
NIH 5 R01 AA025905-03	Direct	93.273	_	252,615
NIH K01 AA024500-02	Direct	93.273	_	133,417
NIH R01 AA023503-03 Child Hospital Boston	Direct	93.273	10,306	10,306
NIH R01 AA023503-03 Univ of Capetown	Direct	93.273	48,973	48,973
NIH R01 AA023503-05 Child Hospital Boston	Direct	93.273	95,116	95,116
NIH R01 AA023503-05 Univ of Capetown	Direct	93.273	70,544	70,544
NIH R01 AA025905-03 Colombia	Direct	93.273	34,208	44,183
NIH R01 AA025905-03 Ediombia NIH R01 AA025905-03 Emory	Direct	93.273	38,770	38,770
NIH R01 AA025905-03 Emory NIH R01 AA025905-03 Harvard	Direct	93.273	107,599	121,099
NIH R01 AA025905-03 Halvard NIH R01 AA025905-03 Seattle CH	Direct	93.273	16,374	25,216
			25,336	25,336
NIH R01 AA025905-03 Univ of Tech Sydney NIH R01 AA025905-03 Univ of Waterloo	Direct	93.273	36,331	49,831
NIH R01 AA025905-03 Univ of Waterloo NIH R01 AA025905-03 Univ Pitts	Direct Direct	93.273 93.273	37,221	48,150
			37,221	3,531
NIH R01 AA203503-03	Direct	93.273	-	69,606
NIH R01 AA203503-05	Direct	93.273	-	9,070
NIH R21 AA02366-02	Direct	93.273	-	
NIH R21 AA024055-02	Direct	93.273	202 272	(2,936)
NIH R01 DA015462-12	Direct	93.279	393,373	598,459
NIH R01 DA034537-04	Direct	93.279	-	154,868
NIH R01 DA034783-04	Direct	93.279	-	26,778
NIH R01 DA042057-02S	Direct	93.279	-	6,540
NIH R01 DA042057-03	Direct	93.279	-	194,778
NIH R01 DA042057-03	Direct	93.279	-	432,510
NIH R21 DA040150-02	Direct	93.279	-	138,488
NIH R21 DA040770-02	Direct	93.279	-	66,950
NIH R21 DA044946-02	Direct	93.279	-	166,201
NIH R21 DA047662-01	Direct	93.279	-	66,645
NIH R01 EB013663-03	Direct	93.286	-	167,594
NIH R01 EB013663-03S1	Direct	93.286	-	30
NIH R01 EB026453-02	Direct	93.286	-	201,849
NIH R01 EB026453-02 Baylor Coll of Med	Direct	93.286	375,087	388,587
	B.11 001			
NIH R01 EB027103-01	Direct	93.286	-	24,931 37,975

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH R25 EEB014772-05	Direct	93.286	\$ -	\$ 30,389
NIH R15 MD011465-01	Direct	93.307	21,475	90,159
NIH R15 MD011465-01 Ohio State Univ	Direct	93.307	19,493	19,493
NIH R21 MD011766-02	Direct	93.307	30,041	155,340
NIH DP2 CA196375-01	Direct	93.310	-	502,784
NIH DP7 OD018427-05	Direct	93.310	-	82,854
NIH U01 GM120293-03	Direct	93.310	-	(36,105
NIH U01 GM120293-04	Direct	93.310	-	619,524
NIH U01 GM120293-05	Direct	93.310	-	318,350
NIH U01 GM125271-02	Direct	93.310	-	398,600
NIH U01 GM125271-02 Univ of Toledo	Direct	93.310	323,014	323,014
NIH S10 OD025170-01	Direct	93.351	-	600,000
NIH R01 NR015768-01	Direct	93.361	35,789	319,837
NIH R01 NR015768-01 Henry Ford Health System	Direct	93.361	64,505	64,505
NIH R01 NR017626-02	Direct	93.361	30,291	263,227
NIH R01 NR017626-02	Direct	93.361	47,269	60,769
NIH R01 NR017626-02	Direct	93.361	-	30,982
NIH T32 CA009531-33	Direct	93.368	_	36,987
NIH R01 CA141769-05	Direct	93.393	_	3,056
NIH R01 CA175088-05	Direct	93.393	_	26,991
NIH R01 CA200718-04	Direct	93.393	109,545	631,034
NIH R01 CA200718-04 supplement	Direct	93.393	-	66,910
NIH R01 CA200864-04	Direct	93.393	76,709	711,968
NIH R03 CA208494-02	Direct	93.393	-	56,252
NIH R03 CA216011-02	Direct	93.393	11,504	63,544
NIH R21 CA220137-02	Direct	93.393	5,598	45,121
NIH R21 CA220311-01	Direct	93.393	32,048	188,031
NIH R21 CA222939-02	Direct	93.393	-	155,855
NIH U01 CA199240-02	Direct	93.393	11,703	387,466
NIH U01 CA199240-02 NIH U01 CA199240-02 supplement	Direct	93.393	-	6,941
NIH U01 CA199240-02 Supplement NIH U01 CA199240-02 Yr1 CF restricted	Direct	93.393	_	632,756
NIH U01 CA199240-03	Direct	93.393	16,697	1,282,174
NIH U01 CA199240-03 NIH U01 CA199240-03 Admn Supplement	Direct	93.393	10,091	2,169
NIH U01 CA199240-03 Admit Supplement NIH U01 CA199240-03 Yr2 CF restricted	Direct	93.393	_	12,471
NIH U01 CA199240-03 Yr2 CF restricted	Direct	93.393	<u>-</u>	36,615
NIH R01 CA199240-03 112 CF Testricted NIH R01 CA123451-08	Direct	93.394	-	14,858
NIH R01 CA123451-08 NIH R01 CA123451-08 Children Hosp of Mich	Direct	93.394	- 4,494	136,446
NIH R21 CA216648-01	Direct	93.394	4,434	117,772
NIH R21 CA216648-01	Direct	93.394	-	21,474
			-	199,211
NIH R37 CA22048-01	Direct	93.394	-	
NIH R37 CA22048-01	Direct	93.394	-	343,209
NIH R01 CA053535-24	Direct	93.395	-	244,336
NIH R01 CA076340-20	Direct	93.395	-	246,148
NIH R01 CA076340-20	Direct	93.395	-	(3,203
NIH R01 CA174949-04	Direct	93.395	-	265,369
NIH R01 CA199004-05	Direct	93.395	-	93,294
NIH R01 CA229535-01	Direct	93.395	8,441	182,664
NIH R01 CA238781-01	Direct	93.395	-	15,553
NIH R21 CA216650-02	Direct	93.395	-	80,929
NIH R21 CA238139-01	Direct	93.395	-	13,778
NIH R37 CA215427-02	Direct	93.395	-	273,811
NIH U10 CA180835-05	Direct	93.395	-	174,367
NIH U10 CA180835-05	Direct	93.395	-	33,363
10010101010100100100				
NIH UG1 CA233163-01	Direct	93.395	-	469,816 427,824

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH R01 CA172480-01	Direct	93.396	\$ -	\$ (34,281)
NIH R01 CA172480-05	Direct	93.396	-	39,730
NIH R01 CA181189-01	Direct	93.396	-	178,779
NIH R01 CA202917-04	Direct	93.396	29,421	341,132
NIH R03 CA219332-02	Direct	93.396	-	88,841
NIH P30 CA022453-36 Admin Supplmt 2	Direct	93.397	-	40,456
NIH P30 CA022453-36 Admin Supplmt 3	Direct	93.397	-	2,534
NIH P30 CA022453-36 Admin Supplmt 4	Direct	93.397	-	53,497
NIH P30 CA022453-36 Admin Supplmt CF	Direct	93.397	-	3,284
NIH P30 CA022453-36 AMTEC	Direct	93.397	-	33,956
NIH P30 CA022453-36 BFRC	Direct	93.397	-	8,857
NIH P30 CA022453-36 BIOREPOSIT	Direct	93.397	-	15,641
NIH P30 CA022453-36 BioStatistics	Direct	93.397	-	84,597
NIH P30 CA022453-36 Building KCI	Direct	93.397	-	104,032
NIH P30 CA022453-36 Clinical Protocol	Direct	93.397	-	163,188
NIH P30 CA022453-36 Epidemiology	Direct	93.397	-	16,155
NIH P30 CA022453-36 Genomics	Direct	93.397	-	3,864
NIH P30 CA022453-36 Master Admin	Direct	93.397	-	50,913
NIH P30 CA022453-36 Microscopy Imaging	Direct	93.397	_	88,598
NIH P30 CA022453-36 Pharmacology	Direct	93.397	-	8,659
NIH P30 CA022453-36 Proteomics	Direct	93.397	_	5,828
NIH P30 CA022453-36 Protocol Review	Direct	93.397	_	18,192
NIH P30 CA022453-37	Direct	93.397	_	250,829
NIH P30 CA022453-37 AdmSpl	Direct	93.397	_	28,716
NIH P30 CA022453-37 AdmSpl	Direct	93.397	_	63,570
NIH P30 CA022453-37 AdmSpl	Direct	93.397	_	58,352
NIH P30 CA022453-37 AdmSpl	Direct	93.397	_	180,318
NIH P30 CA022453-37 AdmSpl	Direct	93.397	_	29,828
NIH P30 CA022453-37 AMTEC	Direct	93.397	_	163,965
NIH P30 CA022453-37 BFR	Direct	93.397	_	40,305
NIH P30 CA022453-37 Biop	Direct	93.397	_	130,323
NIH P30 CA022453-37 Biost	Direct	93.397	_	576,734
NIH P30 CA022453-37 CPDM	Direct	93.397	_	421,352
NIH P30 CA022453-37 DevFds	Direct	93.397	_	35,251
NIH P30 CA022453-37 EpRsh	Direct	93.397	_	77,041
NIH P30 CA022453-37 MICR	Direct	93.397	_	265,843
NIH P30 CA022453-37 Mt Adm	Direct	93.397	_	160,581
NIH P30 CA022453-37 Mt Adm NIH P30 CA022453-37 Pharm	Direct	93.397	_	41,747
NIH P30 CA022453-37 FRMS	Direct	93.397	_	77,424
NIH P30 CA022453-37 Proteo	Direct	93.397	_	39,761
NIH R01 CA222359-02	Direct	93.397	22,594	390,977
			22,594	17,937
NIH F30 CA228221-01	Direct	93.398	-	
NIH F30 CA228221-02	Direct	93.398	-	24,593
NIH F31 CA213807-01	Direct	93.398	-	(4,234
NIH F31 CA213807-02	Direct	93.398	-	29,170
NIH F31 CA213807-03	Direct	93.398	-	2,010
NIH F31 CA215682-02	Direct	93.398	-	8,373
NIH F31 CA217148-01	Direct	93.398	-	69
NIH F31 CA217148-02	Direct	93.398	-	12,728
NIH F31 CA221333-01	Direct	93.398	-	(811
NIH F31 CA236245-01	Direct	93.398	-	26,422
NIH F31 CA243215-01	Direct	93.398	-	1,774
NIH R25 CA171971-05	Direct	93.398	-	(2,915)
NULL TOO CA 000E04 04				
NIH T32 CA009531-31 NIH T32 CA009531-32	Direct Direct	93.398 93.398	-	5,152 236,503

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				·
Department of Health and Human Services (continued):				
ACL 90DPTB0006-01	Direct	93.433	\$ 50,515	\$ 53,943
ACL 90DPTB0006-02-00	Direct	93.433	182,775	491,448
ACL 90IF0092-03	Direct	93.433	17,264	32,073
DHHS-ACF-90YR0092-03	Direct	93.600	7,423	12,356
DHHS-ACF-90YR0092-03 Mich State Univ	Direct	93.600	17,257	17,348
DHHS-ACF-90YR0092-04	Direct	93.600	49,514	416,605
DHHS-ACF-90YR0092-04 Mich State Univ	Direct	93.600	53,906	53,906
NIH K22 HL126842-03	Direct	93.837	-	23,243
NIH R01 HL 109090-04	Direct	93.837	-	781
NIH R01 HL 109090-04 Albert Einstein College Med	Direct	93.837	13,608	13,608
NIH R01 HL 109090-04 Child Hosp Boston	Direct	93.837	1,005	1,005
NIH R01 HL 109090-04 Child Hosp Med Ctr	Direct	93.837	17,042	17,042
NIH R01 HL 109090-04 CHOP	Direct	93.837	11,337	11,337
NIH R01 HL 109090-04 New England Res Inst.	Direct	93.837	186,972	186,972
NIH R01 HL 109090-04 Univ of Pittsburgh	Direct	93.837	762	762
NIH R01 HL 109090-04 Washington Univ	Direct	93.837	11,952	11,952
NIH R01 HL050710-19	Direct	93.837	-	294,024
NIH R01 HL055473-21	Direct	93.837	- 	241,023
NIH R01 HL096787-08	Direct	93.837	5,508	356,034
NIH R01 HL109090-04	Direct	93.837	-	131,355
NIH R01 HL114097-08	Direct	93.837	-	444,798
NIH R01 HL114097-08	Direct Direct	93.837 93.837	-	237,958 33,853
NIH R01 HL117880-02 NIH R01 HL117880-02	Direct	93.837	-	1,468
NIH R01 HL117880-02 NIH R01 HL119815-04	Direct	93.837	-	107,922
NIH R01 HL126706-04	Direct	93.837	_	457,042
NIH R01 HL126706-04	Direct	93.837	_	(278)
NIH R01 HL127691-01	Direct	93.837	205,303	344,697
NIH R01 HL130552-01	Direct	93.837	200,000	262,714
NIH R01 HL131740-03	Direct	93.837	13,115	454,864
NIH R01 HL133506-03	Direct	93.837	32,988	577,784
NIH R01 HL133506-03	Direct	93.837	-	127,168
NIH R01 HL133506-03 Univ of Massachusetts	Direct	93.837	17,393	26,556
NIH R01 HL134787-01	Direct	93.837	92,651	347,750
NIH R01 HL137558-02	Direct	93.837	7,894	37,868
NIH R01 HL137558-02 Bronx	Direct	93.837	11,520	17,427
NIH R01 HL137558-02 Child Hosp of Boston	Direct	93.837	16,107	23,937
NIH R01 HL137558-02 CHOC	Direct	93.837	5,445	8,386
NIH R01 HL137558-02 Drexel	Direct	93.837	1,671	2,573
NIH R01 HL137558-02 Frontier Sci & Tech	Direct	93.837	12,840	13,791
NIH R01 HL137558-02 Harvard	Direct	93.837	22,402	31,064
NIH R01 HL137558-02 Hawaii	Direct	93.837	54,648	54,648
NIH R01 HL137558-02 NY City Health Hosp	Direct	93.837	7,620	11,735
NIH R01 HL137558-02 St. Jude	Direct	93.837	27,045	40,545
NIH R01 HL137558-02 Univ of Colorado	Direct	93.837	932	1,435
NIH R01 HL137558-02 Westat	Direct	93.837	12,352	13,265
NIH R01 HL138007-01	Direct	93.837	-	188,865
NIH R01 HL138007-01	Direct	93.837	-	43,773
NIH R01 HL139968-01	Direct	93.837	25,154	48,462 34.746
NIH R01 HL139968-01 NERI	Direct	93.837	22,563	34,746 114,162
NIH R01 HL139968-01 Univ Colorado	Direct	93.837	114,162 11,747	114,162 17,058
NIH R01 HL139968-01 Vanderbilt	Direct	93.837	11,747	353,956
NIH R01 HL142956-01 NIH R21 HL148089-07	Direct Direct	93.837 93.837	-	12,049
NIH T32 HL120822-04	Direct	93.837	<u>-</u>	28,390
INIT TOZ TIL IZUUZZ-UT	Dilect	<i>3</i> 3.03 <i>1</i>	-	20,090

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

		Provided to		
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH T32 HL120822-06	Direct	93.837	\$ -	\$ 96,648
NIH R01 HL133162-03	Direct	93.838	418,694	963,441
NIH R01 HL138633-03	Direct	93.838	-	315,051
NIH R01 HL138633-03 FSU	Direct	93.838	_	1,047
NIH R01 HL138633-03 Wayne Cnty Healthcare Access	Direct	93.838	227,176	227,176
NIH R01 HL138633-03 Yale	Direct	93.838	16,578	25,530
NIH DP2 DK111910-01	Direct	93.847	-	277,706
NIH DP3 DK097717-01	Direct	93.847	_	4,375
NIH F30 DK101230-04	Direct	93.847	-	1,033
NIH F30 DK116529-01	Direct	93.847	-	19,846
NIH F30 DK116529-02	Direct	93.847	-	14,996
NIH F31 DK116536-01	Direct	93.847	-	17,061
NIH F31 DK116536-02	Direct	93.847	-	26,445
NIH K23 DK118199-01	Direct	93.847	-	169,805
NIH K99 DK114471 -02	Direct	93.847	_	47,816
NIH R01 DK062292-12	Direct	93.847	_	296,125
NIH R01 DK068139-10	Direct	93.847	_	24,420
NIH R01 DK076629-09S	Direct	93.847	_	47,003
NIH R01 DK076629-10	Direct	93.847	73,157	404,702
NIH R01 DK070025-10	Direct	93.847	70,107	161,440
NIH R01 DK090313-06	Direct	93.847	42,394	411,909
NIH R01 DK090313-00 NIH R01 DK105963-02	Direct	93.847	193,180	497,772
NIH R01 DK105965-02 NIH R01 DK106540-05	Direct	93.847	56,339	205,719
			249,727	263,227
NIH R01 DK106540-05 Texas AM Univ	Direct Direct	93.847 93.847		430,411
NIH R01 DK107666-04			-	452,587
NIH R01 DK109036-03	Direct	93.847	140.670	
NIH R01 DK110075-02	Direct	93.847	142,672 6,719	593,397
NIH R01 DK110314-04	Direct	93.847	,	337,324
NIH R01 DK110314-04 Henry Ford Health System	Direct	93.847	28,206	28,429
NIH R01 DK116901-01	Direct	93.847	-	181,182
NIH R21 DK108071-02	Direct	93.847	-	43,171
NIH F31 NS100488-01	Direct	93.853	-	(5,359
NIH F31 NS100488-02	Direct	93.853	-	6,675
NIH F31 NS100488-03	Direct	93.853	-	27,531
NIH R01 NS041922-10	Direct	93.853	2,802	232,023
NIH R01 NS064033-08	Direct	93.853	70.070	268,867
NIH R01 NS066927-12	Direct	93.853	72,976	450,550
NIH R01 NS076715-05	Direct	93.853	(1,338)	(1,338
NIH R01 NS081936-05	Direct	93.853	13,931	45,877
NIH R01 NS086778-01	Direct	93.853	-	240,977
NIH R01 NS086778-06	Direct	93.853	169	62,151
NIH R01 NS089659-05	Direct	93.853	70.040	338,182
NIH R01 NS094570-04	Direct	93.853	70,649	275,542
NIH R01 NS094570-04	Direct	93.853	-	17,287
NIH R01 NS094570-04 Univ of Manitoba	Direct	93.853	4,451	14,821
NIH R21 NS090153-02	Direct	93.853	-	121,478
NIH R21 NS102678-02	Direct	93.853	-	149,557
NIH R56 NS100088-01	Direct	93.853	-	179,555
NIH R56 NS100088-01 Johns Hopkins	Direct	93.853	7,201	7,201
NIH R56 NS100088-01 Medical College Wisconsin	Direct	93.853	10,476	16,133
NIH R61 NS112443-01	Direct	93.853	-	2,831
NIH U24 NS100680-02	Direct	93.853	28,251	87,147
NIH U24 NS100680-02 Sub	Direct	93.853	-	26,612
NIH U24 NS100680-03	Direct	93.853		38,627
14111 024 140 100000-00	Direct	93.033	-	30,000

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH K22 Al20988-01	Direct	93.855	\$ -	\$ 76,489
NIH R01 Al118992-01	Direct	93.855	-	291,128
NIH R01 AI121400-04	Direct	93.855	94,009	386,488
NIH R01 AI127390-03	Direct	93.855	59,099	444,279
NIH R01 Al23352-04	Direct	93.855	-	349,678
NIH R01 AI23352-04 MUSC	Direct	93.855	56,961	67,913
NIH R01 Al23352-04 Univ of Michigan	Direct	93.855	67,722	67,722
NIH R01 Al23352-04 Univ of Zurich	Direct	93.855	133,577	99,769
NIH R21 AI111103-01	Direct	93.855	-	530
NIH R21 AI135538-01	Direct	93.855	-	151,751
NIH R21 AI140033-01	Direct	93.855	-	2,193
NIH R21 AI144708-01	Direct	93.855	-	120,725
NIH F30 GM131580-01	Direct	93.859	-	31,108
NIH R01 GM062160-17	Direct	93.859	-	233,924
NIH R01 GM079529-08	Direct	93.859	-	355,904
NIH R01 GM093110-05	Direct	93.859	-	207,812
NIH R01 GM109215-03	Direct	93.859	70.766	(9,667)
NIH R01 GM109215-05	Direct	93.859	78,766	415,138
NIH R01 GM116807-03	Direct	93.859	-	324,856
NIH R01 GM121061-02	Direct	93.859	-	267,770
NIH R01 GM121061-02S1	Direct	93.859	-	3,714
NIH R01 GM125082-06	Direct	93.859	-	347,285
NIH R01 GM125082-06S1 NIH R01 GM129475-01	Direct Direct	93.859 93.859	-	51,724 5,086
NIH R01 GM129475-01 NIH R25 GM058905-18	Direct	93.859	-	136,526
NIH R25 GM058905-18	Direct	93.859	-	555,638
NIH R35 GM124733-01	Direct	93.859	_	404,560
NIH R35 GM131821-01	Direct	93.859	_	69,542
NIH F30 HD084144-03	Direct	93.865	_	32,421
NIH K12 HD001254-19	Direct	93.865	_	42,643
NIH K12 HD001254-19 SubK	Direct	93.865	_	101,417
NIH K12 HD001254-19 SubK	Direct	93.865	_	114,500
NIH K12 HD001254-20	Direct	93.865	_	8,505
NIH K12 HD001254-20 SubK	Direct	93.865	_	15,200
NIH K12 HD001254-20 SubK	Direct	93.865	_	16,756
NIH R01 HD076257-06	Direct	93.865	_	94,051
NIH R01 HD088549-01	Direct	93.865	23,646	134,362
NIH R01 HD089000-03	Direct	93.865	-	360,916
NIH R03 HD090306-03	Direct	93.865	-	52,762
NIH R03 HD091648-02	Direct	93.865	-	75,834
NIH R03 HD099700-01	Direct	93.865	-	832
NIH R21 HD092956-01	Direct	93.865	15,639	98,704
NIH R25 HD072591-01	Direct	93.865	-	778
NIH UG1 HD021385-32	Direct	93.865	-	(130)
NIH UG1 HD021385-32	Direct	93.865	-	3,161
NIH UG1 HD050096-14	Direct	93.865	-	39,898
NIH UG1 HD050096-15	Direct	93.865	-	232,150
NIH F31 AG058420-01	Direct	93.866	-	(2,067)
NIH F31 AG058420-02	Direct	93.866	-	37,536
NIH R01 AG011230-21	Direct	93.866	-	618,580
NIH R01 AG054363-05	Direct	93.866	500,397	547,708
NIH R01 AG054363-05 John Hopkins	Direct	93.866	25,368	25,368
NIH R01 AG054484-01	Direct	93.866	77,506	403,773
NIH R01 AG058171-01	Direct	93.866	136,796	278,863
NIH R01 AG058171-01 Queens Univ at Kingston	Direct	93.866	52,345	52,345

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
NIH R01 AG058171-01 Univ of Kentucky	Direct	93.866	\$ 83,870	\$ 83,870
NIH R01 AG058171-01 William Beaumont Hosp	Direct	93.866	90,858	90,858
NIH R21 AG050741-01	Direct	93.866	-	205,928
NIH R21 AG055712-01	Direct	93.866	_	152,349
NIH R21 AG059160-02	Direct	93.866	_	153,997
NIH R56 AG060822-01	Direct	93.866	135,979	316,843
NIH F30 EY025923-02	Direct	93.867	-	21,105
NIH F30 EY025923-03	Direct	93.867	-	18,138
NIH P30 EY004068-34	Direct	93.867	-	(2,991)
NIH P30 EY004068-35	Direct	93.867	-	452,103
NIH P30 EY004068-36	Direct	93.867	-	14,948
NIH R01 EY010869-23	Direct	93.867	-	362,595
NIH R01 EY014370-10	Direct	93.867	-	126,544
NIH R01 EY017313-07	Direct	93.867	-	301,955
NIH R01 EY017960-08	Direct	93.867	33,978	441,161
NIH R01 EY022230-05	Direct	93.867	-	363,930
NIH R01 EY022330-04	Direct	93.867	-	141,407
NIH R01 EY022417-06	Direct	93.867	-	55,987
NIH R01 EY022687-04	Direct	93.867	14,643	158,799
NIH R01 EY023226-04	Direct	93.867	14,106	(3,583)
NIH R01 EY023992-05	Direct	93.867	-	362,947
NIH R01 EY026059-02S1	Direct	93.867	-	29,655
NIH R01 EY026059-03	Direct	93.867	-	319,772
NIH R01 EY026551-01	Direct	93.867	-	406,205
NIH R01 EY026551-01	Direct	93.867	-	1,751
NIH R01 EY026584-04	Direct	93.867	103,104	314,710
NIH R01 EY026964-02S1	Direct	93.867	-	48,500
NIH R01 EY026964-03	Direct	93.867	81,502	405,211
NIH R01 EY027381-01	Direct	93.867	-	433,731
NIH R01 EY028442-01	Direct	93.867	-	302,794
NIH R01 EY028915-01	Direct	93.867	-	379,691
NIH R01 EY029690-01	Direct	93.867	-	163,606
NIH R01 EY029836-01	Direct	93.867	-	247,682
NIH R01 AG059683-01	Direct	93.966	-	206,571
CDC 200-2016-M-90293	Direct	93.RD	-	284
CDC 75D30118C02647	Direct	93.RD	-	85,662
CDC 75D30118C02647	Direct	93.RD	-	24,529
NCI HHSH250201000014C	Direct	93.RD	-	43,546
NCI HHSN26100009	Direct	93.RD	-	1,934
NCI HHSN26100010	Direct	93.RD	-	550
NCI HHSN261201300011I	Direct	93.RD	-	1,911
NCI HHSN261201800699P	Direct	93.RD	-	24,900
NCI IPA Assignment A. Shields	Direct	93.RD	-	5,218
NICHD HHSN275201300006C Activity #2	Direct	93.RD	-	3,095,061
NICHD HHSN275201300006C-Activity #1	Direct	93.RD	41,019	3,325,353
NICHD HHSN275201300006C-Activity #3	Direct	93.RD	-	1,087,662
NICHD HHSN275201300006C-Activity #4	Direct	93.RD	-	1,000,532
NICHD HHSN275201300006C-Activity #5	Direct	93.RD	-	3,157,674
NICHD HHSN275201300006C Activity #6	Direct	93.RD	-	2,710,620 252,085
NICHD HHSN275201300006C-Activity #8	Direct Direct	93.RD	-	
NICHD HHSN275201300006C-Space Alloc	Direct	93.RD	-	1,350,000 142,021
Henry Ford Health System B11191	Pass Through	93.073	-	13,298
MDHHS E20192744 Federal 100%	Pass Through	93.110	-	
Reproductive Stress R41ES02899 UMass 18-010120-A00	Pass Through	93.113	-	50,022 49,753
UIVIA55 10-U IU IZU-AUU	Pass Through	93.113	-	49,753

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

Provided to				
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
UMass 19-00627-C00	Pass Through	93.113	\$ -	\$ 38,630
UMass 19-0095140 A00	Pass Through	93.113	Ψ -	(68)
Southern Illinois University 520459	Pass Through	93.173	_	30,858
Vanderbilt Univ Med Ctr VUMC6917	Pass Through	93.173	_	110,939
Indiana University PO#0044803	Pass Through	93.226	_	7,595
Johns Hopkins University R01HS0002287	Pass Through	93.226	_	16,905
University of Michigan 3004552727	Pass Through	93.226	_	53,723
University of Michigan 3004552727	Pass Through	93.226	_	1
University of Michigan 3004552727	Pass Through	93.226	_	82,431
University of Michigan 3004552727	Pass Through	93.226	_	4,961
University of Miami SPC-001030	Pass Through	93.233	_	15,470
Cleveland Clinic Lerner College 1018 2019	Pass Through	93.242	_	76,352
Cleveland Clinic Lerner College 1018 2020	Pass Through	93.242	_	32,660
Emory University A055009	Pass Through	93.242	_	52,799
Michigan State University RC107692	Pass Through	93.242	_	19,711
NYUMC 18-A0-00-1001852 R01MH110793	Pass Through	93.242	_	139,880
NYUMC M190210045 R01MH110793	Pass Through	93.242	_	90,131
University of North Carolina 511536	Pass Through	93.242	_	36,784
University of North Carolina Chapel Hill 5111538	Pass Through	93.242	_	41,963
University of North Carolina Chapel Hill 5111539	Pass Through	93.242	_	85,013
University of Pittsburgh 0060500 131410-1	Pass Through	93.242	_	41,684
MDHHS E20180617 Federal 100%	Pass Through	93.242	-	3,306
MDHHS E20181017 Federal 100%	3	93.243	-	2,200
MDHHS E20192837 Federal 100%	Pass Through		-	105,784
MDHHS E20192874 Federal 100%  MDHHS E20192874 Federal 100%	Pass Through	93.243 93.243	-	109,851
	Pass Through		-	191,161
Florida State University R01966 Westat 6005.84-S03	Pass Through	93.273 93.273	-	
NCASA R34DA045831 2019	Pass Through		-	(15,462) 11,316
NCASA R34DA045831 2019 NCASA R34DA045831 2019	Pass Through	93.279	-	
MDHHS E20182524 Federal 100%	Pass Through	93.279	-	3,230 124
MDHHS E20182690 Federal 100%	Pass Through	93.283	-	
MDHHS E20192828 Federal 100%	Pass Through	93.283	-	1,551
Southern Illinois University Sub 18-10	Pass Through	93.283	-	13,919
	Pass Through	93.286	-	12,094 51,336
Medical University South Carolina 16-070-8C128	Pass Through	93.307	-	51,326
Ohio State University 60050635GRT00047342 RF01491295	Pass Through	93.307	-	347,714
Michigan State University RC106694	Pass Through	93.310	-	(12,708)
Michigan State University RC108889	Pass Through	93.310	-	405,731
Michigan State University RG100983	Pass Through	93.310	-	17,642
Purdue University 4102-85410	Pass Through	93.310	-	14,587
University of Detroit Mercy GM118981-3 2019	Pass Through	93.310	-	196,361
University of Detroit Mercy GM118981-3 2019	Pass Through	93.310	-	333,036
University of Detroit Mercy GM118981-3 2020	Pass Through	93.310	-	18,365
University of Detroit Mercy GM118981-3 2020	Pass Through	93.310	-	80,822
NeuroBio Tex R44NR014102	Pass Through	93.361	-	98,451
FHCRC 0000939647/218549	Pass Through	93.393	-	43,645
FHCRC 0000970910	Pass Through	93.393	-	280
FHCRC 0000980984/218549	Pass Through	93.393	-	33,495
Georgetown University 411982 GR411883	Pass Through	93.393	-	27,489
Michigan State University RC109849	Pass Through	93.393	-	1,017
University of Minnesota N006662506	Pass Through	93.393	-	17,249
USC 107857676	Pass Through	93.393	-	46,703
USC 122268103	Pass Through	93.393	-	19,694
Yale University GR1002587 Admin supplement	Pass Through	93.393	-	6,163
CHOP ALTEO7C1	Pass Through	93.395	-	1,000
CHOP COG U10CA180886	Pass Through	93.395	-	10,083

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
CHOP COG UG1CA189955	Pass Through	93.395	\$ -	\$ 3,017
ECOG-ACRIN U10CA180820-05	Pass Through	93.395	· -	5,318
ECOG-ACRIN UG1CA189828-06	Pass Through	93.395	-	3,276
Indiana University IN4685642	Pass Through	93.395	-	12,645
Medical College of Wisconsin R01CA184798	Pass Through	93.395	-	13,833
Medical College of Wisconsin R01CA184798	Pass Through	93.395	-	17,594
Medical College of Wisconsin R01CA184798	Pass Through	93.395	-	572
Medical College of Wisconsin SPO 6014035	Pass Through	93.395	-	10,665
Michigan State University RC105782	Pass Through	93.395	-	94,806
NRG Oncology Foundation Site Support WSU	Pass Through	93.395	-	24,98
Oregon Health Science Univ SWOG Leadership Philip	Pass Through	93.395	-	36,496
Oregon Health Science Univ SWOG Network Operation Flaherty 2019	Pass Through	93.395	-	13,682
Oregon Health Science Univ SWOG Network Operation Flaherty 2018	Pass Through	93.395	-	19,850
Oregon Health Science Univ SWOG Network Operation Yoo	Pass Through	93.395	-	21,835
Oregon Health Science Univ SWOG Network Operations	Pass Through	93.395	-	31,000
University of Virginia GB10375 153262	Pass Through	93.395	-	31,23
Yale University GR103011 Supplement	Pass Through	93.395	-	612
Yale University GR103011 Early Clinical Trials	Pass Through	93.395	-	(7,35)
Yale University GR103011 Early Clinical Trials	Pass Through	93.395	-	55,792
Neulink, Inc	Pass Through	93.396	-	19,552
University of Illinois R01CA204962 2019	Pass Through	93.396	-	76,35
University of Illinois R01CA204962 2020	Pass Through	93.396	-	46,08
Moffitt Cancer Center 10-18279-03-20	Pass Through	93.397	-	6,29
CTRC/SWOG Enrollment Fund	Pass Through	93.399	-	194,44
MDHHS E20193014 Federal 100%	Pass Through	93.426	-	10,10
Craig Hospital 2694RIMBY	Pass Through	93.433	-	6
MDHHS E20193035 Federal 100%	Pass Through	93.435	9,141	262,40
Wayne Metro Comm Action Agency CSBG14-82030	Pass Through	93.569	-	88,84
University of Washington UWSC10262 BPO29060	Pass Through	93.652	-	14,80
MDHHS E20192836 Federal 100%	Pass Through	93.788	-	166,35
MDHHS E20193232 Federal 100%	Pass Through	93.788	305,000	503,47
MDHHS E20193232 Federal 100%	Pass Through	93.788	-	243,12
Case Western Reserve University RES514117	Pass Through	93.837	-	3,92
Children's Boston Hospital GENFD0001533105	Pass Through	93.837	-	4,21
CHOP R01HL131544 PO#20092469	Pass Through	93.837	-	12,69
Georgia State University SP00012594	Pass Through	93.837	-	41,38
Indiana University IN4683529	Pass Through	93.837	-	11,02
Indiana University IN4683537	Pass Through	93.837	-	68,72
The Brigham and Women's Hospital	Pass Through	93.837	-	19,60
University of Cincinnati 012268-003	Pass Through	93.837	-	1,66
University of Michigan 3004031871	Pass Through	93.837	-	49,50
University of Michigan 3004134106	Pass Through	93.837	-	29
University of Michigan 3005096798	Pass Through	93.837	-	138,96
George Washington University U10HD36801	Pass Through	93.838	-	13,33
Henry Ford Health System B11194	Pass Through	93.838	-	8,59
Seattle Children's Research 10930SUB	Pass Through	93.838	-	26,83
University of Michigan SUBK00009496	Pass Through	93.838	-	22,32
ACRI 04-001 U01HL130048	Pass Through	93.839	-	12
BCW 0115-81148	Pass Through	93.839	-	5,64
BCW 0263-81148	Pass Through	93.839	-	9,15
University of Iowa S00665-01	Pass Through	93.839	-	2,04
Northwestern University 60037425 2018	Pass Through	93.846	-	(23
Northwestern University 60037425 2019	Pass Through	93.846	-	50,51
USC 108947941	Pass Through	93.846	-	35,885

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

	Provided to			
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
Indiana University IN4684798	Pass Through	93.847	\$ -	\$ 22,763
University of Michigan 3002819730	Pass Through	93.847	-	2,447
University of Michigan 3004896724	Pass Through	93.847	8,388	44,803
University of Michigan 3004918538	Pass Through	93.847	-	15,767
University of Michigan 3005284102	Pass Through	93.847	-	75,132
University of Michigan 3005338448	Pass Through	93.847	-	31,522
University of Michigan Chronic Renal	Pass Through	93.847	-	14,035
University of South Florida Site 3480	Pass Through	93.847	-	(838)
Augusta University 29457-7	Pass Through	93.853	-	4,200
Children's Research Institute 30003963-02	Pass Through	93.853	-	46,924
Emory University T234783	Pass Through	93.853	-	11,522
Free Flow Medical Devices R41NS103704	Pass Through	93.853	-	60,104
Henry Ford Health System B11186	Pass Through	93.853	-	96,980
Mitovation: Infant NeuroLUX: A Nov	Pass Through	93.853	-	51,318
NYU 18-A0-001000938 110614	Pass Through	93.853	-	383,589
University of California 84465C	Pass Through	93.853	-	3,660
University of Michigan 3003064633	Pass Through	93.853	-	17,581
University of Michigan 3003064633	Pass Through	93.853	-	23,645
University of Michigan 3003114601	Pass Through	93.853	-	(334)
University of Michigan 3003263762	Pass Through	93.853	-	20,445
University of Michigan 3003263762 Beaumont Hosp	Pass Through	93.853	-	2,470
University of Michigan 3003603781	Pass Through	93.853	-	44,964
University of Michigan 3004601384	Pass Through	93.853	-	26,259
University of Michigan 3004981455	Pass Through	93.853	-	77,136
Columbia University 9(GG011896-49)	Pass Through	93.855	-	27,171
Duke University UM1AI104681	Pass Through	93.855	-	(5,274)
Duke University UM1AI104681	Pass Through	93.855	-	95,324
University of Wisconsin 765K015	Pass Through	93.855	-	(4,857)
University of Wisconsin 859K132	Pass Through	93.855	-	18,323
University of Nevada Las Vegas GR05668	Pass Through	93.855	-	195,238
University of Alabama at Birmingham 000504111-002A04	Pass Through	93.855	-	143,145
Harvard University 133233-5068504	Pass Through	93.859	-	37,403
Northwestern University 60041058	Pass Through	93.859	-	26,408
University of Pittsburgh 0026281(123833-12)	Pass Through	93.859	-	(860)
Washington University WU-16-73	Pass Through	93.859	-	4,788
ART LLC R43HD092295	Pass Through	93.865	-	(1,885)
ART LLC R43HD094405	Pass Through	93.865	-	24,894
Augusta University 29820-4	Pass Through	93.865	-	39,189
Augusta University 31475-1	Pass Through	93.865	-	22,984
Augusta University 31477-1 2018	Pass Through	93.865	-	11,041
Augusta University 31477-1 2019	Pass Through	93.865	-	15,012
Florida State University R02029	Pass Through	93.865	-	255,950
Florida State University R02066	Pass Through	93.865	-	35,054
Florida State University R02099	Pass Through	93.865	-	4,678
Florida State University R02149	Pass Through	93.865	-	20,245
Florida State University R02160	Pass Through	93.865	-	81,056
Henry Ford Health System B11136	Pass Through	93.865	-	10,757
Indiana University IN4684930	Pass Through	93.865	-	64,942
Michigan State University RC108011	Pass Through	93.865	-	17,902
Research Institute at Nationwide Hospital #719715	Pass Through	93.865	-	4,433
RTI International 0216651	Pass Through	93.865	-	53,920
Tulane University 556636-3618/19	Pass Through	93.865	-	5,853
UMass OSP2018102 P0#WA00740130	Pass Through	93.865	-	59,796
University of Michigan 3005322702	Pass Through	93.865	-	13,498
University of North Carolina 5111121	Pass Through	93.865	-	58,282
	-			

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

Provided to				
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
University of North Carolina 5111121 SubK	Pass Through	93.865	\$ -	\$ 13,000
University of North Carolina 5114042	Pass Through	93.865	-	13,551
University of North Carolina Chapel Hill 5108782	Pass Through	93.865	-	202,511
University of North Carolina Chapel Hill 5111130	Pass Through	93.865	-	25,078
University of North Carolina Chapel Hill 5112384	Pass Through	93.865	-	16,162
University of North Carolina Chapel Hill 5114013	Pass Through	93.865	-	7,226
University of North Carolina Chapel Hill 5114051	Pass Through	93.865	-	5,698
University of Rochester 417424G	Pass Through	93.865	-	46,833
University of Utah 10035609 CCDP	Pass Through	93.865	-	21,505
University of Utah 10035609 CHOM	Pass Through	93.865	-	707
University of Utah 10035609 CPCCRN	Pass Through	93.865	-	6,944
University of Utah 10035609 TOUCH	Pass Through	93.865	-	3,015
University of Utah 10035609 VAP	Pass Through	93.865	-	5,489
Cleveland Clinic Lerner College R01AG22304	Pass Through	93.866	-	32,629
Henry Ford Health System B11167	Pass Through	93.866	-	22,620
Minneapolis Med Research Fdn XT-1721	Pass Through	93.866	-	(70,136)
Oregon Health Science Univ 1008640 2019	Pass Through	93.866	-	3,966
Oregon Health Science Univ 1008640 2020	Pass Through	93.866	_	1,414
Oregon Health Science Univ 1010251 2019	Pass Through	93.866	_	4,453
Oregon Health Science Univ 1010251 2020	Pass Through	93.866	_	1,927
UCSD 103895799 S9001958	Pass Through	93.866	_	151,853
UCSD 117381277 S9002293	Pass Through	93.866	_	8,002
University of California Davis A18-0168-S002	Pass Through	93.866	_	117,018
University of Miami SPC-000494	Pass Through	93.866	_	36,053
University of Michigan 3003782628	Pass Through	93.866	_	(32)
University of Michigan 3004040431	Pass Through	93.866	_	1,890
University of Michigan 3005049834	Pass Through	93.866	_	12,029
University of Michigan 3005163942	Pass Through	93.866	_	110,582
University of Michigan 3005163942	Pass Through	93.866	_	93,117
University of Michigan 3005163942	Pass Through	93.866	_	8,454
University of Michigan 3005183374	Pass Through	93.866		28,579
University of Michigan 3005594162	Pass Through	93.866	_	4,875
University of Michigan 3005600955	Pass Through	93.866	-	26,441
·	•		-	24,481
University of Michigan 3005600955	Pass Through	93.866 93.866	-	24,481 944
University of Michigan 3005600955	Pass Through		-	5,623
University of Michigan 3005720318	Pass Through	93.866	-	208
USC 80648853	Pass Through	93.866	-	
Washington University WU-16-126-MOD-3	Pass Through	93.867	-	(1,898)
Washington University WU-16-126-MOD-1 Fixed Fee	Pass Through	93.867	-	30,140
Washington University WU-16-126-MOD-3 Fixed Fee	Pass Through	93.867	-	954
SEMHA Ryan White Part A - Primary 2018	Pass Through	93.914	-	15
SEMHA Ryan White MAI Outpatient Ambulatory 2019	Pass Through	93.914	-	25,647
SEMHA Ryan White Part A MAI Outpatient 2019	Pass Through	93.914	-	652
SEMHA Ryan White Part A MAI Outpatient 2020	Pass Through	93.914	-	42,888
SEMHA Ryan White Part A Primary 2019	Pass Through	93.914	-	114,992
SEMHA Ryan White Part A Psychosocial 2019	Pass Through	93.914	-	6,761
SEMHA Ryan White Part A Psychosocial 2020	Pass Through	93.914	-	143,330
SEMHA Ryan White Part A Psychosocial 2020	Pass Through	93.914	-	6,873
Inst Pop Health Detroit H49MC26189	Pass Through	93.926	-	8,522
Inst Pop Health Detroit H49MC26189	Pass Through	93.926	-	14,547
MDHHS E20192714 Federal 100%	Pass Through	93.940	-	205,452
MDHHS E20192714 Federal 100%	Pass Through	93.940	-	116,950
MDHHS E20192714 Federal 100%	Pass Through	93.940	-	71,353
ECOG-ACRIN LAPS	Pass Through	93.RD	-	7,886

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Research and Development Cluster (continued):				
Department of Health and Human Services (continued):				
Flag Therapeutics R44CA221543	Pass Through	93.RD	\$ -	\$ 96,914
Henry Ford Health System 75D20118C02928	Pass Through	93.RD	· -	5,781
Information Management System D7-MDCSS-1 & 2	Pass Through	93.RD	_	1,357,350
Information Management System D7-MDCSS-3	Pass Through	93.RD	_	173,335
Mount Sinai Medical Center UH34AT009149	Pass Through	93.RD	_	1,454
Rehabilitation Institute of Mich Fdn 19-1-001	Pass Through	93.RD	-	11,233
University of Chicago Argonne 9F60007	Pass Through	93.RD	-	99,252
University of Michigan 3004184777	Pass Through	93.RD	-	(1,981)
University of Michigan 3004184777 SubK	Pass Through	93.RD	-	99,837
University of Michigan 3004184777 SubK	Pass Through	93.RD	-	1,114
University of Michigan SWOG Clinical Trials Initiative	Pass Through	93.RD		4,481
Total Department of Health and Human Services			7,987,892	87,334,129
Department of Homeland Security -				
MDEQ 3362-1701	Pass Through	97.039		14,595
Total Research and Development Cluster			9,886,700	112,514,696
Student Financial Assistance Cluster:				
U.S. Department of Education:				
USED P007A182102 18-19 SEOG	Direct	84.007	-	931,405
USED P007A192102 19-20 SEOG	Direct	84.007	-	550,484
USED P033A182102 18-19 FWS	Direct	84.033	-	1,129,865
USED P033A182102 18-19 FWS-JLD	Direct	84.033	-	62,504
USED P033A192102 19-20 FWS	Direct	84.033	-	282,660
USED P033A192102 19-20 FWS-JLD	Direct	84.033	-	26,675
Perkins Loans - Loan balance at the beginning of the year plus loans issued	Direct	84.038	-	16,716,637
USED P063P170245 17-18 Pell	Direct	84.063	-	536
USED P063P170245 17-18 Pell Admin	Direct	84.063	-	25
USED P063P180245 18-19 Pell	Direct	84.063	-	23,280,444
USED P063P130245-18-19 Pell Admin	Direct	84.063	-	41,190
USED P063P190245 19-20 Pell	Direct	84.063	-	15,618,853
William D. Ford Direct Loan Program (Loans issued)	Direct	84.268	-	189,101,077
USED P379T190245 Teach	Direct	84.379		74,904
Total U.S. Department of Education			-	247,817,259
Department of Health and Human Services:				
Health Professions Student Loan Program - Medicine - Loan balance at the	Direct	93.342		
beginning of the year	Biroot	00.012	-	1,947,871
Loans for Disadvantaged Students Program - Loan balance at the beginning of	Direct	93.342		4 007 000
the year plus loans issued			-	1,287,068
Nursing Faculty Loan Program - Loan balance at the beginning of the year plus	Direct	93.264		0.400.400
loans issued ARRA Nursing Faculty Loan Program - Loan balance at the beginning of the year			-	6,426,430
plus loans issued	Direct	93.408	_	27,402
Total Department of Health and Human Services			-	9,688,771
Total Student Financial Assistance Cluster			_	257,506,030
Department of Agriculture - SNAP Cluster:				201,000,000
Mich Fitness Fdn E20182657 FY18 WSU SNAP	Pass Through	10.561	_	5,231
Mich Fitness Fdn E20190792 FY19 WSU SNAP	Pass Through	10.561	_	178,932
Total SNAP Cluster	. add Till dagii	10.001		184,163
U.S. Department of Transportation - Highway Planning and Construction Cluster -				104,100
Mich Fitness Fdn Safe Routes 2018-0465	Pass Through	20.205	_	9,952
17.10.11 1 11.1000 1 411 Cato 1 104.00 20 10-0-00	i ass imough	20.200		0,002

U.S. Department of Transportation - Highway Safety Cluster:

Federal Agency/Pass-through Agency/Program Title/Pass-through ID

## Schedule of Expenditures of Federal Awards (Continued)

Direct/Pass Through

#### Year Ended September 30, 2019

**Total Amount** 

CFDA Number	 vided to ecipients	Federa	I Expenditures
20.616 20.616	\$ - -	\$	7,289 18,711
	_		26,000
84.027	_		1,441
84.027	-		25,681
	-		27,122
84.044	_		304,939
84.047	_		580,947
84.047	_		465,315
84.047	_		304,628
84.066	_		580,393
84.217	 		246,501
	-		2,482,723

Total Highway Safety Cluster  U.S. Department of Education - Special Education (IDEA) Cluster:  Dispute Resolution Educ. Research 2018  Dispute Resolution Educ. Research 2019  Total Special Education (IDEA) Cluster  U.S. Department of Education - TRIO Cluster:  USED P044A160703  USED P047A177116  Direct 84.047  USED P047A177116  Direct 84.047  USED P047A1771342  Direct 84.047  USED P047A171342  Direct 84.047  USED P066A160085  USED P066A160085  USED P066A160085  USED P066A160085  USED P217A170148  Direct 84.066  Direct 84.066
Dispute Resolution Educ. Research 2018         Pass Through Pass Through Pass Through Pass Through 84.027         -         1,441 1,41 1,41 2,5681           Dispute Resolution Educ. Research 2019         Pass Through Pass Through 84.027         -         25,681           Total Special Education (IDEA) Cluster         -         27,122           U.S. Department of Education - TRIO Cluster:         -         304,939           USED P047A171116         Direct         84.047         -         580,947           USED P047A17134         Direct         84.047         -         580,947           USED P047A171342         Direct         84.047         -         304,628           USED P047A170148         Direct         84.066         -         580,393           USED P217A170148         Direct         84.217         -         2,485,701           Total TRIO Cluster         Direct         84.217         -         2,485,702           Department of Health and Human Services - Medicaid Cluster - MDHRS E20192158 Federal 100%         Pass Through         93.778         -         291,099           Other Federal Awards:           Department of Agriculture - DPSCD PO 0119034108         Pass Through         10.001         -         1,667           Department of Defense:         Schoolcraft C
U.S. Department of Education - TRIO Cluster:  USED P044A160703 Direct 84.044 - 304,939 USED P047A171116 Direct 84.047 - 580,947 USED P047A171116 Direct 84.047 - 465,315 USED P047A171342 Direct 84.047 - 304,628 USED P046A160085 Direct 84.047 - 304,628 USED P066A160085 Direct 84.066 - 580,393 USED P217A170148 Direct 84.217 - 246,501 Total TRIO Cluster 84.217 - 246,501 Total TRIO Cluster Pass Through 93.778 - 291,099 Other Federal Awards: Department of Agriculture - DPSCD P0 0119034108 Pass Through 10.U01 - 1,667 Department of Defense: Schoolcraft College SC-WSU-18-2-1818 PTAC Pass Through 12.002 - 52,409 Schoolcraft College SC-WSU-18-2-1818 MEDC Pass Through 12.002 - (12)
USED P047A171116
Department of Health and Human Services - Medicaid Cluster - MDHHS E20192158 Federal 100%       Pass Through       93.778       -       291,099         Other Federal Awards: <ul> <li>Department of Agriculture -</li> <li>DPSCD PO 0119034108</li> <li>Pass Through</li> <li>10.001</li> <li>1,667</li> </ul> Department of Defense: <ul> <li>Schoolcraft College SC-WSU-18-2-1818 PTAC</li> <li>Schoolcraft College SC-WSU-18-2-1818 MEDC</li> <li>Pass Through</li> <li>12.002</li> <li>52,409</li> <li>(12)</li> </ul> Schoolcraft College SC-WSU-18-2-1818 MEDC             Pass Through             12.002             -             (12)
Other Federal Awards:         Department of Agriculture -       Pass Through       10.U01       -       1,667         Department of Defense:       Schoolcraft College SC-WSU-18-2-1818 PTAC       Pass Through       12.002       -       52,409         Schoolcraft College SC-WSU-18-2-1818 MEDC       Pass Through       12.002       -       (12)
Department of Defense: Schoolcraft College SC-WSU-18-2-1818 PTAC Schoolcraft College SC-WSU-18-2-1818 MEDC Pass Through 12.002 - 52,409 12.002 - (12)
Schoolcraft College SC-WSU-18-2-1818 PTAC Pass Through 12.002 - 52,409 Schoolcraft College SC-WSU-18-2-1818 MEDC Pass Through 12.002 - (12)
Schoolcraft College SC-WSU-18-2-1818 MEDC Pass Through 12:002 - 56,154
Schoolcraft College SC-WSU-19-2-1918 Pass Through 12.002 - 21,994
Schoolcraft College SC-WSU-19-2-1918       Pass Through       12.002       -       18,750         NSTA 19-871-038       Pass Through       12.630       -       15,519         NSTA 19-871-101       Pass Through       12.630       -       954
Battelle Memorial Inst US-001-000071860 Pass Through 12.001
Total Department of Defense - 187,096
Department of Justice:         MDHHS E20182621 Federal 100%       Pass Through       16.575       -       11,324         MDHHS E20191299 Federal 100%       Pass Through       16.575       -       186,493         Elder Law of Michigan 2018-V3-GX-K026       Pass Through       16.582       -       15,892         City of Detroit 6000257 Ceasefire       Pass Through       16.U01       36,000       49,645         Total Department of Justice       36,000       263,354
Department of Labor:       DOL SH-31218-17-60-F-26       Direct       17.502       -       28,303         DOL SH-05039SH8       Direct       17.502       -       105,583
Total Department of Labor - 133,886
U.S. Department of State:         World Learning SIZ-100-16-CA-008 2018       Pass Through       19.021       -       64,697         World Learning SIZ-100-16-CA-008 2019       Pass Through       19.021       -       62,615         Inst Intl Fulbright FST1801_WSU_4.1.18 Fulbright       Pass Through       19.401       -       3,391         Inst Intl Fulbright FSC1901 WSU 1.15.19       Pass Through       19.401       -       63,755

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Other Federal Awards (continued):				
U.S. Department of State (continued):				
Inst Intl Fulbright FST1901 WSU 4.1.19	Pass Through	19.401	\$ -	\$ 85,302
Total U.S. Department of State	. acccag			279,760
·				210,100
National Aeronautics and Space Administration - University of Michigan 3005533896	Pass Through	43.008	-	4,495
National Endowment for the Arts and Humanities:				
NEA 1853142-79-19	Direct	45.024	-	10,000
NEH PF-255848-17	Direct	45.130	-	26,278
NEH FEL-257881-18	Direct	45.160	-	34,906
MCACA 18PS4225AC	Pass Through	45.025	-	82
MDOE LS-00-16-0023-17	Pass Through	45.310	-	31,528
Total National Endowment for the Arts and Humanities	Ŭ		_	102,794
Environmental Protection Agency -				, -
Mich Tech University 1604013Z1	Pass Through	66.951	_	1,825
U.S. Department of Energy -	r add Trifdagir	00.001		1,020
Brookhaven Science Associates 359161	Pass Through	81.U01		35,724
	Pass Through	61.001	-	35,724
U.S. Department of Education:				5.004
USED P335A130090	Direct	84.335	-	5,961
USED P335A170040	Direct	84.335	-	52,850
USED P335A170040	Direct	84.335	-	188,747
MI Dept of Talent & Econ Devl 191130-191929	Pass Through	84.002	-	104,938
MI Dept of Talent & Econ Devl FY20	Pass Through	84.002	-	8,274
MDOE 181320-QCIP5	Pass Through	84.181	-	35,853
MDOE 191320- 1819	Pass Through	84.181	-	337,249
MDOE 192110-I14080	Pass Through	84.287	-	497,249
MDOE 192110-I14081	Pass Through	84.287	-	503,064
MDOE 192110-J17016	Pass Through	84.287	-	403,325
MDOE 192110-K181583	Pass Through	84.287	-	532,372
MDOE 192110-L194312	Pass Through	84.287	-	127,730
MDOE 192110-L194313	Pass Through	84.287	-	148,581
MDOE 192110-L194314	Pass Through	84.287	-	153,114
MDOE 202110-J17016	Pass Through	84.287	-	136,322
MDOE 202110-K181583	Pass Through	84.287	-	143,039
Mi Gear Up (Federal Funds) FY17/18	Pass Through	84.334	-	30,756
MDOE 170290-005	Pass Through	84.367	-	35,006
Arc Mi Family Alliance Evaluation	Pass Through	84.U01		57,484
Total U.S. Department of Education			-	3,501,914
U.S. Department of Health and Human Services:				
HRSA U77 HP26852-05 AHEC Central & Eastern Area Health	Direct	93.107	19,534	19,534
HRSA U77 HP26852-05 AHEC Covenant Comm Care	Direct	93.107	30,954	30,954
HRSA U77 HP26852-05 AHEC Northern Mich	Direct	93.107	37,980	37,980
HRSA U77 HP26852-05 AHEC Point	Direct	93.107	-	(13,085)
HRSA U77 HP26852-05 AHEC Western Mich	Direct	93.107	21,081	21,081
HRSA U77 HP26852-06 AHEC	Direct	93.107	-	252,355
HRSA U77 HP26852-06 AHEC	Direct	93.107	-	17,313
HRSA U77 HP26852-06 AHEC Central&Eastern Area	Direct	93.107	106,075	106,075
HRSA U77 HP26852-06 AHEC Covenant Care	Direct	93.107	83,271	90,015

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to	
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federal Expenditures
Other Federal Awards (continued):				
U.S. Department of Health and Human Services (continued):				
HRSA U77 HP26852-06 AHEC Covenant Care	Direct	93.107	\$ 6,551	\$ 6,551
HRSA U77 HP26852-06 AHEC MidMich Comm Health	Direct	93.107	196,559	196,559
HRSA U77 HP26852-06 AHEC MidMich Comm Health	Direct	93.107	45,701	45,701
HRSA U77 HP26852-06 AHEC Northern Mich	Direct	93.107	83,205	83,205
HRSA U77 HP26852-06 AHEC Northern Mich	Direct	93.107	33,353	33,353
HRSA U77 HP26852-06 AHEC Western Mich	Direct	93.107	173,502	173,502
HRSA U77 HP26852-06 AHEC Western Mich	Direct	93.107	20,489	20,489
HRSA U77 HP26852-07 AHEC	Direct	93.107	-	19,347
HRSA T73 MC30019-03 NMU	Direct	93.110	17,727	19,146
HRSA T73 MC30119-02	Direct	93.110	-	939
HRSA T73 MC30119-02 Leadership CMU	Direct	93.110	-	158
HRSA T73 MC30119-02 Leadership UMD	Direct	93.110	3,270	3,358
HRSA T73 MC30119-02 LEND Peds CMU	Direct	93.110	-	74
HRSA T73 MC30119-02 LEND Peds UofM	Direct	93.110	-	64
HRSA T73 MC30119-02 LEND Peds WMU	Direct	93.110	-	303
HRSA T73 MC30119-03	Direct	93.110	-	6,199
HRSA T73 MC30119-03 CMU	Direct	93.110	27,660	27,660
HRSA T73 MC30119-03 CMU	Direct	93.110	15,097	15,097
HRSA T73 MC30119-03 Leader	Direct	93.110	-	7,554
HRSA T73 MC30119-03 Leadership MSU	Direct	93.110	54,025	54,025
HRSA T73 MC30119-03 LEND Peds	Direct	93.110	-	24,354
HRSA T73 MC30119-03 LEND Peds WMU	Direct	93.110	13,994	14,297
HRSA T73 MC30119-03 MDHHS Family	Direct	93.110	20,999	20,999
HRSA T73 MC30119-03 UofM Ann Arbor	Direct	93.110	15,074	15,074
HRSA T73 MC30119-03 UofM Dearborn	Direct	93.110	14,000	14,000
HRSA T73 MC30119-03 WMU	Direct	93.110	13,977	13,977
HRSA T73 MC30119-03-03	Direct	93.110	42,000	207,330
HRSA T73 MC30119-04	Direct	93.110	-	33,072
HRSA T73 MC30119-04 WMU	Direct	93.110	611	611
HRSA A22 HP30936-02	Direct	93.124	-	44,650
HRSA D19 HP30865-02	Direct	93.178	-	259,166
HRSA D19 HP30865-02	Direct	93.178	-	50,268
HRSA D19 HP30865-03	Direct	93.178	-	85,352
HRSA D19 HP30865-03	Direct	93.178	-	13,735
SAMSHA H79 TI025966-03	Direct	93.243	-	42,521
HRSA D09 HP29983-03	Direct	93.247	210,087	578,658
HRSA D09 HP29983-03	Direct	93.247	-	101,957
HRSA T94 HP32910-01	Direct	93.247	-	82,287
HRSA T94 HP32910-01	Direct	93.247	-	4,636
HRSA UF1 HP28521-02	Direct	93.359	-	3,356
HRSA UF1 HP28521-03	Direct	93.359	-	389,114
HRSA UK1 HP31702-01	Direct	93.359	22,503	242,084
HRSA UK1 HP31702-01	Direct	93.359	-	80,838
HRSA UK1 HP31702-01 Covenant Comm Care	Direct	93.359	43,522	43,522
HRSA UK1 HP31702-01 Oakland County	Direct	93.359	27,035	27,035
HRSA UK1 HP31702-02	Direct	93.359	2,573	68,552
HRSA UK1 HP31702-02	Direct	93.359	-	15,653
ACF 90DDUC0005-02	Direct	93.632	-	406,704
ACF 90DDUC0005-02	Direct	93.632	-	5,441
ACF 90DDUC0005-03	Direct	93.632	-	88,334
HRSA M01 HP31389-01	Direct	93.732	-	137,557
HRSA M01 HP31389-02	Direct	93.732	-	343,912
HRSA M01 HP31389-03	Direct	93.732	-	10,034
HRSA T98 HP33431-01	Direct	93.732	-	5,990
HRSA T85 HP24473-05	Direct	93.884	-	349

# Schedule of Expenditures of Federal Awards (Continued)

## Year Ended September 30, 2019

			Provided to		
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subrecipients	Federa	l Expenditures
Other Federal Awards (continued):					
U.S. Department of Health and Human Services (continued):					
HRSA H76 HA00105-28	Direct	93.918	\$ -	\$	196,898
HRSA H76 HA00105-29	Direct	93.918	Ψ - -	Ψ	670,279
MDHHS E20181338 Federal 100%	Pass Through	93.94	-		7,233
	•		-		,
University of Michigan 3005076054	Pass Through	93.110	-		2,560
MDHHS E20182864 Federal 100%	Pass Through	93.116	-		5,030
MDHHS E20192839 Federal 100%	Pass Through	93.116	-		112,427
MDHHS E20193380 Federal 100%	Pass Through	93.136	-		48,544
University of Illinois at Chicago T13HP31010	Pass Through	93.145	-		6,727
University of Illinois at Chicago U10HA32109	Pass Through	93.145	-		2,953
University of Illinois MATEC 2019 U10HP29293	Pass Through	93.145	7,500		267,025
University of Illinois MATEC 2020 U10HP29293	Pass Through	93.145	-		16,530
MDHHS E20182596 Federal 70.7%	Pass Through	93.153	-		14,766
MDHHS E20192833 Federal 72%	Pass Through	93.153	-		819,012
MDHHS E20192649 Federal 100%	Pass Through	93.184	-		32,942
MDHHS E20180512 Federal 100%	Pass Through	93.283	-		4,873
MDHHS E20192157 Federal 100%	Pass Through	93.283	-		42,932
MDHHS E20192834 Federal 100%	Pass Through	93.283	-		12,169
SEMHA Ryan White HIV Care Services 2019	Pass Through	93.314	-		138,179
SEMHA Ryan White HIV MCM SubK2019	Pass Through	93.314	-		36,031
SEMHA Ryan White HIV MHS SubK 2019	Pass Through	93.314	-		7,264
SEMHA Ryan White Part A HIV 2020	Pass Through	93.314	-		91,061
SEMHA Ryan White Part A MAI 2020	Pass Through	93.314	-		57,224
SEMHA Ryan White Part A Minority 2019	Pass Through	93.314	_		88,997
SEMHA Ryan White Part A SubK 2020	Pass Through	93.314	_		29,532
SEMHA Ryan White Part A SubK 2020	Pass Through	93.314	_		9,800
MDHHS E20193397 Federal 100%	Pass Through	93.630	9,571		29,473
MDHHS E20193398 Federal 100%	Pass Through	93.630	5,059		34,692
MDHHS E20193399 Federal 100%	Pass Through	93.630	-		25,039
RFSUNY 1135853-8-76397	Pass Through	93.648	_		6,400
RFSUNY NO 18-6	Pass Through	93.648	_		140,268
MDHHS-YIT 18-82001 Federal 80%	Pass Through	93.674	_		112,035
MDHHS E20181333 Federal 100%	Pass Through	93.733	_		58,475
MDHHS E20182498 Federal 100%	Pass Through	93.758	_		219
MDHHS E20182579 Federal 14.3%	Pass Through	93.758	_		155
MDHHS E20192838 Federal 14.3%	Pass Through	93.758	-		11,259
MDHHS E20192648 Federal 100%	Pass Through	93.898	-		692,700
	· · ·		-		,
SEMHA Ryan White HIV AIDS 2018	Pass Through	93.914	-		(733)
SEMHA Ryan White Part A LIV AIDS 2019	Pass Through	93.914	-		73,766
SEMHA Ryan White Part A HIV AIDS 2018	Pass Through	93.914	-		(94)
SEMHARyan White Part A 2020	Pass Through	93.914	-		88,062
MDHHS E20152067	Pass Through	93.940	-		718
MDHHS E20161045	Pass Through	93.940	-		74,289
MDHHS E20180294 Federal 100%	Pass Through	93.940	-		300
MDHHS E20180377 Federal 83% 2 CFDA 93.977	Pass Through	93.940	-		42,562
MDHHS E20180716 Federal 100%	Pass Through	93.940	-		20
MDHHS E20182327 Federal 57.3%	Pass Through	93.940	-		1,412
MDHHS E20182529 Federal 95%	Pass Through	93.940	-		17
MDHHS E20182530 Federal 100%	Pass Through	93.940	-		160
MDHHS E20192159 Federal 100%	Pass Through	93.940	-		1,307
MDHHS E20192652 Federal 39.2% 2 CFDA 93.940	Pass Through	93.940	-		122,809
MDHHS E20192864 Federal 100%	Pass Through	93.940	-		10,614
MDHHS E20180377 Federal 83% 2 CFDA 93.977	Pass Through	93.977	-		5,632
MDHHS E20192652 Federal 39.2% 2 CFDA 93.940	Pass Through	93.977	-		241,896
National Academy Science HMD 2019-07-18 20000010696	Pass Through	93.U01			35,118
Total U.S. Department of Health and Human Services	-		1,424,539		9,280,483
			, = :,==		,,

# Schedule of Expenditures of Federal Awards (Continued)

#### Year Ended September 30, 2019

			Total A Provide			
Federal Agency/Pass-through Agency/Program Title/Pass-through ID	Direct/Pass Through	CFDA Number	Subreci	pients	Feder	ral Expenditures
Other Federal Awards (continued): Corporation for National & Community Services: Corporation for National & Community MDHHS MACF18-82368 MDHHS E20183152 MDHHS E20191747 Federal 100% Total Corporation for National & Community Services	Direct Pass Through Pass Through Pass Through	94.006 94.006 94.006 94.006	\$	- - - -	\$	184,025 214,255 99,998 538,327 1,036,605
Total Other Federal Awards			1,	460,539		14,829,603
Total Federal Expenditures			<b>\$</b> 11,	347,239	\$	387,871,388

#### Notes to Schedule of Expenditures of Federal Awards

Year Ended September 30, 2019

#### Note 1 - Basis of Presentation

The accompanying schedule of expenditures of federal awards (the "Schedule") includes the federal grant activity of Wayne State University (the "University") under programs of the federal government for the year ended September 30, 2019. The information in the Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (the "Uniform Guidance"). Because the Schedule presents only a selected portion of the operations of the University, it is not intended to and does not present the financial position, changes in net position, or cash flows of the University.

#### **Note 2 - Summary of Significant Accounting Policies**

Expenditures reported in the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in OMB Circular A-21, *Cost Principles for Educational Institutions*, or the cost principles contained in Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. Pass-through entity identifying numbers are presented where available.

The University has elected not to use the 10 percent *de minimis* indirect cost rate to recover indirect costs, as allowed under the Uniform Guidance.

#### **Note 3 - Loan Programs**

During the fiscal year ended September 30, 2019, the University issued new loans to students under the Federal Direct Student Loan Program (FDLP). The loan program includes subsidized and unsubsidized Stafford Loans, Parents' Loans for Undergraduate Students (PLUS), and PLUS loans for graduate and professional students. The value of loans issued for the FDLP is based on disbursed amounts. The undergraduate PLUS loans are applied first to the student's tuition and fees, and any remaining balance is disbursed directly to the parents or, with the parents' permission, to the student. The loan amounts issued during the year are disclosed in the schedule of expenditures of federal awards under the student financial aid cluster.

In addition, the University participates in the Federal Perkins Loan Program through the Department of Education, the Health Professions Student Loan Program (including loans for disadvantaged students), and the Nurse Faculty Loan Program through the Department of Health and Human Services. These loan programs that are directly administered by the University are considered revolving loan programs whereby collections received on past loans, including interest, and new funds received from federal agencies are loaned out to current students. For these programs, the beginning of year balance and loans made during the year are disclosed in the schedule of expenditures of federal awards. The outstanding balances on these loan programs as of September 30, 2019 are as follows:

Federal Program	CFDA Number	Loan Balances
Department of Education - Federal Perkins Loan Program Department of Health and Human Services - Health Professions Student Loan	84.038	\$ 14,042,102
Program - Medicine Department of Health and Human Services - Loans for Disadvantaged Students	93.342	1,597,016
Program	93.342	987,037
Department of Health and Human Services - Nursing Faculty Loan Program	93.264	5,915,253
Department of Health and Human Services - ARRA Nursing Faculty Loan Program	93.408	25,276
	Total	\$ 22,566,684

#### Notes to Schedule of Expenditures of Federal Awards

Year Ended September 30, 2019

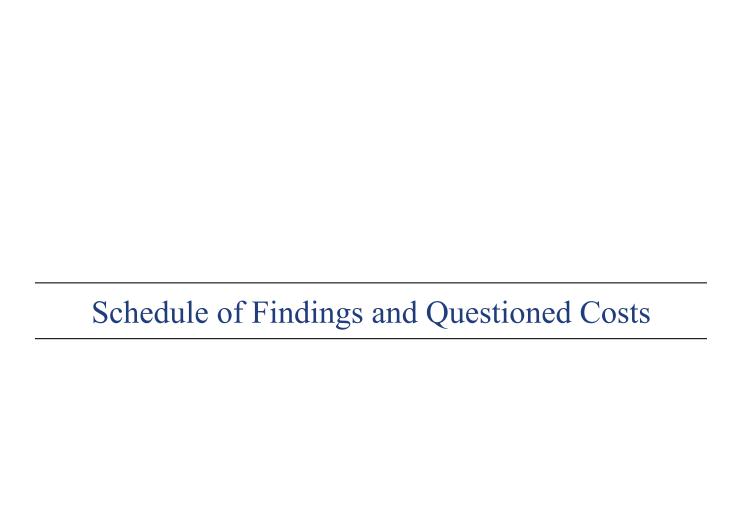
#### Note 4 - Adjustments and Transfers

As allowable and in accordance with federal regulations issued by the U.S. Department of Education, the University carried forward \$198,254 of the 2017-2018 Federal Work Study (FWS) Program (84.033) award, which was spent on the FWS Program in the 2018-2019 award year. The University also carried forward \$254,762 of the 2018-2019 FWS Program award to be expended on the FWS Program in the 2019-2020 award year.

The University, pursuant to federal regulations, transferred \$636,905 of the 2018-2019 FWS Program award to the Federal Supplemental Educational Opportunity Grant (FSEOG) Program (84.007), which was spent in the 2018-2019 year. The University also carried back \$89,387 of the 2019-2020 FSEOG Program award, which was spent in the 2018-2019 award year.

#### **Note 5 - Indirect Costs**

The University had approved predetermined indirect cost rates, which are effective from October 1, 2018 to September 30, 2022. The approved rates for on-campus and off-campus research were 54 and 26 percent, respectively.



#### Schedule of Findings and Questioned Costs

Year Ended September 30, 2019

#### **Section I - Summary of Auditor's Results**

Financial Statemen	ts				
Type of auditor's rep	ort issued:	Unmodi	fied		
Internal control over	financial reporting:				
Material weaknes	s(es) identified?		Yes	X	No
	ncy(ies) identified that are I to be material weaknesses?		Yes	X	None reported
Noncompliance mate statements noted			Yes	X	None reported
Federal Awards					
Internal control over	major programs:				
Material weakness(es) identified?     Yes X			X	No	
	ncy(ies) identified that are I to be material weaknesses?	X	Yes		None reported
	sclosed that are required to be reported in Section 2 CFR 200.516(a)?	X	Yes		No .
Identification of majo	r programs:				
CFDA Number	Name of Federal Progran	n or Cluster			Opinion
Various 84.007, 84.033, 84.038, 84.063, 84.268, 84.379, 93.264,	Research and Development Cluster				Unmodified
93.342, 93.408	Student Financial Assistance Cluster				Unmodified
Dollar threshold used type A and type B	I to distinguish between programs:	\$3,000,000	)		
Auditee qualified as I	ow-risk auditee?	X	Yes		No

#### **Section II - Financial Statement Audit Findings**

None

#### Schedule of Findings and Questioned Costs (Continued)

Year Ended September 30, 2019

#### Section III - Federal Program Audit Findings

Reference Number	Finding
2019-001	CFDA Number, Federal Agency, and Program Name - Student Financial Assistance Cluster - Department of Education - Federal Direct Loans CFDA 84.268, Pell CFDA 84.063
	Federal Award Identification Number and Year - Various
	Pass-through Entity - N/A
	Finding Type - Significant deficiency
	Repeat Finding - Yes, 2018-001
	Criteria - Changes in a student's status are required to be reported to the National Student

**Criteria** - Changes in a student's status are required to be reported to the National Student Loan Data System (NSLDS) or the guarantee agency within 30 days of the change or included in a student status confirmation report sent to NSLDS within 60 days of the status change (FPL, 34 CFR section 674.19; Pell, 34 CFR section 690.83(b)(2); Direct Loan, 34 CFR section 685.309).

**Condition** - The University did not report the student status change in a timely manner for 3 of the 60 students selected for testing.

**Questioned Costs - None** 

#### Identification of How Questioned Costs Were Computed - N/A

**Context** - Of the 60 students selected for testing, 3 students did not have a status change reported in a timely manner to NSLDS. All 3 of the students had graduated from the University.

Cause and Effect - The University's processes in place did not result in the reporting of student status changes within the required time frame. For one of the students identified, the University did not report the student as withdrawn from the University within 60 days of being withdrawn from the University while the University was working to confirm the student's graduation status. The graduation status change was reported to the NSLDS by the University after the 60-day required reporting time frame from the date the student graduated from the University.

For the second student identified, the University did not have a procedure in place to ensure that students who graduated from an undergraduate program, but continued to be enrolled at the University in graduate classes, had their graduation status at the program level communicated timely to the NSLDS. An issue with the processing of this student's graduation file being reported to the NSLDS occurred, which caused this student's graduation from his undergraduate program to not be communicated timely to the NSLDS at the program level. The University identified this issue and reported the status to the NSLDS after the 60-day required reporting time frame from the date the student graduated from the University.

For the third student identified, the University did not have a procedure in place to ensure that a student who was reported as graduated timely to the NSLDS at the program level was also reported timely as graduated at the campus level with the NSLDS. An entry error caused this student's graduation to not be recorded timely at the campus level, as it was initially erroneously recorded as withdrawn. Subsequent to the audit testing performed, the proper status of graduated at the campus level was reported.

**Recommendation** - The University should implement controls to ensure student status changes are reported correctly and within the required time frame.

#### Schedule of Findings and Questioned Costs (Continued)

#### Year Ended September 30, 2019

Reference	
Number	Finding

#### 2019-001 (Cont.)

Views of Responsible Officials and Corrective Action Plan - The University concurs with the findings and recommendations. The University is taking actions to ensure that student status changes are reported to the National Student Loan Data System (NSLDS) in a timely manner.

One student was not reported as withdrawn for the period of time the School of Medicine (SOM) was finalizing their degree certification. While the graduation was reported in a timely fashion from the time the SOM certified the degree, the Office of the Registrar will work with the SOM to report such students as withdrawn and then update their graduation status within the required time frame once their degree is certified.

The second student graduated from their undergraduate program, but then continued to be enrolled at the University in a graduate program. Due to a procedural error, the student's graduation from his undergraduate program was not reported to the NSLDS timely. The University identified this issue, and corrective measures were put into place at that time. All files were correctly updated, and this issue should not reoccur.

The third student was reported as graduated at the program level to the NSLDS, but their campus level was reported as withdrawn. The student was required to be manually processed on the University's third-party servicer's database in order to report their graduation. There is no error message or report to identify students in this situation. As this is not a problem with data in the University's administrative system, the University will work with its servicer to identify students in this situation for correction.



#### **Summary Schedule of Prior Audit Findings**

February 13, 2020

Federal Audit Clearinghouse RE: Wayne State University Summary Schedule of Prior Audit Findings Fiscal Year Ended September 30, 2019

**Prior Year Finding Number: 2018-001** 

Fiscal Year in Which the Finding Initially Occurred: 2015

**Federal Program, CFDA Number and Name:** Student Financial Assistance Cluster - Department of Education - Federal Pell Grants CFDA 84.063, Federal Direct Loans CFDA 84.268, Perkins CFDA 84.038

**Original Finding Description:** The University did not report the student status change in a timely manner for five of the 60 students selected for testing. One of the student's change to graduated status was not communicated to the National Student Loan Data System (NSLDS) until identified during the audit.

**Status/Partial Corrective Action (as applicable):** Partially Corrected - The Office of the Registrar continues to monitor and manually report leave of absence' students as withdrawn for the period of the leave to the National Student Clearinghouse (NSC) based on information provided by the School of Medicine (SOM) leave report. In addition, the University initiated a business process analysis of the SOM's leave of absence policies and procedures. The current process has been documented and areas for streamlining are currently under consideration.

**Planned Corrective Action:** The University will continue to evaluate other long-term solutions including the possible conversion from a term-based to a semester-based structure within the SOM. Until a long-term solution is fully implemented, a dedicated staff person will be assigned to manually review all enrollment changes for the School of Medicine and report them to the NSC.



February 13, 2020

Wayne State University
Corrective Action Plan
Related to the Schedule of Findings and Questioned Costs
For the Year Ended: September 30, 2019

#### Name of contact person responsible for planned corrective actions:

Rebecca Cooke
Interim Vice President, Finance and Business Operations, Treasurer and CFO 5700 Cass Avenue
Suite 4900, Academic Administration Building
Detroit, Michigan 48202

Phone: (313) 577-5580 Fax: (313) 577-2338 Email: rcooke@wayne.edu

Finding Number: 2019-001 - Student Financial Assistance Cluster - Department of Education - Federal

Direct Loans CFDA 84.268, Pell CFDA 84.063

<u>Condition:</u> The University did not report the student status change in a timely manner for 3 of the 60 students selected for testing.

#### **Views of Responsible Officials and Planned Corrective Action:**

The University concurs with the auditor's findings and recommendations. The University is taking actions to ensure that students' status changes are reported to the National Student Loan Data System (NSLDS) in a timely manner.

One student was not reported as withdrawn for the period of time the School of Medicine (SOM) was finalizing their degree certification. While the graduation was reported in a timely fashion from the time the SOM certified the degree, the Office of the Registrar will work with the SOM to report such students as withdrawn and then update their graduation status within the required timeframe once their degree is certified.

The second student graduated from their undergraduate program, but then continued to be enrolled at the University in a graduate program. Due to a procedural error, the student's graduation from his undergraduate program was not reported to the NSLDS timely. The University identified this issue and corrective measures were put into place at that time. All files were correctly updated and this issue should not reoccur.

The third student was reported as graduated at the program level to the NSLDS, but their campus level was reported as withdrawn. The student was required to be manually processed on the University's third-party servicer's database in order to report their graduation. There is no error message or report to identify students in this situation. As this is not a problem with data in the University's administrative system, the University will work with its servicer to identify students in this situation for correction.

**Anticipated Completion Date:** August 2020