The Ohio State University

(A Component Unit of the State of Ohio)

EIN: 31-6025986

Financial Statements as of and for the years ended June 30, 2021 and 2020 and Report on Federal Financial Assistance Programs in Accordance with the OMB Uniform Guidance for the year ended June 30, 2021

The Ohio State University Index June 30, 2021 and 2020

	Page(s)
Report of Independent Auditors	1 – 2
Management's Discussion and Analysis (unaudited)	3 – 22
Financial Statements	
Statements of Net Position	23
Statements of Revenues, Expenses and Other Changes in Net Position	24
Statements of Cash Flows	25 – 26
Notes to the Financial Statements	27 – 96
Supplementary Information:	
Required Supplementary Information on GASB 68 Pension Liabilities (Unaudited)	97
Required Supplementary Information on GASB 75 Other Post Employment Benefits (Unaudited)	98
Notes to Required Supplementary Information (Unaudited)	99
Other Information on the Long-Term Investment Pool	100 – 101
Schedule of Expenditures of Federal Awards	102 - 180
Notes to Schedule of Expenditures of Federal Awards	181 – 184
Report of Independent Auditors 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	185 – 186
Report of Independent Auditors on Compliance with Requirements That Could Have A Direct and Material Effect on Each Major Program and on Internal Control over Compliance in Accordance with the OMB Uniform Guidance	187 – 188
Schedule of Findings and Questioned Costs	189 – 191
Summary of Prior Audit Findings	192



Report of Independent Auditors

To the Board of Trustees of The Ohio State University

Report on the Financial Statements

We have audited the accompanying financial statements of the primary institution and of the aggregate discretely presented component units of The Ohio State University (the "University"), a component unit of the State of Ohio, which comprise the statements of net position as of and for the years ended June 30, 2021 and 2020, and the related statements of revenues, expenses and changes in net position and of cash flows for the years then ended, and the related notes to the financial statements, which collectively comprise the 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 the 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.

Auditors' Responsibility

Our responsibility is to express opinions on the 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 audit 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 our 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, we consider internal control relevant to the University'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 University'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 primary institution and the aggregate discretely presented component units of The Ohio State University as of June 30, 2021 and 2020, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 3 through 22, the Required Supplementary Information on GASB 68 Pension Liabilities on page 97, the Required Supplementary Information on GASB 75 Net OPEB Liabilities on page 98, and the Notes to Required Supplementary Information on page 99 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits 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 opinions on the financial statements that collectively comprise the University's basic financial statements. The accompanying other information on the long-term investment pool on pages 100 through 101 is presented for purposes of additional analysis and are not a required part of the basic financial statements. The accompanying schedule of expenditures of federal awards for the year ended June 30, 2021 on pages 102 through 184 is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and is not a required part of the basic financial statements.

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

The accompanying other information on the long-term investment pool has not been subjected to the auditing procedures applied in the audits of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 19, 2021 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters for the year ended June 30, 2021. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

November 19, 2021

Pricewaterhous Coopers LLP

Management's Discussion and Analysis (Unaudited)

The following Management's Discussion and Analysis, or MD&A, provides an overview of the financial position and activities of The Ohio State University (the "university") for the year ended June 30, 2021, with comparative information for the years ended June 30, 2020 and June 30, 2019. We encourage you to read this MD&A section in conjunction with the audited financial statements and footnotes appearing in this report.

About The Ohio State University

The Ohio State University is the State of Ohio's flagship research institution and one of the largest universities in the United States of America, with over 67,000 students, 7,500 faculty members and 28,000 staff members. Founded in 1870 under the Morrill Land Grant Act, the university – which was originally known as the Ohio Agricultural and Mechanical College -- has grown over the years into a comprehensive public institution of higher learning, with over 250 undergraduate majors, 162 master's degree programs, 105 doctoral programs and nine professional degree programs.

The university is governed by a board of trustees who are responsible for oversight of academic programs, budgets, general administration, and employment of faculty and staff. The university's 15 colleges, four regional campuses, the Wexner Medical Center and various academic support units operate largely on a decentralized basis. The Board approves annual budgets for university operations, but these budgets are managed at the college and department level.

The Ohio State University Wexner Medical Center ("the Medical Center") is one of the largest and most diverse academic medical centers in the country and the only academic medical center in central Ohio. As a part of the Wexner Medical Center, the Health System operates under the governance of The Ohio State University Board of Trustees and is comprised of seven hospitals and a network of ambulatory care locations. The Health System provides a full spectrum of services from primary to quaternary specialized care. Key clinical care locations and facilities of the Health System include:

- University Hospital: the Wexner Medical Center's flagship hospital is a leader in
 multiple specialties including organ and tissue transplantation, women and infants,
 digestive diseases, bariatric surgery and minimally invasive surgery. In addition to
 having a Level I Trauma Center as designated by the American College of
 Surgeons, University Hospital is also home to a Level III Neonatal Intensive Care
 Unit, central Ohio's only adult burn center and the only adult solid organ transplant
 program in central Ohio.
- Arthur G. James Cancer Hospital and Solove Research Institute ("The James"): the only free-standing cancer hospital in central Ohio and the first in the Midwest, the Arthur G. James Cancer Hospital and Richard J. Solove Research Institute is an international leader in cancer prevention, detection and treatment. The James is one of only 51 comprehensive cancer centers designated by the National Cancer Institute (NCI) and one of only a few institutions nationally funded by the NCI to conduct both phase I and phase II clinical trials on novel anticancer agents sponsored by the NCI.

- Richard M. Ross Heart Hospital ("The Ross"): is dedicated to advancing the field of cardiovascular medicine and surgery. The Ross Heart Hospital offers comprehensive heart and vascular care spanning every specialty from open heart surgery to electrophysiology, vascular surgery, advanced heart failure care and emergency cardiac care. The Ross is one of the nation's few free-standing facilities devoted entirely to the research of diseases affecting the heart, lungs and blood vessels.
- OSU Harding Hospital: offers counseling services along with the most comprehensive inpatient and outpatient mental health and behavioral health services in central Ohio. Programs are available for adolescents, adults and older adults with complex psychiatric disorders. Ohio State Harding Hospital's team includes psychiatrists, psychologists, social workers, registered nurses, occupational therapists, recreational therapists, chaplains and licensed counselors.
- Ohio State East Hospital: blends academic medicine with a community-based setting. Ohio State East Hospital offers renowned services in orthopedic care, emergency services, cancer care, addiction services, ear, nose and throat care, heart care, radiology and imaging services, rehabilitation and wound healing. Additionally, patients have access to central Ohio's leading alcohol and drug addiction recovery services, digestive disease treatment, a full-range of diagnostic services, a sleep disorders center and outpatient oncology services.
- Dodd Hall: home to Ohio State's nationally recognized and accredited rehabilitation inpatient program, specializing in stroke, brain and spinal cord rehabilitation. The program was the first in Ohio and is dedicated to physical medicine and rehabilitation research, training and treatment.
- Brain and Spine Hospital: a leader in brain and spine treatment and research with
 dedicated units for stroke care, neurotrauma and traumatic brain injuries, spinal cord
 injuries and spine surgery, epilepsy, chronic pain, acute rehabilitation, neurosurgery
 and sleep medicine. Ohio State is one of the first medical centers in the country to
 combine five neuroscience-related specialties into a single, integrated program and
 is designed to rapidly unlock the mysteries of the brain and to pioneer therapies and
 technology on every neurological front.
- Ambulatory Services: offering primary care and many specialized health services in numerous convenient locations throughout Ohio. Primary care, sports medicine, orthopedics, mammography, imaging, wound care and other specialties are provided with the compassionate and nationally ranked expert care that is synonymous with The Ohio State University Wexner Medical Center.

The Health System provided services to approximately 62,900 inpatients and 2,116,000 outpatients during fiscal year 2021 and 62,300 inpatients and 1,868,000 outpatients during fiscal year 2020.

The following financial statements reflect all assets, liabilities, deferred inflows/outflows and net position (equity) of the university, the Ohio State University Wexner Medical Center, the Ohio Agricultural Research and Development Center (OARDC) and the Ohio Technology Consortium (OH-TECH), which is an umbrella organization that includes the Ohio Academic Resources Network (OARnet), the Ohio Supercomputer Center and the Ohio Library and Information Network (OhioLINK). These entities constitute the "primary government" for

financial reporting purposes. In addition, the financial statements include consolidated financial results for a number of "component units", which are legally separate entities that meet the financial accountability criteria set forth in Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity*, as amended by GASB Statement No. 61, *The Financial Reporting Entity: Omnibus* and Statement No. 80, *Blending Requirements for Certain Component Units—an amendment of GASB Statement No. 14*.

The following component units are considered to "exclusively benefit" the university and are shown in a blended presentation with the primary government:

- The OSU Foundation (a fundraising foundation operating exclusively for the benefit of the university)
- OSU Health Plan (a non-profit organization formerly known as OSU Managed Health Care Systems that administers university health care benefits)
- Oval Limited (captive insurer that provides medical malpractice coverage to university hospitals and physicians)
- Pelotonia (a fundraising organization operating exclusively for the benefit of the university)

The GASB has indicated that, under the amended consolidation standards, the "exclusive benefit" criterion for blending is not met when a component unit provides services to parties external to the primary government. As a result, the university presents the following component units in a discrete presentation:

- OSU Physicians, Inc. (the practice group for physician faculty members of the Colleges of Medicine and Public Health)
- Campus Partners for Community Urban Redevelopment (a non-profit organization participating in the redevelopment of neighborhoods adjacent to the main Columbus campus)
- Transportation Research Center, Inc. (an automotive research and testing facility in East Liberty, Ohio)
- Dental Faculty Practice Association (the practice group for faculty members of the College of Dentistry)
- Science and Technology Campus Corporation (a non-profit organization established to further development of the university's Science and Technology Campus)

Condensed financial information for both blended and discretely presented component units is provided in the Notes to the Financial Statements. The university is considered a component unit of the State of Ohio and is included in the State of Ohio's Comprehensive Annual Financial Report.

About the Financial Statements

The university presents its financial statements in a "business type activity" format, in accordance with GASB Statement No. 34, Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments and GASB Statement No. 35, Basic Financial Statements – and Management's Discussion and Analysis – for Public Colleges and Universities – an amendment of GASB Statement No. 34. In addition to this

MD&A section, the financial statements include a Statement of Net Position, a Statement of Revenues, Expenses and Changes in Net Position, a Statement of Cash Flows and Notes to the Financial Statements. Separate columns are presented for the primary institution (which includes the primary government and the blended component units), discretely presented component units and the total university. Unless otherwise specified, the amounts presented in this MD&A are for the primary institution.

The **Statement of Net Position** is the university's balance sheet. It reflects the total assets, deferred outflows, liabilities, deferred inflows and net position (equity) of the university as of June 30, 2021, with comparative information as of June 30, 2020. Liabilities due within one year, and assets available to pay those liabilities, are classified as current. Other assets and liabilities are classified as non-current. Investment assets are carried at fair value or at Net Asset Value (NAV), as applicable.

Capital assets, which include the university's land, buildings, improvements, and equipment, are shown net of accumulated depreciation. Net position is grouped in the following categories:

- Net investment in capital assets
- Restricted nonexpendable
- Restricted expendable
- Unrestricted

In addition to assets, liabilities and net position, the university's balance sheet includes deferred outflows of resources and deferred inflows of resources. Deferred outflows are similar to assets and will be recognized as expense in future periods. Deferred inflows are similar to liabilities and will be recognized as revenue (or reductions of expense) in future periods.

The **Statement of Revenues, Expenses and Changes in Net Position** is the university's income statement. It details how net position has increased (or decreased) during the year ended June 30, 2021, with comparative information for the year ended June 30, 2020. Tuition revenue is shown net of scholarship allowances, patient care revenue is shown net of contractual allowances, charity care and bad debt expense, depreciation is provided for capital assets, and there are required subtotals for net operating income (loss) and net income (loss) before capital contributions and additions to permanent endowments.

It should be noted that the required subtotal for net operating income or loss generally will reflect a "loss" for state-supported colleges and universities. This is primarily due to the way operating and non-operating items are defined under GASB Statement No. 9, Reporting Cash Flows of Proprietary and Nonexpendable Trust Funds and Governmental Entities That Use Proprietary Fund Accounting. Operating expenses include virtually all university expenses, except for interest on long-term debt and certain investment management expenses. Operating revenues, however, exclude certain significant revenue streams that the university and other public institutions have traditionally relied upon to fund current operations, including state instructional support, current-use gifts and investment income.

The **Statement of Cash Flows** details how cash has increased (or decreased) during the year ended June 30, 2021, with comparative information for the year ended June 30, 2020. It breaks out the sources and uses of university cash into the following categories:

- Operating activities
- Noncapital financing activities
- Capital financing activities
- Investing activities

Cash flows associated with the university's expendable net position appear in the operating and noncapital financing categories. Capital financing activities include payments for capital assets, proceeds from long-term debt and debt repayments. Purchases and sales of investments are reflected as investing activities.

The **Notes to the Financial Statements,** which follow the financial statements, provide additional details on the numbers in the financial statements. Behind the notes is a section that provides required supplementary information related to pensions and other postemployment benefits and other information on the university's Long-Term Investment Pool.

Financial Highlights and Key Trends

The global outbreak of COVID-19, a new strain of coronavirus that can result in severe respiratory disease, was first detected in December of 2019 and subsequently spread across six continents impacting many countries, including the United States. The COVID-19 outbreak has altered the behavior of businesses and people in a manner that has had and is expected to continue to have effects on global and local economies, including the State of Ohio.

On March 13, 2020, the university announced that it would suspend face-to face instruction and transition to remote instruction for the remainder of the spring semester. On April 1, 2020, the university announced that the suspension of face-to-face instruction would extend through the summer semester. With limited exceptions, all university events scheduled to occur during the summer months of 2020, including summer camps and sports camps, were cancelled. Nearly all university housing and dining facilities were closed on March 22, 2020 and remained closed through the summer 2020 semester.

On June 3, 2020, the university announced that it would resume in-person classes for the Autumn 2020 semester, with a mix of on-line, in-person and blended courses to reduce the number of students, faculty and staff that were on campus at any one time. Ongoing health and safety concerns resulted in the postponement of the 2020-2021 fall sports season. Attendance at football games and other athletics events was limited to families, staff and the media under strict safety protocols.

The university conducted extensive testing of students, faculty and staff throughout the 2020-2021 academic year. All other on-campus protocols (masking, social distancing and limits on group gatherings) remained in place, and throughout the Spring 2021 semester, the university observed a low positivity rate among its students. As vaccination rates continued to increase and other health and safety protocols remained effective, the university announced that it

expected to return to more of a traditional university experience for the Autumn 2021 semester. The University State of Emergency, which was declared by the university president on March 22, 2020, was lifted effective July 1, 2021.

COVID-19 disrupted key university operations and resulted in significant declines in tuition, housing and dining and athletics revenues. In response to the COVID-19 outbreak, the university instituted a series of cost controls, including a hiring pause and business-only essential spending. After an unprecedented year managing the COVID-19 pandemic, the university's financial position remains strong. Total net position increased \$3.19 billion, to \$8.62 billion at June 30, 2021, driven primarily by strong investment performance, continued positive momentum at the Health System, significant efficiency measures across the university and reductions in university net pension and other post-employment benefit liabilities.

Demand for an Ohio State education and outcomes for students also remain strong. Total enrollment for Autumn 2020 was 67,957, down 305 students compared to Autumn 2019. 94% of the freshmen enrolled in Autumn 2019 returned to OSU in Autumn 2020. 69% of students graduated within four years, and over 87% graduated within six years.

The following sections provide additional details on the university's 2021 financial results and a look ahead at significant economic conditions that are expected to affect the university in the future.

Statement of Net Position

Summary Statement of Net Position (in thousands)		2021		2020		2019
Cash and temporary investments	\$	3,371,175	\$	3,633,027	\$	3,308,174
Receivables, inventories, prepaids and other current assets	<u> </u>	1,038,798		808,875	<u> </u>	872,714
Total current assets		4,409,973		4,441,902		4,180,888
Restricted cash		276,243		401,664		492,033
Noncurrent notes and pledges receivable, net		134,207		110,673		124,901
Net other post-employment benefit receivable		275,182		77,901		74,520
Long-term investment pool		7,041,973		5,287,131		5,256,759
Other long-term investments		348,227		301,676		219,455
Other noncurrent assets		202,911		-		,
Capital assets, net of accumulated depreciation		6,267,672		5,700,078		5,268,363
Total noncurrent assets		14,546,415		11,879,123		11,436,031
Total assets		18,956,388		16,321,025		15,616,919
Deferred outflows		467,600		717,357		1,155,735
Total assets and deferred outflows	\$	19,423,988	\$	17,038,382	\$	16,772,654
Accounts payable and accrued expenses	\$	774,841	\$	638.750	\$	591,844
Medicare advance payment program	•	254,854	•	274,915	·	-
Deposits and advance payments for goods and services		371,040		268,481		281,886
Current portion of bonds, notes and lease obligations		352,716		374,717		618,302
Other current liabilities		93,883		88,673		112,259
Total current liabilities		1,847,334		1,645,536		1,604,291
Noncurrent portion of bonds, notes and lease obligations		2,690,587		2,732,098		2,543,360
Net pension liability		2,679,333		3,025,029		3,715,058
Net other post-employment benefits liability		22.683		1.459.572		1,339,383
Advance from concessionaire		980,953		1,002,769		1,024,555
Other noncurrent liabilities		789,941		527,489		434,88
Total noncurrent liabilities		7,163,497		8,746,957		9,057,24
Total liabilities		9,010,831		10,392,493		10,661,532
Deferred inflows		1,796,237		1,221,395		677,046
Net investment in capital assets Restricted:		3,471,509		3,010,095		2,605,38
Nonexpendable		1,789,304		1,622,782		1,580,115
Expendable		2,030,928		1,125,359		1,303,269
Unrestricted		1,325,179		(333,742)		(54,689
Total net position		8,616,920		5,424,494		5,434,076
Total liabilities, deferred inflows and net position	\$	19,423,988	\$	17,038,382	\$	16,772,654

During the year ended June 30, 2021, **cash and temporary investment** balances decreased \$262 million, to \$3.37 billion, reflecting capital expenditures and net cash flows for operating activities. Amounts shown as **restricted cash** consist primarily of unspent proceeds from the General Receipts Bonds, which are being used to fund various capital projects. Restricted cash balances decreased \$125 million, to \$276 million at June 30, 2021, reflecting application of bond proceeds to capital projects. The Statement of Cash Flows, which is discussed in more detail below, provides additional information on sources and uses of university cash.

Accounts receivable increased \$210 million, to \$737 million at June 30, 2021. Health System receivables were up \$105 million, reflecting an overall increase in hospital patient acuity and increased outpatient volumes. Receivables on grants and contracts increased \$86 million, driven primarily by a \$56 million in receivables on grants managed by the Office of Sponsored Programs.

The fair value of the university's **long-term investment pool** (LTIP) increased \$1.75 billion, to \$7.04 billion at June 30, 2021. The increase is primarily due to a \$1.69 billion increase in the fair value of LTIP assets, \$137 million of interest and dividend income and \$251 million of net principal additions. These increases were partially offset by \$247 million in distributions and \$80 million of expenses. The long-term investment pool operates similar to a mutual fund, in that each named fund is assigned a number of shares in the pool. It includes the gifted endowment funds of the university, gifted endowment funds of the OSU Foundation, and unrestricted funds that have been internally designated to function as endowments. The pool is invested in a diversified portfolio of equity and fixed-income securities, partnerships and hedge funds that is intended to provide the long-term growth necessary to preserve the value of these funds, adjusted for inflation, while making distributions to support the university's mission.

The university has established a **securities lending program** through its custodian bank for the long-term investment pool. Securities loaned by the university are secured by collateral in the form of cash, equity, U.S. government obligations, and foreign government/private debt. The portion of this collateral that was received in cash increased \$106 million, to \$118 million at June 30, 2021, reflecting an expansion of securities lending activity in 2021. These balances are reported in the Statement of Net Position as a current asset and a corresponding current liability.

Other long-term investments are non-unitized investments that relate primarily to gift arrangements between donors and the OSU Foundation and long-term investments of operating funds. These investments increased \$47 million, to \$348 million, at June 30, 2021, primarily due to unrealized gains and capital calls on private equity investments.

Capital assets, which include the university's land, buildings, improvements, equipment and library books, net of depreciation, grew \$568 million, to \$6.27 billion at June 30, 2021. The university depreciates its capital assets on a straight-line basis, using estimated useful lives ranging from 5 years (for computer equipment and software) to 100 years (for certain building components such as foundations).

Additions to university capital assets totaled \$1.03 billion in 2021. The Health System accounted for \$500 million of the total and includes expenditures for facilities, infrastructure improvement, land, and equipment purchases. The remaining \$532 million of university capital additions include \$60 million of equipment and library books, \$33 million related to the Workday Enterprise Resource Planning project, \$102 million related to the Comprehensive Energy Management Plan (CEMP) facility improvements and \$337 million related to improvements and renovations of various academic buildings, athletic facilities, student life facilities and other infrastructure.

The replacement of the College of Dentistry Postle Hall and Mars G. Fontana Labs Advanced Materials Corridor projects were completed during the fiscal year. New science facilities were finished at the Newark and Wooster regional campuses. The Workday Enterprise Resource Planning project went live during the fiscal year, and the new Ty Tucker Tennis Center was completed. The WOSU radio and television operation took possession of their new headquarters on High Street, and the Health Sciences Faculty Office and Optometry clinic at the corner of 11th and Neil Avenues was placed in service. The Health System completed construction of a new parking garage for the new inpatient hospital as well as a new central sterile supply facility.

The OSU Health System has major construction projects currently underway including:

- New Inpatient Hospital Construction is underway on a 1.9 million square foot, 24story inpatient hospital east of Cannon Drive. Scheduled to open in early 2026, the \$1.79 billion hospital is the largest single facilities project ever undertaken at The Ohio State University.
- Health System Outpatient Care Facilities Construction is underway or nearing completion on new outpatient care facilities in New Albany, Dublin and Powell. These comprehensive facilities are part of a new suburban outpatient care program that supports growth in the region and excellence in academic health care. Also under construction is a \$344 million West Campus outpatient facility that will include the region's first proton therapy facility.

Major academic facility projects currently underway include:

- Interdisciplinary Research Facility Construction is underway on a 305,000 square foot, five-story laboratory building on West Campus that will serve multiple research disciplines, including biomedical, life sciences, engineering and environmental sciences. Two floors will be dedicated to The Ohio State University Comprehensive Cancer Center. Scheduled for completion in 2023, the \$238 million facility will be an anchor for the university's future Innovation District.
- The Interdisciplinary Health Sciences Center This project will renovate existing facilities and construct a new building for interprofessional education through the health sciences including the college of Medicine and Optometry. Occupancy is slated for 2024.
- The Energy Advancement and Innovation Center This new facility will be a hub for Ohio State faculty members, students, alumni, researchers, local entrepreneurs and industry experts to work together on the next generation of smart energy systems, renewable energy and green mobility solutions. Opening is slated for the fall of 2023.
- Arts District Work continues on the \$165 million Arts District project on the west side of High Street between 15th and 18th avenues. Included are new facilities for

the School of Music (Timashev Family Music Building) and Department of Theatre, Film, and Media Arts.

The university's estimated future capital commitments, based on contracts and purchase orders, total approximately \$1.74 billion at June 30, 2021.

Accounts payable and accrued expenses increased \$136 million, to \$775 million at June 30, 2021, reflecting increases in payables to vendors for supplies and services.

On April 10, 2017, the university entered into a 50-year agreement to lease the university's utility system to Ohio State Energy Partners (OSEP) and grant it the exclusive right to operate the utility system and provide utility services to the Columbus campus. On July 6, 2017, the university received an upfront payment of \$1.09 billion. The upfront payment is reported as an **advance from concessionaire** and is being amortized as a reduction to operating expense (Operation and Maintenance of Plant) on a straight-line basis over the term of the agreement.

Under the agreement, OSEP operates, maintains and makes capital investments in the utility system and charges the university a Utility Fee, which includes fixed, variable and operating and maintenance (O&M) components. OSEP capital investments in the utility system are recognized as capital assets and a related **long-term payable to the concessionaire**. The fixed and O&M components of the Utility Fee are recognized as operating expense. The variable component of the Utility Fee will be recognized as a reduction in the long-term payable to the concessionaire and interest expense. The university paid \$59 million and \$56 million in total fixed and O&M utility fees for the years ended June 30, 2021 and 2020, respectively. The total amounts payable to the concessionaire increased \$94 million, to \$236 million at June 30, 2021. The \$12 million current portion of this liability is included in other current liabilities on the Statement of Net Position.

University debt, in the form of **bonds, notes and capital lease obligations**, decreased \$64 million, to \$3.04 billion at June 30, 2021. In June 2020, the university issued \$186 million in Series 2020A fixed rate bonds to refund \$227 million of its variable rate bonds. In addition, the university entered into forward-starting interest-rate swap agreements to advance refund its Series 2013A bonds. The swap agreements are effective June 2023, have a total notional amount of \$329 million and are considered effective hedges. At June 30, 2021, the fair value of the swap agreements was \$12 million and is reported as a noncurrent asset and offsetting deferred inflow of resources. At June 30, 2020, the fair value of the swap agreements was negative \$7 million and is reported as a noncurrent liability and offsetting deferred outflow of resources.

The university's plant debt includes variable rate demand bonds that mature at various dates through 2044. GASB Interpretation 1, *Demand Bonds Issued by State and Local Governmental Entities*, provides guidance on the statement of net position classification of these bonds. Under GASB Interpretation 1, outstanding principal balances on variable rate demand bonds may be classified as noncurrent liabilities if the issuer has entered into a "take-out agreement" to convert bonds "put" but not resold into some other form of long-term obligation. In the absence of such an agreement, the total outstanding principal balances for these bonds are required to be classified as current liabilities.

Although it is the university's intent to repay its variable rate demand bonds in accordance with the maturities set forth in the bond offering circulars, the university does not have "take-out agreements" in place per the GASB Interpretation 1 requirements. Accordingly, the university has classified the total outstanding principal balances on its variable rate demand bonds as current liabilities. These obligations totaled \$290 million and \$318 million at June 30, 2021 and 2020, respectively.

On September 30, 2021, the University closed on \$600,000 in tax-exempt fixed rate General Receipts Bonds - Series 2021A. The proceeds of the bonds will be used to fund construction of the Wexner Medical Center's new Inpatient Hospital, scheduled to open in 2026.

GASB Statement No. 68 requires governmental employers participating in defined benefit pension plans to recognize liabilities for plans whose actuarial liabilities exceed the plan's net assets. These liabilities are referred to as net pension liabilities. A related accounting standard, GASB Statement No. 75, requires employers participating in other post-employment benefit (OPEB) plans to recognize liabilities for plans whose actuarial liabilities exceed the plan's net assets. OPEB benefits consist primarily of post-retirement healthcare. The university participates in two multi-employer cost-sharing retirement systems, OPERS and STRS-Ohio, and is required to record a liability for its proportionate share of the net pension and OPEB liabilities of the retirement systems.

In 2021, the university's share of OPERS and STRS-Ohio net pension liabilities decreased \$346 million, to \$2.68 billion at June 30, 2021. The decrease relates primarily to OPERS net pension liabilities, which were down \$481 million, to \$1.50 billion. In calendar year 2020, OPERS realized a 12.02% return on defined benefit plan investments for the period. STRS net pension liabilities increased \$136 million, to \$1.18 billion, reflecting fiscal year 2020 STRS investment returns of 3.14%.

Deferred outflows related to pensions decreased \$106 million, to \$340 million at June 30, 2021, and deferred inflows related to pensions increased \$195 million, to \$682 million at June 30, 2021. The changes in pension deferrals relate primarily to OPERS projected vs actual investment returns. These deferrals will be recognized as pension expense in future periods.

In 2021, the university's share of OPERS and STRS-Ohio net OPEB liabilities swung from a \$1.36 billion net liability to a \$275 million net asset at June 30, 2021, primarily due to changes in OPERS benefit terms. On January 15, 2020, the OPERS Board approved several changes to the health care plan offered to Medicare and non-Medicare retirees in efforts to decrease costs and increase the solvency of the health care plan. These changes are effective January 1, 2022 and include changes to base allowances and eligibility for Medicare retirees, as well as replacing OPERS-sponsored medical plans for non-Medicare retirees with monthly allowances. These changes in benefit terms, combined with an increase in the discount rate from 3.16% to 6.00%, resulted in a \$1.63 billion reduction in the university's share of OPERS net OPEB liabilities. The university's share of STRS-Ohio net OPEB assets was stable, increasing \$7 million, to \$85 million at June 30, 2021.

Deferred outflows related to OPEB decreased \$135 million, to \$104 million at June 30, 2021, and deferred inflows related to OPEB increased \$378 million, to \$676 million at June 30, 2021.

The changes in pension deferrals relate primarily to OPERS deferrals for changes in assumptions and expected vs actual experience. These deferrals will be recognized as OPEB expense in future periods.

Total pension and OPEB expense recognized by the university decreased \$1.58 billion, to a negative (credit) of \$770 million in 2021. Total pension and OPEB expense includes employer contributions and (non-cash) expense accruals associated with the recognition of net pension and OPEB liabilities and deferrals. Total employer contributions were up \$16 million, to \$396 million in 2021. Pension and OPEB expense accruals were down \$1.59 billion, to negative \$1.17 billion.

It should be noted that, in Ohio, employer contributions to the state's cost-sharing multiemployer retirement systems are established by statute. These contributions, which are payable to the retirement systems one month in arrears, constitute the full legal claim on the university for pension and OPEB funding. Although the liabilities recognized under GASB 68 and GASB 75 meet the GASB's definition of a liability in its conceptual framework for accounting standards, they do not represent legal claims on the university's resources, and there are no cash flows associated with the recognition of net pension and OPEB liabilities, deferrals and related expense.

Deferred inflows primarily consist of changes to OPEB and pension liabilities as explained in the previous paragraphs. Other deferred inflows consist primarily of the unamortized proceeds of the parking service concession arrangement. The parking deferred inflows, which totaled \$397 million and \$407 million at June 30, 2021 and June 30, 2020, respectively, are being amortized to operating revenue on a straight-line basis over the 50-year life of the agreement. The remaining balance of deferred inflows relates to deferred gains on debt-related transactions and deferrals for irrevocable split-interest agreements.

Prior-Year Highlights: *In 2020*, cash and temporary investment balances increased \$325 million, to \$3.63 billion, primarily due to the Health System's receipt of \$275 million of Medicare Advance payments and \$143 million of Provider Relief Funds. The university's share of OPERS and STRS-Ohio net pension liabilities decreased \$690 million, to \$3.03 billion at June 30, 2020, primarily reflecting a 17.23% return in calendar 2019 on OPERS defined benefit plan investments. *In 2019*, the university's share of OPERS and STRS-Ohio net pension liabilities increased \$1.17 billion, to \$3.72 billion at June 30, 2019, primarily due to a combination of negative investment returns for OPERS and reductions in OPERS long-term assumed rate of return on pension plan investments. Cash and temporary investment balances increased \$285 million, to \$3.31 billion, primarily due to strong healthcare operating cash flows.

Statement of Revenues, Expenses and Changes in Net Position

	2021		 2020	2019	
Operating Revenues:					
Tuition and fees, net	\$	869,740	\$ 953,569	\$	969,633
Grants and contracts		784,021	743,431		732,253
Auxiliary enterprises sales and services, net		175,961	298,064		339,615
OSU Health System sales and services, net		3,952,605	3,449,681		3,432,271
Departmental sales and other operating revenues		205,905	 187,089		201,783
Total operating revenues	·	5,988,232	5,631,834		5,675,555
Operating Expenses:					
Educational and general		2,248,013	2,809,135		2,665,355
Auxiliary enterprises		206,123	320,392		361,346
OSU Health System		2,733,141	3,345,167		3,109,070
Depreciation		457,950	 425,012		413,039
Total operating expenses		5,645,227	6,899,706		6,548,810
Net operating income (loss)		343,005	(1,267,872)		(873,255
Non-operating revenues (expenses):					
State share of instruction and line-item appropriations		486,115	461,838		469,679
Gifts - current use		129,723	157,511		160,102
Net investment income		1,859,173	231,190		229,663
Federal COVID-19 assistance programs		150,037	158,058		-
Grants, interest expense and other non-operating		11,363	 19,169		(14,961
Net non-operating revenue		2,636,411	1,027,766		844,483
Income (loss) before other changes in net					
position		2,979,416	(240,106)		(28,772)
State capital appropriations		63,988	69,905		64,900
Private capital gifts		78,942	77,425		26,565
Additions to permanent endowments		63,157	63,695		45,533
Capital contributions and other changes in net position		6,923	 19,499		3,236
Total changes in net position		213,010	230,524		140,234
Increase (decrease) in net position		3,192,426	(9,582)		111,462
Net position - beginning of year		5,424,494	 5,434,076		5,322,614
Net position - end of year	\$	8,616,920	\$ 5,424,494	\$	5,434,076

Net **tuition and fees** decreased \$84 million or 9%, to \$870 million in 2021, due primarily to a decrease in gross tuition of \$88 million. Gross tuition decreased \$48 million for Autumn semester and \$53 million for Spring semester, offset by an increase of \$13 million for Summer semester. Autumn and Spring tuition decreased primarily due to decreases in non-resident fees resulting from out-of-state students choosing all online instruction. The increase in Summer tuition reflects a shift back to in-person instruction.

Operating **grant and contract revenues** increased \$41 million, to \$784 million, reflecting increases in federal grants of \$37 million. Grants managed by the Office of Sponsored Programs increased \$7 million.

Total **auxiliary revenues** decreased \$122 million, to \$176 million, due primarily to revenue losses associated with the postponement of fall sports of \$85 million, decreases in Student Life housing and dining revenues of \$32 million, and decreases in Business Advancement (Schottenstein Center, Blackwell, and Fawcett Center) revenues of \$17 million. These

revenue reductions were partially offset by an \$11 million decrease in scholarship allowances attributable to room and board. **Auxiliary expenses** decreased \$114 million, to \$206 million, primarily due to decreases in year-end accruals for pension and other post-employment benefits of \$70 million, Athletics expenses of \$34 million, and Business Advancement (Schottenstein Center and Blackwell) expenses of \$11 million.

Educational and general expenses decreased \$561 million to \$2.25 billion in 2021, primarily due to a \$576 million reduction in allocated pension and OPEB expense. Additional details are provided below.

	2021		2020	2019		
Instruction and departmental research	\$ 1,050,943	\$	1,051,376	\$	1,038,290	
Separately budgeted research	497,923		505,290		492,81	
Public service	170,867		176,889		176,38	
Academic support	252,353		223,552		223,17	
Student services	80,175		89,162		93,40	
Institutional support	356,154		355,179		246,30	
Operation and maintenance of plant	118,406		117,727		123,12	
Scholarships and fellowships	147,269		139,622		127,76	
Non-cash accruals for pensions and other postemployment benefits	 (426,078)		150,338		144,08	
Total educational and general expense	\$ 2,248,013	\$	2,809,135	\$	2,665,35	

Most E&G expenditure categories were flat in 2021, reflecting expenditure controls implemented in response to the outbreak of COVID-19. Ohio State instituted a hiring pause on April 1, 2020. The university also temporarily paused the annual merit compensation increase process and instituted pauses in off-cycle salary increases. Restrictions on university travel and a review of all non-essential spending such as supplies, equipment purchases, conferences and membership expenses led to additional savings. These savings were offset by COVID-19-related operational expenses of \$75 million and disbursement of federal emergency aid to students.

Health System operating revenues increased \$503 million, to \$3.95 billion in 2021, reflecting increases in hospital patient acuity and growth in outpatient volumes. Operating expenses (excluding depreciation, interest and transfers) decreased \$612 million to \$2.73 billion, primarily due to a \$948 million swing in expenses associated with pension and OPEB accruals. Excluding pension and OPEB, Health System operating expenses increased \$318 million. An in-depth look at the Health System, as presented in their stand-alone financial statements, is provided below.

In total, the Health System operates nearly 1,500 inpatient beds and serves as a major tertiary and quaternary referral center for Ohio and the Midwest. The Wexner Medical Center delivers superior patient care, quality outcomes, and patient safety and has been recognized by US News and World Report for 29 consecutive years as one of "America's Best Hospitals." and is ranked first in Central Ohio. The Health System is recognized as a national leader in ten specialties including: Cancer, Cardiology & Heart Surgery, Diabetes & Endocrinology, Ear,

Nose & Throat, Gastroenterology and GI Surgery, Gynecology, Neurology & Neurosurgery, Pulmonary and Lung Surgery, Rehabilitation, and Urology. The Ear, Nose & Throat program ranked eighth in the United States. The Geriatrics specialty, along with 13 procedures and conditions, was ranked as high performing.

The Health System is also proud to be the first in central Ohio to have a hospital achieve Magnet Recognition, one of the highest honors awarded for nursing excellence. The Ross Heart Hospital, University Hospital, and The James are all designated Magnet hospitals. The Ohio State University Wexner Medical Center has more "Top Doctors" than any other central Ohio hospital. Wexner Medical Center physicians were selected by Castle Connolly because they are among the very best in their specialties.

Suspended operations due to the Covid-19 pandemic resulted in decreases in revenues and patient care volumes significantly below budget projections in 2020. In 2021, the Health System experienced recovery in surgical and procedural volumes. Total surgical volume increased 13.4% compared to 2020. Hospital admissions saw a slight growth in 2021 however the Health System experienced an increase of 8.7% in the acuity of the patient in the hospital leading to strong results in operations for the year.

Approximately 88% of total operating revenues are from patient care activities. Other Operating Revenues include revenue from reference labs, cafeteria operations, rental agreements and other non-patient services. Due to the increasing complexity and significantly growing number of specialty oral and self-administered pharmaceuticals available for cancer and non-cancer patients, the Health System operates a Specialty Retail Pharmacy dedicated to improving patient care by easing the challenges of managing medications. The Specialty Retail Pharmacy contributed \$204.9 million to Health System operating revenues in 2021 and \$166.7 million 2020.

Other Operating Revenues also includes a portion of the margin shared with Nationwide Children's Hospital for the management of the Neonatal Intensive Care Unit located at the Heath System. The goal of this managed unit is to standardize the care and quality outcomes of all the neonatal patients in Central Ohio. The NICU contributed \$13.9 million of operating revenues in 2021 and \$17.8 million in 2020. In 2019, the Health System enrolled in the Care Innovation and Community Improvement Program (CICIP). CICIP was developed to increase alignment of quality improvement strategies and goals between the State, Managed Care Organizations (MCO), and both public and nonprofit hospital agencies. The Health System recognized \$70.2 million in Other Operating Revenues related to CICIP in 2021 and \$52.6 million in 2020.

Operating expenses decreased \$679.2 million or 20.2% from 2020 to 2021, primarily due to expenses associated with pension and OPEB accruals, which swung from a positive \$264 million in 2020 to a negative \$679 million in 2021. Excluding pension and OPEB accruals, Health System operating expenses increased \$264 million. Salaries and benefits increased \$61 million, reflective of the recovery of volume due to the Covid-19 pandemic. Supplies and drugs increased \$151.4 million or 15.9%. The increase in supplies was a result of a strong transplant year for heart and lung as well as an increase in intensity for surgical and procedural volume. The Health System performed approximately 483,000 Covid-19 tests that resulted in

increased lab costs for the system. The increase in drugs is due to strong volumes at the James as well as the Specialty Retail Pharmacy. Purchased services grew \$34.9 million or 8.9% in 2021 reflecting increased hospital franchise fees as well as higher cleaning and advertising costs. The increase in hospital franchise fees is a result of additional assessments due to Covid-19 related emergency spending measures.

The Health System is continuing its vision to deliver unparalleled care and meet anticipated future growth, embarking on a plan to expand its care with new, large outpatient care facilities planned for New Albany, Dublin, and Powell. A new inpatient hospital scheduled to open in early 2026 will be a 1.9 million square foot facility and the largest single facilities project ever undertaken at The Ohio State University. The new tower will enhance research, clinical training and patient care. The hospital will have up to 820 beds in private rooms, 60 neonatal intensive care unit bassinets, 24 floors, an emergency department, imaging suites, operating rooms and critical care and medical/surgical beds. The Health System will continue creating an innovative healthcare delivery model to deliver high value care with an unparalleled patient experience and access. By pushing the boundaries of discovery and knowledge, The Ohio State University Wexner Medical Center will solve significant problems and deliver unparalleled care.

Consolidated revenues for **OSU Physicians, Inc.** (OSUP), the University's central practice group for physician faculty members of the College of Medicine and Public Health, increased \$64 million, to \$648 million in 2021. Net patient care revenue increased \$49 million, reflecting the lifting of coronavirus restrictions and the resumption of services provided by OSUP. Other revenues increased \$15 million, primarily due to increases in university operating support. Consolidated operating expenses increased \$40 million, to \$603 million in 2021. Approximately \$40 million of the increase came from physician and other provider related costs which was primarily due to new physicians and other providers entering the practice during fiscal year 2021. Staff salaries and benefits increased \$1 million, reflecting an increase in staff FTEs. Non-operating income (expense) for OSUP decreased \$20 million, primarily due to \$12 million in Provider Relief Funds received and recognized as revenue in 2020. OSUP balances are included in the Discretely Presented Component Units columns of the university's financial statements.

Total state operating support increased \$24 million, to \$486 million, reflecting increases in state **share of instruction** (SSI). Total SSI for 2021 was \$401 million, a 6% increase over final 2020 distributions. In response to the impact of the COVID-19 pandemic on economic activity, the State of Ohio implemented a number of cost containment measures, including reductions in SSI appropriations for the final two months of 2020. **State line-item appropriations** were stable in 2021, increasing \$1 million to \$85 million. **State capital appropriations** decreased \$6 million, to \$64 million.

In response to the COVID-19 outbreak, the federal government has provided support to individuals, companies and non-profit institutions in the form of loans, grants, tax changes and other types of relief. The university recognized revenues totaling \$150 million for **federal COVID-19 assistance programs** in 2021, including \$59 million of CARES institutional grants, \$25 million of CARES emergency grants to students, \$42 million of Coronavirus Relief Funds from the State of Ohio, and \$16 million in FEMA Public Assistance funds provided to the Health

System. In 2020, the university recognized revenues totaling \$158 million for federal COVID-19 assistance, including \$143 million of Provider Relief Funds for the Health System and \$14 million of CARES emergency grants to students. Amounts provided to the university under these grant programs are recognized as non-operating revenues in the Statement of Revenues, Expenses and Changes in Net Position as eligibility requirements are met. In addition to the Provider Relief Funds, the Health System received \$275 million in 2020 under the **Medicare Accelerated and Advance Payment Program.** These amounts are considered short-term loans, and repayments began in 2021. Current liabilities for advance payments provided to the Health System totaled \$255 million and \$275 million at June 30, 2021 and 2020, respectively.

Total **gifts** to the university decreased \$27 million, to \$272 million in 2021. Several colleges and support units received gifts in excess of \$1 million in 2021, including Veterinary Medicine, the College of Food, Agricultural and Environmental Sciences, University Hospitals, the James Cancer Hospital and Research Institute, the Comprehensive Cancer Center, the College of Medicine, the College of Arts and Sciences, the College of Engineering, Fisher College of Business, Moritz College of Law, General University Scholarships and the Department of Athletics. Support came from more than 194,000 alumni and friends.

University investments yielded \$1.86 billion of **net investment income** in 2021, compared with \$231 million in 2020. For 2021, the LTIP returned +29.2% compared to +1.1% in 2020. In 2021, the LTIP was above benchmark for all asset classes after having lagged the benchmark across all asset classes in 2020.

For 2021, the Global Equity allocation returned +41.0% which outperformed on a relative basis to the MSCI ACWI benchmark, which recorded a +39.3% result, by +1.7% for the year. The LTIP's Global Fixed Income allocation outperformed compared to the US Aggregate Bond benchmark, generating a +7.7% return versus -0.3% for the benchmark. The Real Assets allocation returned +11.0%, outperforming the CPI +5% return of +10.1% for the year.

Prior-Year Highlights: *In 2020*, total net position was stable, decreasing \$10 million, to \$5.42 billion at June 30, 2020. Federal assistance provided under the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the implementation of expenditure controls offset a significant portion of the revenue losses from suspended operations. Health System operating revenues were relatively stable in 2020, increasing \$17 million, to \$3.45 billion. University investments yielded \$231 million of net investment income in 2020, compared with \$230 million in 2019. *In 2019*, Health System operating revenues grew \$328 million, to \$3.43 billion. Growth in surgical cases, increased chemotherapy and pharmaceutical volumes and increased bed capacity contributed to the growth in operating revenue. Educational and general expenses increased \$667 million, to \$2.67 billion in 2019, primarily due to a \$557 swing in expenses associated with pension and other post-employment benefit (OPEB) liabilities. University investments yielded \$230 million of net investment income in 2019, down from \$439 million in 2018. Total net position increased \$112 million, to \$5.43 billion at June 30, 2019, primarily due to strong Health System operating results.

Statement of Cash Flows

University Cash Flows Summary (in thousands)	2021		2020	2019		
Net cash flows used in operating activities	\$ (402,268)	\$	(4,234)	\$	(7,757)	
Net cash flows from noncapital financing activities	889,559		934,803		779,439	
Capital appropriations and gifts for capital projects	145,499		104,855		99,114	
Payments for purchase or construction of capital assets	(891,524)		(739,379)		(604,717)	
Principal and interest payments on capital debt and leases, net of federal Build America Bond interest subsidies	(184,739)		(180,250)		(180,138)	
Net cash flows provided (used) in investing activities	(849,008)		68,118		(1,128)	
Net increase (decrease) in cash and cash equivalents	\$ (1,292,481)	\$	183,913	\$	84,813	

University cash and cash equivalents decreased \$1.29 billion in 2021. Net cash used in operating activities was \$402 million, compared to \$4 million in 2020. The decrease relates primarily to the 2020 receipt of \$275 million in Medicare Advance Payment Program funds by the Health System and 2021 increases in Health System payments for compensation and supplies and services. Net cash flows from noncapital financing activities decreased \$45 million, to \$890 million, reflecting a decrease in current-use gift receipts. Payments for purchase or construction of capital assets increased \$152 million, to \$892 million, primarily due to increases in Health System capital expenditures. Cash used by investing activities was \$849 million, reflecting net purchases of temporary investments.

Economic Factors That Will Affect the Future

Ohio State continues to mount a comprehensive response to the COVID-19 pandemic, both to support the health and safety of the university community and as part of its role as a leading national flagship public research university. Ohio State experts supported the State of Ohio's response, and the Wexner Medical Center was at the forefront of addressing patient care needs. The university plans to reactivate campus in Autumn 2021 with increased in-person activity while maintaining an active focus on COVID-19.

Dr. Kristina M. Johnson became the 16th university president in August 2020 amid the pandemic. In her first State of the University address, President Johnson announced a commitment to four areas of excellence: academic, research and creative expression, entrepreneurship and partnerships, and service to the State of Ohio, the nation and the world.

The university's FY2022 Financial Plan reflects these new initiatives and enhances the university's strategic plan with a focus on the following areas:

- Academic Excellence The university plans to increase the number of tenure track faculty by up to 350 over the next ten years. At the same time, the university will invest \$4 million in the Drake Institute for Teaching and Learning to extend best practices in instruction.
- Excellence in Research and Creative Expression Dr. Grace Wang, Executive Vice President for Research, Innovation, and Knowledge Enterprise (ERIK), will lead an initiative to double research expenditures over the next decade. The FY2022 Financial Plan includes operating investments totaling at least \$35 million in academic and research initiatives. Additional capital investments will also be made in this area.
- Excellence in Entrepreneurship and Partnership ERIK will also serve as a hub
 on which to build external relationships that will help grow the university's portfolio
 of federally funded research and expand strategic partnerships with industry. Among
 the community partnerships for the university's Innovation District is an \$87.5 million
 commitment from JobsOhio.
- Excellence in Service to the State of Ohio, the Nation and the World To best serve the economic and personal prosperity of the region and the State of Ohio, the university is on track to provide opportunities for students to achieve a "debt-free bachelor's degree" within the decade. Since FY2016, the university has added more than \$200 million in new need-based student aid. In FY2022, the university will invest more than \$53 million in three programs: The Buckeye Opportunity Program, President's Affordability Grants, and the Land Grant Opportunity Program. A fifth incoming class of Ohio students will enter under the Ohio State Tuition Guarantee, which locks in rates for tuition, mandatory fees and room and board for four years.

The Wexner Medical Center continues to reinvest projected margin in patient care and capital planning to support growing demand. Strategic growth initiatives include the opening of new outpatient care facilities in New Albany, Dublin and on the university's West Campus. The West Campus outpatient facility, slated to open in 2023, will include central Ohio's first proton therapy facility, in partnership with Nationwide Children's Hospital. Also planned to open in 2023 on West Campus is an Interdisciplinary Research Facility, which will service a variety of research disciplines, including the OSU Comprehensive Cancer Center. Construction is also underway on a new 1.9 million square foot Inpatient Hospital, scheduled to open in 2026.

To safeguard the university's resources during the pandemic, the university set FY2021 savings efficiency goals of \$175 million for the university, \$77.6 million for the Wexner Medical Center and \$45 million for capital expenditures. The university exceeded these savings goals. Targets for FY2022 efficiency savings total \$90 million, including \$35 million for university, \$30 for Wexner Medical Center and \$25 million for capital.

The impact of COVID-19 on university finances and operations may continue to be felt for at least the coming (FY2022) fiscal year, depending on vaccination rates and whether the COVID-19 virus or variations of the virus continue to spread in the United States and around the world. Future adverse consequences of the COVID-19 pandemic may include, but are not limited to: a decline in enrollment (including a disproportional decline in enrollment by international students); a decline in demand for university housing; a decline in demand for university programs that involve travel or that have international connections; cancellation, postponement and/or reduced attendance for athletic events; and an increase in costs associated with purchasing of personal protective equipment and implementing community-wide testing programs. University management continues to monitor the course of the pandemic and is prepared to take additional measures to protect the health of the university community and promote the continuity of its academic mission.

Cautionary Note Regarding Forward-Looking Statements

Certain information provided by the university, including written as outlined above or oral statements made by its representatives, may contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995.

All statements, other than statements of historical facts, which address activities, events or developments that the university expects or anticipates will or may occur in the future contain forward-looking information.

In reviewing such information, it should be kept in mind that actual results may differ materially from those projected or suggested in such forward-looking information. This forward-looking information is based upon various factors and was derived using various assumptions. The university does not undertake to update forward-looking information contained in this report or elsewhere to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking information.

THE OHIO STATE UNIVERSITY STATEMENTS OF NET POSITION June 30, 2021 and June 30, 2020 (in thousands)

		mary	Discretely F	otal versity		
	2021	tution 2020	Compone 2021	2020	2021	2020
ASSETS AND DEFERRED OUTFLOWS:						2020
Current Assets:						
Cash and cash equivalents	\$ 677,386	\$ 1,844,446	\$ 260,758	\$ 186,705	\$ 938,144	\$ 2,031,151
Temporary investments	2,693,789	1,788,581	1,614	15,135	2,695,403	1,803,716
Accounts receivable, net Notes receivable - current portion, net	736,500 25,231	526,682 25,231	69,268	56,555 424	805,768 25,231	583,238 25,655
Pledges receivable - current portion, net	63,799	79,240	-	-	63,799	79,240
Accrued interest receivable	19,848	21,274	_	-	19,848	21,274
Inventories and prepaid expenses	150,576	170,732	4,623	4,279	155,199	175,011
Investments held under securities lending program	118,266	12,092	-	-	118,266	12,092
Amounts due from (to) primary institution	(75,422)	(26,376)	75,422	26,376		
Total Current Assets	4,409,973	4,441,902	411,685	289,474	4,821,658	4,731,377
Noncurrent Assets:						
Restricted cash	276,243	401,664	-	_	276,243	401,664
Notes receivable, net	36,766	51,425	800	850	37,566	52,275
Pledges receivable, net	97,441	59,248	-	-	97,441	59,248
Net other post-employment benefit asset	275,182	77,901	-	-	275,182	77,901
Long-term investment pool	7,041,973	5,287,131	-	-	7,041,973	5,287,131
Other long-term investments	348,227	301,676		-	348,227	301,676
Other noncurrent assets	202,911	-	1,222	-	204,133	-
Capital assets, net Total Noncurrent Assets	6,267,672 14,546,415	5,700,078 11,879,123	<u>296,209</u> 298,231	243,277 244,127	6,510,934 14,791,699	5,922,015
Total Noriculient Assets	14,540,415	11,079,123	290,231	244,127	14,791,099	12,101,910
Total Assets	18,956,388	16,321,025	709,916	533,601	19,613,357	16,833,287
Deferred Outflows:						
Pension	339,679	445,769	-	-	339,679	445,769
Other post-employment benefits	104,182	239,629	-	-	104,182	239,629
Other deferred outflows Total Deferred Outflows	23,739 467,600	31,959 717,357			23,739 467,600	31,959 717,357
			r 700.040	ф F00 C04		
Total Assets and Deferred Outflows	\$ 19,423,988	\$ 17,038,382	\$ 709,916	\$ 533,601	\$ 20,080,957	\$ 17,550,644
LIABILITIES, DEFERRED INFLOWS AND NET POSITION:						
Current Liabilities:	0 774.044	A 000 750	ф 00 F00	A 00.077	r 000 407	£ 000.007
Accounts payable and accrued expenses	\$ 774,841 254.854	\$ 638,750	\$ 33,586	\$ 30,877	\$ 808,427 265.045	\$ 669,627 287.500
Medicare advance payment program Deposits and advance payments for goods and services	371,040	274,915 268,481	10,191 4,742	12,585 3,141	375,782	271,622
Current portion of bonds, notes and leases payable	62,746	57,002	1,455	1,607	64,201	58,608
Long-term bonds payable, subject to remarketing	289,970	317,715	-, 100	-	289,970	317,715
Liability under securities lending program	118,266	12,092	_	_	118,266	12,092
Other current liabilities	110,847	108,209	11,801	9,153	122,648	117,362
Amounts due to (from) primary institution - current	(135,230)	(31,628)	135,230	31,628	-	· -
Total Current Liabilities	1,847,334	1,645,536	197,005	88,991	2,044,339	1,734,526
Noncurrent Liabilities:						
Bonds, notes and leases payable	2,690,587	2,732,098	14,911	16,290	2,705,498	2,748,388
Concessionaire payable	223,721	134,362	-	-	223,721	134,362
Net pension liability	2,679,333	3,025,029	-	-	2,679,333	3,025,029
Net other post-employment benefit liability	22,683	1,459,572	-	-	22,683	1,459,572
Compensated absences	214,428	210,158	-	-	214,428	210,158
Self-insurance accruals	85,083	87,928	-	-	85,083	87,928
Amounts due to third-party payors - Health System	90,403	60,516	-	-	90,403	60,516
Irrevocable split-interest agreements Refundable advances for Federal Perkins loans	36,328	31,853 29.695	-	-	36,328	31,853
Advance from concessionaire	26,005 980,953	1,002,769	-	-	26,005 980,953	29,695 1,002,769
Other noncurrent liabilities	283.643	104.255	59.960	39.215	290,656	122.132
Amounts due to (from) primary institution - noncurrent	(169.670)	(131,278)	169,670	131,278	-	-
Total Noncurrent Liabilities	7,163,497	8,746,957	244,541	186,783	7,355,091	8,912,402
Total Liabilities	9,010,831	10,392,493	441,546	275,774	9,399,430	10,646,928
				<u> </u>		.,,
Deferred Inflows: Parking service concession arrangement	397,283	406,914	_	_	397,283	406,914
Pension	682,490	487,347	_	_	682,490	487,347
Other post-employment benefits	675,698	298,463	_	_	675,698	298,463
Other deferred inflows	40,766	28,671	_	_	40,766	28,671
Total Deferred Inflows	1,796,237	1,221,395			1,796,237	1,221,395
Not Position						
Net Position: Net investment in capital assets	3,471,509	3,010,095	271,367	216,111	3,742,876	3,226,206
Restricted:	.,,	-,	-	-,	-,,	-,,
Nonexpendable	1,789,304	1,622,782	-	-	1,789,304	1,622,782
Expendable	2,030,928	1,125,359	.		2,030,928	1,125,359
Unrestricted	1,325,179	(333,742)	(2,997)	41,716	1,322,182	(292,026)
Total Net Position	8,616,920	5,424,494	268,370	257,827	8,885,290	5,682,321
Total Liabilities, Deferred Inflows and Net Position	19,423,988	17,038,382	709,916	533,601	20,080,957	17,550,644
			<u> </u>			

THE OHIO STATE UNIVERSITY STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION Years ended June 30, 2021 and June 30, 2020 (in thousands)

(in thousands)				Presented	Total			
	Insti	tution	Compone	ent Units 2020	Univ	ersity		
Operating Revenues:	2021	2020	2021	2020	2021	2020		
Student tuition and fees (net of scholarship	\$ 869,740	\$ 953,569	\$ -	\$ -	\$ 869,740	\$ 953,569		
allowances of \$234,727 and \$238,920, respectively) Federal grants and contracts	407,404	369,977	18,969	12,946	426,373	382,923		
State grants and contracts	76,611	78,217	10,909	12,940	76,611	78,217		
Local grants and contracts	27,538	27,015	_	_	27,538	27,015		
Private grants and contracts	272,468	268,222	37,461	39,852	309,929	308,074		
Sales and services of educational departments	168,707	142,389	10,053	9,354	178,760	151,743		
Sales and services of auxiliary enterprises (net of scholarship allowances of \$26,375 and \$39,982, respectively)	175,961	298,064	-	-	175,961	298,064		
Sales and services of the OSU Health System, net	3,952,605	3,449,681	-	-	3,952,605	3,449,681		
Sales and services of OSU Physicians, Inc., net	-	-	647,601	584,222	647,601	584,222		
Other operating revenues	37,198	44,700			37,198	44,700		
Total Operating Revenues	5,988,232	5,631,834	714,084	646,374	6,702,316	6,278,208		
Operating Expenses: Educational and General:								
Instruction and departmental research	957,504	1,096,254	7,782	8,821	965,286	1,105,075		
Separately budgeted research	436,886	537,912	21,110	15,923	457,996	553,835		
Public service	139,588	187,854	6,209	12,243	145,797	200,097		
Academic support	190,097	250,674	-	-	190,097	250,674		
Student services	52,086	95,070	-	-	52,086	95,070		
Institutional support	229,993	378,552	22,345	20,367	252,338	398,919		
Operation and maintenance of plant	95,672	122,449	717	741	96,389	123,190		
Scholarships and fellowships	146,187	140,370	-	-	146,187	140,370		
Auxiliary enterprises	206,123	320,392	-	-	206,123	320,392		
OSU Health System	2,733,141	3,345,167	-	-	2,733,141	3,345,167		
OSU Physicians, Inc.	-	-	603,324	563,200	603,324	563,200		
Depreciation	457,950	425,012	12,754	10,272	470,704	435,284		
Total Operating Expenses	5,645,227	6,899,706	674,241	631,567	6,319,468	7,531,273		
Net Operating Income (Loss)	343,005	(1,267,872)	39,843	14,807	382,848	(1,253,065)		
Non-operating Revenues (Expenses):								
State share of instruction and line-item appropriations	486,115	461,838	-	-	486,115	461,838		
Federal subsidies for Build America Bonds interest	10,790	10,987	-	-	10,790	10,987		
Federal non-exchange grants	66,124	61,531	-	- 44 005	66,124	61,531		
Federal COVID-19 assistance programs	150,037	158,058	-	11,805	150,037	169,863		
State non-exchange grants Gifts	13,246 129,723	14,702 157,511	-	-	13,246 129,723	14,702 157,511		
Net investment income	1,859,173	231,190	1.753	1,925	1,860,926	233,115		
Interest expense on plant debt	(125,687)	(116,379)	(1,549)	(1,531)	(127,236)	(117,910)		
Other non-operating revenues (expenses)	46,890	48,328	(30,445)	(13,110)	16,445	35,218		
Net Non-operating Revenue	2,636,411	1,027,766	(30,241)	(911)	2,606,170	1,026,855		
Income (Loss) before Changes in Net Position	2,979,416	(240,106)	9,602	13,896	2,989,018	(226,210)		
Changes in Net Position:								
State capital appropriations	63,988	69,905	-	-	63,988	69,905		
Private capital gifts	78,942	77,425	-	-	78,942	77,425		
Additions to permanent endowments	63,157	63,695	-	-	63,157	63,695		
Capital contributions and changes in net position	6,923	19,499	941	5,079	7,864	24,578		
Total Changes in Net Position	213,010	230,524	941	5,079	213,951	235,603		
Increase (Decrease) in Net Position	3,192,426	(9,582)	10,543	18,975	3,202,969	9,393		
Net Position - Beginning of Year:	5,424,494	5,434,076	257,827	238,852	5,682,321	5,672,928		
Net Position - End of Year	\$ 8,616,920	\$ 5,424,494	\$ 268,370	\$ 257,827	\$ 8,885,290	\$ 5,682,321		

The accompanying notes are an integral part of these financial statements.

THE OHIO STATE UNIVERSITY STATEMENTS OF CASH FLOWS Years Ended June 30, 2021 and June 30, 2020 (in thousands)

(in thousands)							
	Prima	•	Discretely Pr			Total	
-	Institut 2021	2020	Componen 2021	2020	_	Univers 2021	2020
-				2020	-		
Cash Flows from Operating Activities: Tuition and fee receipts \$	750.007 6	000 750 6	•		\$	750 007 ¢	000 750
	758,837 \$	838,750 \$	- \$	-	Ф	758,837 \$	838,750
Grant and contract receipts	746,479	764,850	77,991	67,488		824,470	832,338
Receipts for sales and services	4,227,793	3,981,772	599,436	595,501		4,827,229	4,577,273
Payments to or on behalf of employees	(2,771,435)	(2,672,926)	(435,974)	(421,493)		(3,207,409)	(3,094,419)
University employee benefit payments	(784,093)	(721,606)	(98,310)	(93,854)		(882,403)	(815,460)
Payments to vendors for supplies and services	(2,419,832)	(2,080,763)	(24,650)	(78,502)		(2,444,482)	(2,159,265)
Payments to students and fellows	(133,905)	(165,171)	-	-		(133,905)	(165,171)
Student loans issued	(3,764)	(3,249)	-	-		(3,764)	(3,249)
Student loans collected	9,778	9,061	-	-		9,778	9,061
Student loan interest and fees collected	911	1,949	-	-		911	1,949
Other receipts (payments)	(33,037)	43,099	118,493	69.140	_	(33,037)	43,099
Net cash provided (used) by operating activities	(402,268)	(4,234)	118,493	69,140	_	(283,775)	64,906
Cash Flows from Noncapital Financing Activities:							
State share of instruction and line-item appropriations	486,115	461,838	-	-		486,115	461,838
Non-exchange grant receipts	79,370	76,233	-	-		79,370	76,233
Federal COVID-19 assistance programs	144,286	158,058	-	11,805		144,286	169,863
Gift receipts for current use	93,413	148,904	-	-		93,413	148,904
Additions to permanent endowments	63,157	63,695	-	-		63,157	63,695
Drawdowns of federal direct loan proceeds	310,679	332,591	-	-		310,679	332,591
Disbursements of federal direct loans to students	(312,319)	(330,524)	-	-		(312,319)	(330,524)
Amounts received from irrevocable split-interest agreements	10,192	5,187	-	-		10,192	5,187
Amounts paid to annuitants and life beneficiaries	(2,063)	(1,797)	-	-		(2,063)	(1,797)
Agency funds receipts	5,052	4,549	-	-		5,052	4,549
Agency funds disbursements	(4,546)	(5,564)	-	-		(4,546)	(5,564)
Other receipts	16,223	21,633	8,784	5,838		25,007	27,471
Net cash provided by noncapital financing activities	889,559	934,803	8,784	17,643	-	898,343	952,446
Cash Flows from Capital Financing Activities:					_		
Proceeds from capital debt	-	_	1,596	12,003		1,596	12,003
State capital appropriations	67,302	71,605	-	-		67,302	71,605
Gift receipts for capital projects	78.197	33,250	_	_		78,197	33.250
Payments for purchase or construction of capital assets	(891,524)	(739,379)	(66,540)	(55,221)		(958,064)	(794,600)
Principal payments on capital debt and leases	(70,566)	(68,343)	(1,191)	(2,934)		(71,757)	(71,277)
Interest payments on capital debt and leases	(124,963)	(117,234)	(1,531)	(1,501)		(126,494)	(118,735)
Federal subsidies for Build America Bonds interest	10,790	5,327	-	-		10,790	5,327
Net cash (used) by capital financing activities	(930,764)	(814,774)	(67,666)	(47,653)	-	(998,430)	(862,427)
Cash Flows from Investing Activities:					_		
Net (purchases) sales of temporary investments	(882,182)	(27,789)	13,852	(12,550)		(868,330)	(40,339)
Proceeds from sales and maturities of long-term investments	3,648,843	3,122,487	-	13,926		3,648,843	3,136,413
Investment income, net of related expenses	370,290	142,413	590	2,046		370,880	144,459
Purchases of long-term investments	(3,985,959)	(3,168,993)	-	-		(3,985,959)	(3,168,993)
Net cash provided (used) by investing activities	(849,008)	68,118	14,442	3,422	-	(834,566)	71,540
Net Increase (Decrease) in Cash	(1,292,481)	183,913	74,053	42,552	-	(1,218,428)	226,465
Cash and Cash Equivalents - Beginning of Year	2,246,110	2,062,197	186,705	144,153		2,432,815	2,206,350
Cash and Cash Equivalents - End of Year \$	953,629 \$	2,246,110 \$	260,758 \$	186,705	\$	1,214,387 \$	2,432,815
· · · · · · · · · · · · · · · · · · ·		 *-			-	 *_	

THE OHIO STATE UNIVERSITY STATEMENTS OF CASH FLOWS, Cont'd Years Ended June 30, 2021 and June 30, 2020 (in thousands)

(Primary Institution		Discretely Presented Component Units			Total University		
	_	2021	2020	2021	2020	_	2021	2020	
Reconciliation of Net Operating Income (Loss) to Net Cash Used by Operating Activities:	_								
Operating income (loss)	\$	343,005 \$	(1,267,872) \$	39,844 \$	14,807	\$	382,849 \$	(1,253,065)	
Adjustments to reconcile net operating income (loss)									
to net cash provided (used) by operating activities:									
Depreciation expense		457,950	425,012	12,754	10,272		470,704	435,284	
Changes in assets and liabilities:									
Accounts receivable, net		(211,658)	110,490	(11,496)	4,735		(223,154)	115,225	
Notes receivable, net		5,359	(4,743)	474	2,188		5,833	(2,555)	
Accrued interest receivable		(648)	28	-	-		(648)	28	
Inventories and prepaid expenses		20,156	(37,208)	(345)	364		19,811	(36,844)	
Amounts due to/from primary institution		(92,948)	(27,036)	54,945	5,603		(38,003)	(21,433)	
Net other post-employment benefit asset		(197,281)	(3,381)	-	-		(197,281)	(3,381)	
Deferred outflows		234,551	448,217	-	24		234,551	448,241	
Other noncurrent assets		(190,622)	-	(665)	-		(191,287)	-	
Accounts payable and accrued liabilities		159,506	84,258	3,146	4,726		162,652	88,984	
Medicare advance payment program		(20,061)	274,915	(2,394)	12,585		(22,455)	287,500	
Self-insurance accruals		(2,845)	5,421	-	-		(2,845)	5,421	
Amounts due to third-party payors - Health System		29,887	11,142	-	-		29,887	11,142	
Deposits and advanced payments		115,655	(25,440)	1,600	806		117,255	(24,634)	
Compensated absences		4,270	32,486	-	-		4,270	32,486	
Refundable advances for Federal Perkins loans		(3,690)	(3,783)	-	-		(3,690)	(3,783)	
Advance from concessionaire		(21,816)	(21,786)	-	-		(21,816)	(21,786)	
Net pension liability		(345,696)	(690,029)	-	(136)		(345,696)	(690,165)	
Net other post-employment benefit liability		(1,436,889)	120,189	-	(60)		(1,436,889)	120,129	
Deferred inflows		562,747	548,207	-	(13)		562,747	548,194	
Other liabilities	_	188,800	16,679	20,630	13,239		209,430	29,918	
Net cash provided (used) by operating activities	\$_	(402,268) \$	(4,234) \$	118,493 \$	69,140	\$	(283,775) \$	64,906	
Non Cash Transactions:									
Construction in process in accounts payable	\$	47,852 \$	33,503 \$	9,414 \$	9,534	\$	57,266 \$	43,037	
Construction in process in concessionaire payable		101,507	102,867	-	-		101,507	102,867	
Capital lease		11,316	10,970	-	-		11,316	10,970	
Stock gifts		19,473	19,306	-	-		19,473	19,306	
Net increase (decrease) in fair value of investments		1,487,302	88,869	1,064	(248)		1,488,366	88,621	
Forgiveness of debt		-	-	278	- '		278	-	
Bond refunding placed in escrow		-	232,024	-	-		-	232,024	

The accompanying notes are an integral part of these financial statements.

NOTE 1 — SUMMARY OF SIGNIFICANT ACCOUNTING AND REPORTING POLICIES

Organization

The Ohio State University (the "university") is a land grant institution created in 1870 by the Ohio General Assembly under provisions of the Morrill Act. The university is one of several state-supported universities in Ohio. It is declared by statute to be a body politic and corporate and an instrumentality of the State.

The university is governed by a Board of Trustees which is granted authority under Ohio law to do all things necessary for the proper maintenance and continual successful operation of the university. Trustees are appointed by the governor, with the advice and consent of the state Senate. In 2005, the Ohio General Assembly voted to expand the Board from 11 to 17 members. The standard term for voting members of the Board is nine years. The Board also includes two non-voting student trustees who are appointed to two-year terms.

In 2009, the Board appointed its first charter trustee, which expanded the Board to 18 members. A maximum of three charter trustees may be appointed and removed by a vote of the Board. Charter trustees, who must be non-Ohio residents, are appointed to three-year terms and do not have voting privileges.

The Board of Trustees has responsibility for all the university's financial affairs and assets. The university operates largely on a decentralized basis by delegating this authority to its academic and support departments. The Board must approve the annual budgets for unrestricted academic and support functions, departmental earnings operations and restricted funds operations, but these budgets are managed at the department level.

Basis of Presentation

The accompanying financial statements present the accounts of the following entities, which constitute the primary government for financial reporting purposes:

- The Ohio State University and its hospitals and clinics
- Ohio Agricultural Research and Development Center
- The Ohio Technology Consortium (OH-TECH)

In addition, these financial statements include component units -- legally separate organizations for which the university is financially accountable. Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity,* as amended by Statement No. 61, *The Financial Reporting Entity: Omnibus* and Statement No. 80, *Blending Requirements for Certain Component Units* – an amendment of GASB Statement No. 14., defines financial accountability.

The criteria for determining financial accountability include the following circumstances:

- Appointment of a voting majority of an organization's governing authority and the ability of the primary government (i.e. the university) to either impose its will on that organization or the potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government, or;
- An organization is fiscally dependent on the primary government and provides specific financial benefits to, or imposes specific financial burdens on, the primary government.

The university's component units and the reasons for their inclusion in the university's financial statements are described below:

- The Ohio State University Foundation The fiscal dependency criteria apply to this not-for-profit fundraising organization, which operates exclusively for the benefit of The Ohio State University.
- OSU Health Plan, Inc. The university appoints a voting majority of the board for this organization, which provides medical benefit plan administration services to the university and its faculty and staff.
- Oval Limited The university holds all of the voting stock of this captive insurance entity, which was established by the university to provide medical malpractice coverage to physicians in the university's medical center.
- **Pelotonia** The fiscal dependency criteria apply to this not-for-profit fundraising organization, which operates exclusively for the benefit of The Ohio State University.

The component units listed above provide services entirely, or almost entirely, to the university or otherwise exclusively, or almost exclusively, benefit the university. Therefore, the transactions and balances for these organizations have been blended with those of the primary government, collectively referred to as the primary institution.

In addition to the blended component units described above, the university's financial statements include the following discretely presented component units:

- The Ohio State University Physicians, Inc. The university appoints a voting majority of the board of the medical practice group for physician faculty members in the Colleges of Medicine and Public Health.
- Campus Partners for Community Urban Redevelopment, Inc. This non-profit
 organization, which participates in the redevelopment of neighborhoods adjacent to
 the Columbus campus, is fiscally dependent on the university.
- Transportation Research Center of Ohio, Inc. The university appoints a voting
 majority of the board for this automotive research and testing facility in East Liberty,
 Ohio.
- Dental Faculty Practice Association, Inc. The university appoints a voting majority of the board for the dental practice group for faculty in the College of Dentistry.

• Science and Technology Campus Corporation (SciTech) – This non-profit organization, which was established to further development of the university's Science and Technology Campus, is fiscally dependent on the university.

Summary financial statement information for the university's blended and discretely presented component units is provided in Notes 21 and 22. Audited financial statements for the discretely presented component units considered to be material to the university may be obtained from the Office of the Controller. A total university column in the financial statements is provided as memorandum only for purposes of additional analysis by users. The total university column reflects eliminations of transactions between the primary institution and the discretely component units. These transactions consist primarily of (a) discretionary subsidies and contributions which are presented as either non-operating activities or capital additions at the component unit level and (b) exchange-based goods and services that support the operations of the entity, which are presented as operating revenues and expenses at the component unit level. The impact of these transactions on the statement of revenues, expenses and changes in net position was \$0 for the years ended June 30, 2021 and 2020.

The university, as a component unit of the State of Ohio, is included as a discrete entity in the State of Ohio's Comprehensive Annual Financial Report.

Basis of Accounting

The financial statements of the university have been prepared in accordance with accounting principles generally accepted in the United States of America, as prescribed by the GASB. The university is reporting as a special purpose government engaged in business type activities (BTA) 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. In accordance with BTA reporting, the university presents Management's Discussion and Analysis; Statements of Net Position; Statements of Revenues, Expenses and Changes in Net Position; Statements of Cash Flows; and Notes to the Financial Statements. In the financial statements, separate columns are presented for the *primary institution* (which includes the primary government and the blended component units), *discretely presented component units* and the *total university*. The Notes to the Financial Statements include separate disclosures for the primary institution and the discretely presented component units, where relevant and material. Unless otherwise specified, the amounts presented in MD&A are those of the primary institution.

The university's financial resources are classified for accounting and reporting purposes into the following four net position categories:

- Net investment in capital assets: Capital assets, net of accumulated depreciation, and related debt attributable to the acquisition, construction or improvement of those assets.
- Restricted nonexpendable: Amounts subject to externally-imposed stipulations
 that they be maintained in perpetuity and invested for the purpose of generating
 present and future income, which may either be expended or added to the principal
 by the university. These assets primarily consist of the university's permanent
 endowments.

- Restricted expendable: Amounts whose use is subject to externally-imposed stipulations that can be fulfilled by actions of the university pursuant to those stipulations or that expire by the passage of time.
- Unrestricted: Amounts which are not subject to externally-imposed stipulations. Substantially all unrestricted balances are internally designated for use by university departments to support working capital needs, to fund related academic or research programs, and to provide for unanticipated shortfalls in revenues and deviations in enrollment.

Under the university's decentralized management structure, it is the responsibility of individual departments to determine whether to first apply restricted or unrestricted resources when an expense is incurred for purposes for which both restricted and unrestricted funds are available.

For internal financial management purposes, the university classifies financial resources into funds that reflect the specific activities, objectives or restrictions of the resources.

Cash and Investments

Cash and cash equivalents consist primarily of petty cash, demand deposit accounts, money market accounts, savings accounts and investments with original maturities of ninety days or less at the time of purchase. Such investments consist primarily of U.S. Government obligations, U.S. Agency obligations, repurchase agreements and money market funds. Restricted cash consists of bond proceeds restricted for capital expenditures. For purposes of the Statement of Cash Flows, "cash" is defined as the total of these two line items.

Investments are carried at fair value in accordance with GASB Statement No. 31, Accounting and Financial Reporting for Certain Investments and for External Investment Pools, as amended by GASB Statement No. 72, Fair Value Measurement and Application. The average cost method is used for purposes of determining gains and losses on the sale of investments. The specific identification method is used for purposes of determining gains and losses on the sale of gifted securities.

The university holds investments in limited partnerships, private equity and other investments, which are carried at estimated fair value provided by the management of these limited partnerships. The purpose of this alternative investment class is to increase portfolio diversification and reduce risk due to the low correlation with other asset classes. Investments in these limited partnerships are fair valued based on the university's proportional share of the net asset value of the total fund. Because these investments are not readily marketable, the estimated value is subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market for the investments existed, and such differences could be material. As of June 30, 2021, the university has made commitments to limited partnerships totaling \$1,352,335 that have not yet been funded. These commitments may extend for a maximum of twelve years.

Investment income is recognized on an accrual basis. Interest and dividend income is recorded when earned.

Endowment Policy

All endowments are invested in the university's Long Term Investment Pool, which consists of 6,973 Board authorized funds and 209 pending funds. Each named fund is assigned a number of shares in the Long Term Investment Pool based on the value of the gifts, income-to-principal transfers, or transfers of operating funds to that named fund. For donor restricted endowments, the Uniform Prudent Management of Institutional Funds Act (UPMIFA), as adopted in Ohio, permits the university's Board of Trustees to appropriate an amount of realized and unrealized endowment appreciation as the Board deems prudent. The UPMIFA, as adopted in Ohio, establishes a 5% safe harbor of prudence for funds appropriated for expenditure. Net realized and unrealized appreciation, after the spending rule distributions, is retained in the Long Term Investment Pool, and the associated net position is classified as restricted-expendable, unless otherwise restricted by the donor.

Annual distributions to named funds in the Long Term Investment Pool are computed using the share method of accounting for pooled investments. The annual distribution per share is 4.5% of the average fair value per share of the Long Term Investment Pool over the most recent seven year period.

At June 30, 2021, the fair value of the university and Foundation gifted endowments is \$2,678,895, which is \$811,004 above the historical dollar value of \$1,867,891. Although the fair value of the gifted endowments in total exceeds the historical cost at June 30, 2021, there are 191 named funds that remain underwater (excluding income-to-principal transfers, or transfers of operating funds to that named fund). The fair value of these underwater funds at June 30, 2021 is \$73,494, which is \$4,844 below the historical dollar value of \$78,338.

At June 30, 2020, the fair value of the university and Foundation gifted endowments is \$2,034,290, which is \$238,321 above the historical dollar value of \$1,795,969. Although the fair value of the gifted endowments in total exceeds the historical cost at June 30, 2020, there are 2,689 named funds that remain underwater (excluding income-to-principal transfers, or transfers of operating funds to that named fund). The fair value of these underwater funds at June 30, 2020 is \$858,109, which is \$78,992 below the historical dollar value of \$937,101.

The depreciation on non-expendable endowment funds is recorded as a reduction to restricted non-expendable net position. Recovery on these funds is recorded as an increase in restricted non-expendable up to the historical value of each fund. Per UPMIFA (§ 1715.53(D)(C), the reporting of such deficiencies does not create an obligation on the part of the endowment fund to restore the fair value of those funds.

Gift Pledges Receivable

The university receives pledges and bequests of financial support from corporations, foundations and individuals. Revenue is recognized when a pledge representing an unconditional promise to pay is received and all eligibility requirements have been met. In the absence of such promise, revenue is recognized when the gift is received. In accordance with GASB Statement No. 33, Accounting and Financial Reporting for Non-exchange Transactions, endowment pledges are not recorded as assets until the related gift is received.

An allowance for uncollectible pledges receivable is provided based on management's judgment of potential uncollectible amounts and includes such factors as prior collection history, type of gift and nature of fundraising.

Inventories

The university's inventories, which consist principally of publications, general stores and other goods for resale by earnings operations, are valued at the lower of moving average cost or market. The inventories of the Health System, which consist principally of pharmaceuticals and operating supplies, are valued at cost on a first-in, first-out basis.

Capital Assets and Collections

Capital assets are long-life assets in the service of the university and include land, buildings, improvements, equipment, software and library books. Capital assets are stated at cost or acquisition value at date of gift. Depreciation of capital assets (excluding land and construction in progress) is provided on a straight-line basis over the following estimated useful lives:

Type of Asset	Estimated Useful Life
Improvements other than buildings	20 years
Buildings	10 to 100 years
Moveable equipment, software and furniture	5 to 15 years
Library books	10 years

The university does not capitalize works of art or historical treasures that are held for exhibition, education, research and public service. These collections are neither disposed of for financial gain nor encumbered in any way. Accordingly, such collections are not recognized or capitalized for financial statement purposes.

Advance Payments for Goods and Services

Advance payments for goods and services primarily consist of receipts relating to tuition, room, board, grants, contracts and athletic events received in advance of the services to be provided. Tuition and fees relating to the summer academic term are recorded as revenue in the year to which they pertain. The university will recognize revenue to the extent these services are provided over the coming fiscal year.

Derivative Instruments

Derivative instruments are reported at fair value in the Statement of Net Position. The university has entered into interest-rate swap agreements, which are considered effective hedging derivatives. Changes in the fair value of these instruments are reported as deferred outflows or deferred inflows in the Statement of Net Position. Additional information on derivative instruments is provided in Note 10.

Operating and Non-Operating Revenues and Expenses

The university defines operating activities, for purposes of reporting on the Statement of Revenues, Expenses, and Changes in Net Position, as those activities that generally result from exchange transactions, such as payments received for providing services and payments made for goods or services received. With the exception of interest expense on long-term indebtedness and certain expenses related to investments, substantially all university expenses are considered to be operating expenses. Certain significant revenue streams relied upon for operations are recorded as non-operating revenues, as defined by GASB Statement No. 35, including state appropriations, current-use gifts and net investment income. In addition, amounts provided to the university under Federal COVID-19 assistance grant programs are recognized as non-operating revenues as eligibility requirements are met.

Tuition, Room and Board

Student tuition and residence hall fees are presented net of scholarships and fellowships applied to student accounts. Stipends and other payments made directly to students are presented as scholarship and fellowship expense. Fee authorizations provided to graduate teaching, research and administrative associates as part of an employment arrangement are presented in instruction, research and other functional categories of operating expense.

State Support

The university is a state-assisted institution of higher education which receives a student enrollment-based instructional subsidy from the State of Ohio. This subsidy, which is based upon a formula devised by the Ohio Board of Regents, is determined annually and is adjusted to state resources available.

The state also provides line-item appropriations which partially support the current operations of various activities, which include clinical teaching expenditures incurred at The Ohio State University Health System and other health sciences teaching facilities, The Ohio State University Extension, the Ohio Agricultural Research and Development Center, and the Center for Labor Research.

In addition to current operating support, the State of Ohio provides the funding for and constructs major plant facilities on the university's campuses, and this funding is recorded as state capital appropriations. The funding is obtained from the issuance of revenue bonds by the Ohio Public Facilities Commission (OPFC) which, in turn, initiates the construction and subsequent lease of the facility by the Ohio Board of Regents. Such facilities are reflected as buildings or construction in progress in the accompanying statement of net position. Neither the obligations for the revenue bonds issued by OPFC nor the annual debt service charges for principal and interest on the bonds are reflected in the university's financial statements.

Debt service is funded through appropriations to the Ohio Board of Regents by the General Assembly. These facilities are not pledged as collateral for the revenue bonds. Instead, the bonds are supported by a pledge of monies in the Higher Education Bond Service Fund and future payments to be received by such fund, which is established in the custody of the Treasurer of State.

Government Grants and Contracts

Government grants and contracts normally provide for the recovery of direct and indirect costs and are subject to audit by the appropriate government agency. Federal funds are subject to an annual OMB Uniform Guidance audit. Recovery of related indirect costs is generally recorded at fixed rates negotiated for a period of one to three years.

The university generally considers grants, contracts and non-capital appropriations to be exchange transactions. Under these arrangements, the university provides a bargained-for benefit, typically in the form of instruction, research or public service programs, either directly to the funding entity or to its constituents. The overall scope and nature of these program activities is determined by the level of funding and the requirements set forth by these resource providers.

Federal COVID-19 Assistance Programs

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act), Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan Act (ARPA) provide budgetary relief to higher education institutions through numerous provisions. These acts and other federal COVID-19 assistance programs provide support to individuals, companies and non-profit institutions in the form of loans, grants, tax changes and other types of relief. CARES Act Provider Relief Funds were distributed for lost revenues and healthcare related expenses due to operational changes to prepare for treating patients with COVID-19.

For the year ended June 30, 2021, the university recognized revenues totaling \$150,037 for federal COVID-19 assistance programs, including \$58,920 of CARES institutional grants, \$25,403 of CARES emergency grants to students, \$42,614 of Coronavirus Relief Funds from the State of Ohio, \$263 in CARES Strengthening Institutions programs, \$6,585 in CARES Provider Relief funds, \$625 in PPP loan forgiveness, \$19 in additional CARES assistance and \$15,608 in FEMA Public Assistance funds, which were provided to the Health System for costs associated with emergency protective measures in response to COVID-19. For the year ended June 30, 2020, the university recognized revenues totaling \$158,058, including \$143,301 of Provider Relief Funds for the Health System and \$14,757 of CARES emergency grants to students. Amounts provided under federal COVID-19 grant programs are recognized as non-operating revenues in the Statement of Revenues, Expenses and Changes in Net Position as eligibility requirements are met.

The CARES Act expands the Medicare Accelerated and Advance Payment Program. These advance payments are intended to provide necessary funds for the disruption in claims processing and may also be offered in circumstances such as national emergencies or natural disasters to accelerate cash flow to impacted healthcare providers and suppliers. Amounts provided under the Medicare Accelerated and Advance Payment Program are considered short-

term loans and are reported as current liabilities in the Statement of Net Position. Advance payments totaling \$274,915 were provided to the Health System in 2020. In 2021, the Health System began to repay the advance through retractions (reductions) in Medicare payments. Current liabilities for advance payments provided to the Health System totaled \$254,854 and \$274,915 at June 30, 2021 and 2020, respectively.

OSU Physicians, which is shown as a discretely presented component unit in the university's financial statements, received and recognized \$11,805 of Provider Relief Fund revenue for the year ended June 30, 2020. OSU Physicians also received \$12,585 in Medicare advance payments in 2020. Current liabilities for advance payments provided to OSU Physicians totaled \$10,191 and \$12,585 at June 30, 2021 and 2020, respectively.

OSU Health System Revenue

Net patient service revenue represents amounts received and the estimated realizable amounts due from patients and third-party payors for services rendered net of contractual allowances, charity care and bad debt expenses. Revenue received under third-party cost reimbursement agreements (primarily the federal Medicare and Medicaid programs) are subject to examination and retroactive adjustments by the agencies administering the programs. In the normal course of business, the Health System contests certain issues resulting from examination of prior years' reimbursement reports. The accompanying financial statements include provisions for estimated retroactive adjustments arising from such examinations and contested issues. The Health System recognizes settlements of protested adjustments or appeals upon resolution of the matters.

OSU Physicians Revenue

Net patient service revenue represents amounts received and the estimated realizable amounts due from patients and third-party payors for services rendered net of contractual allowances, charity care, self-pay discounts and bad debt expenses.

OSU Physicians (OSUP), a discretely presented component unit of the university, provides care to patients under various reimbursable agreements, including governmental and commercial payors (third party payors). These arrangements provide for payment for covered services at agreed-upon rates and under certain fee schedules and various discounts from charges. Provisions have been made in the financial statements for estimated contractual adjustments, representing the difference between the customary charges for services rendered and related reimbursements, and for administrative adjustments.

Charity Care and Community Benefit

Care is provided to patients regardless of their ability to pay. A patient is classified as charity care in accordance with policies established by the OSU Health System and OSUP. Because collection of amounts determined to qualify as charity care are not pursued, such amounts are written off and not reported as gross patient service revenue. OSU Health System and OSUP maintain records to identify and monitor the level of charity care provided, including the amount of charges foregone for services rendered. Net charity care costs for the OSU Health System for the years ended June 30, 2021 and 2020 are \$51,138 and \$52,589, respectively, after applying

a decrease of \$468 and \$5,661, respectively, for support received under the Health Care Assurance Program (HCAP). HCAP is administered by the State of Ohio to help hospitals cover a portion of the cost of providing charity care. Charity care costs for OSUP for the years ended June 30, 2021 and 2020 are \$7,458 and \$8,437, respectively.

Management Estimates

The 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 the reported amounts of assets, liabilities, revenues and expenditures during the reporting period. Disclosure of contingent assets and liabilities at the date of the financial statements may also be affected. Actual results could differ from those estimates.

Newly Issued Accounting Pronouncements

In order to provide temporary relief to governments in light of the COVID-19 pandemic, the GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*. This Statement – which was issued in May 2020 and is effective immediately – extends the effective dates of certain accounting and financial reporting provisions in Statements and Implementation Guides that were first effective for reporting periods beginning after June 15, 2018. The effective dates of the accounting pronouncements listed below have been updated in accordance with Statement No. 95.

In June 2017, the GASB issued Statement No. 87, *Leases*. This standard establishes accounting and reporting for leases, based on the foundational principle that all leases are financings of the right to use an underlying asset for a period of time. Lessees will record an intangible right-of-use asset and corresponding lease liability. Lessors will record a lease receivable and a corresponding deferred inflow of resources. The standard provides an exception for short-term leases with a maximum possible term of 12 months or less. This standard is effective for periods beginning after June 15, 2021 (FY2022).

In March 2020, the GASB issued Statement No. 93, Replacement of Interbank Offered Rates (IBOR). Due to global reference rate reform, the London Interbank Offered Rate (LIBOR) is expected to cease to exist at the end of 2021. This standard addresses accounting and financial reporting implications that result from the replacement of an IBOR. The removal of LIBOR as an appropriate benchmark interest rate is effective for reporting periods ending after December 31, 2021 (FY2023). All other requirements of this Statement are effective for reporting periods beginning after June 15, 2020 (FY2021). The other requirements had no impact on the university's financial statements.

In March 2020, the GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. This standard addresses P3s and APAs and amends current guidance in GASB 60, Accounting and Financial Reporting for Service Concession Arrangements. In general, the standard applies the right-of-use model set forth in GASB 87 to P3 arrangements and provides accounting and disclosure guidance for both transferors and operators of governmental assets. The standard is effective for periods beginning after June 15, 2022 (FY2023).

In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement requires recognition of a right-to-use subscription asset, initially measured as the sum of the initial subscription liability amount, payments made to the vendor before commencement of the subscription term, and capitalizable implementation costs. The subscription asset is then amortized over the subscription term. The requirements of this Statement are effective for fiscal years beginning after June 15, 2022 (FY2023), and all reporting periods thereafter.

In June 2020, the GASB issued Statement No. 97, Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32. This Statement clarifies how the absence of a governing board should be considered in determining whether a primary government is financially accountable for purposes of evaluating potential component units and modifies the applicability of certain component unit criteria as they relate to defined contribution pension plans, defined contribution OPEB plans, and other employee benefit plans. It also establishes accounting and financial reporting requirements for Section 457 plans that meet the definition of a pension plan and for benefits provided through those plans and modifies the investment valuation requirements for all Section 457 plans. The provisions that limit the applicability of the "absence of a governing board" and "financial burden" criteria to arrangements other than defined contribution plans would be effective immediately; other provisions would be effective for reporting periods beginning after June 15, 2021.

In 2021, the university adopted GASB Statement No. 84, Fiduciary Activities, GASB Statement No. 89, Accounting for Interest Cost Incurred Before the End of a Construction Period and GASB Statement No. 90, Majority Equity Interests – an amendment of GASB Statements No. 14 and No. 61. The adoption of these standards had no material impact on the university's financial statements.

University management is currently assessing the impact that implementation of GASB Statements No. 87, 93, 94, 96 and 97 will have on the university's financial statements.

Other

The university is exempt from income taxes under Internal Revenue service rules. Any unrelated business income is taxable.

NOTE 2 — CASH AND CASH EQUIVALENTS

At June 30, 2021, the carrying amount of the primary institution's cash, cash equivalents and restricted cash is \$953,629 as compared to bank balances of \$953,759. The differences in carrying amount and bank balances are caused by outstanding checks and deposits in transit.

Of the bank balances, \$87,861 is covered by federal deposit insurance and \$865,898 is uninsured but collateralized by pools of securities pledged by the depository banks and held in the name of the respective banks.

At June 30, 2020, the carrying amount of the primary institution's cash, cash equivalents and restricted cash is \$2,246,110 as compared to bank balances of \$2,239,213. The differences in carrying amount and bank balances are caused by outstanding checks and deposits in transit. Of the bank balances, \$307,728 is covered by federal deposit insurance and \$1,931,485 is uninsured but collateralized by pools of securities pledged by the depository banks and held in the name of the respective banks.

At June 30, 2021, the carrying amount of the discretely presented component units' cash, cash equivalents and restricted cash is \$260,758 as compared to bank balances of \$261,688. The differences in carrying amount and bank balances are caused by outstanding checks and deposits in transit. Of the bank balances, \$2,027 is covered by federal deposit insurance and \$259,661 is uninsured but collateralized by pools of securities pledged by the depository banks and held in the name of the respective banks.

At June 30, 2020, the carrying amount of the discretely presented component units' cash, cash equivalents and restricted cash is \$186,705 as compared to bank balances of \$188,647. The differences in carrying amount and bank balances are caused by outstanding checks and deposits in transit. Of the bank balances, \$5,364 is covered by federal deposit insurance and \$183,283 is uninsured but collateralized by pools of securities pledged by the depository banks and held in the name of the respective banks.

NOTE 3 — INVESTMENTS

University investments are grouped into three major categories for financial reporting purposes: Temporary Investments, the Long-Term Investment Pool and Other Long-Term Investments.

Temporary Investments are amounts available for current operations. The target is to maximize value while protecting the liquidity of the assets. Temporary Investments include the following instruments with varying maturities: obligations of the U. S. Treasury and other federal agencies and instrumentalities, municipal and state bonds, corporate bonds, certificates of deposit, commercial paper, repurchase agreements, money market funds and mutual funds.

The Long-Term Investment Pool is a unitized investment pool consisting of gifted endowment funds of the university, gifted endowment funds of the OSU Foundation, and quasi-endowment funds which are internally designated funds that are to function as endowments.

The Long-Term Investment Pool operates with a long-term investment goal of preserving and maintaining the real purchasing power of the principal while allowing for the generation of a predictable stream of annual distribution.

The university's Board of Trustees approved the following thematic asset classes, allocation ranges and benchmarks for the Long-Term Investment Pool:

Asset Class	Range	Benchmark
Global Equities	40-80%	MSCI All Country World Index (ACWI)
Global Credit	10-50%	Barclays U.S. Aggregate Bond Index
Real Assets	5-20%	U.S. Consumer Price Index (CPI) + 5%

The Global Equities category includes domestic equity, international equity, emerging market equity, hedged funds and private equity. The Global Credit category includes global fixed income and relative value/macro, credit oriented managers and private credit. The Real Assets category includes real estate and infrastructure funds.

Other Long-Term Investments are non-unitized investments that relate primarily to gift arrangements between donors and the OSU Foundation. Included in this category are charitable remainder trust assets invested in mutual funds, OSU Foundation interests in unitrust, gift annuities, annuity trust and pooled income agreements, life insurance policies for which the OSU Foundation has been named owner and beneficiary, and certain real estate investments. Also included in this category are other private equity investments and investments in certain organizations that are affiliated with the OSU Health System.

U. S. Government and Agency securities are invested through trust agreements with banks who keep the securities in their safekeeping accounts at the Federal Reserve Bank in "book entry" form. The banks internally designate the securities as owned by or pledged to the university. Common stocks, corporate bonds and money market instruments are invested through trust agreements with banks who keep the investments in their safekeeping accounts at Northern Trust and BNY Mellon in "book entry" form. The banks internally designate the securities as owned by or pledged to the university.

The cash and cash equivalents amount represents cash held in the Long-Term Investment Pool by various investment managers. Such amounts were generated by gifts received throughout the fiscal year and sales of investments in the Long-Term Investment Pool. Subsequently, the cash and cash equivalents will be used to purchase long-term investments.

Total university investments by major category for the primary institution at June 30, 2021 and 2020 are as follows:

	Primary I	Insti	tution
	2021		2020
Temporary Investments	\$ 2,693,789	\$	1,788,581
Long-Term Investment Pool:			
Gifted Endowment - University	1,333,836		1,038,113
Gifted Endowment - OSU Foundation	1,345,059		996,177
Quasi Endowment - Operating	1,740,687		1,363,204
Quasi Endowment - Designated	2,622,391		1,889,637
Total Long-Term Investment Pool	7,041,973		5,287,131
Securities Lending Collateral Investments	118,266		12,092
Other Long-Term Investments	348,227		301,676
Total Investments	\$ 10,202,255	\$	7,389,480

Total university investments by investment type for the primary institution at June 30, 2021 are as follows:

			Primary Institution	on	
			Other	Securities	
	Temporary	Long-Term	Long-Term	Lending Collateral	
	Investments	Investment Pool	Investments	Investments	Total
U.S. equity	\$ -	\$ 1,159,881	\$ 22,530	\$ - \$	1,182,411
International equity	-	513,586	-	-	513,586
Equity mutual funds	109,272	1,072,486	27,451	-	1,209,209
U.S. government obligations	183,912	605	844	-	185,361
U.S. government agency					
obligations	128,991	-	-	-	128,991
Corporate bonds and notes	1,663,809	-	-	-	1,663,809
Bond mutual funds	505,032	539,956	25,602	-	1,070,590
Foreign government bonds	25,119	-	-	-	25,119
Real assets	5	762,928	23,577	-	786,510
Hedge funds	-	565,599	-	-	565,599
Private equity	-	2,058,643	225,102	-	2,283,745
Commercial paper	32,534	-	-	-	32,534
Cash and cash equivalents	-	368,289	-	-	368,289
Other	45,115	-	23,121	-	68,236
Securities Lending Collateral Assets:					
Repurchase agreements	-	-	-	72,042	72,042
Variable rate notes	-	-	-	-	-
Commercial Paper	-	-	-	-	-
Certificates of deposit	-	-	-	-	-
Cash and other adjustments		-	-	46,224	46,224
	\$ 2,693,789	\$ 7,041,973	\$ 348,227	\$ 118,266 \$	10,202,255

Total university investments by investment type for the primary institution at June 30, 2020 are as follows:

				Pı	rimary In	stituti	on			
					Oth	er	Securit	ies		
		Temporary	Long-T	erm	Long-	Term	Lending Co	llateral		
		Investments	Investme	nt Pool	Investi	ments	Investm	ents	Total	
U.S. equity	\$	-	\$ 66	54,055	\$	-	\$	- 5	664	,055
International equity		-	47	75,277		-		-	475	,277
Equity mutual funds		84,580	44	15,874	2	1,526		-	551	,980
U.S. government obligations		117,993		1,448		510		-	119	,951
U.S. government agency										
obligations		135,206		-		-		-	135	,206
Corporate bonds and notes		1,297,564		-		-		-	1,297	,564
Bond mutual funds		90,223		-	1	.6,435		-	106	,658
Foreign government bonds		7,542		-		-		-	7	,542
Real assets		8,999	52	26,131	2	2,089		-	557	,219
Hedge funds		-	50	04,888		-		-	504	,888,
Private equity		-	1,22	25,211	22	0,507		-	1,445	,718
Commercial paper		26,480		-		-		-	26	,480
Cash and cash equivalents		-	1,44	14,247		-		-	1,444	,247
Other		19,994		-	2	0,609		-	40	,603
Securities Lending Collateral Assets:										
Repurchase agreements		-		-		-	4	4,877	4	,877
Variable rate notes		-		-		-		525		525
Commercial Paper		-		-		-	:	1,300	1	,300
Certificates of deposit		-		-		-	4	4,850	4	,850
Cash and other adjustments		-		-		-		540		540
	\$	1,788,581	\$ 5,28	37,131	\$ 30	1,676	\$ 13	2,092	7,389	,480

The components of the net investment income and loss for the primary institution are as follows:

Interest and dividends

Net increase in fair value of investments

Investment expenses

Total

2021	2020
\$ 190,698	\$ 194,485
1,727,863	88,869
 (59,388)	(52,164)
\$ 1,859,173	\$ 231,190

Information on Fair Value of Investments

Fair value is defined in the accounting standards as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities reported at fair value are organized into a hierarchy based on the levels of inputs observable in the marketplace that are used to measure fair value.

Inputs are used in applying the various valuation techniques and take into account the assumptions that market participants use to make valuation decisions. Inputs may include price information, credit data, liquidity statistics, and other factors specific to the financial instrument. Observable inputs reflect market data obtained from independent sources. In contrast, unobservable inputs reflect the entity's assumptions about how market participants would value the financial instrument.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used for financial instruments measured at fair value on a recurring basis:

Level 1 – Prices based on unadjusted quoted prices in active markets that are accessible for identical assets or liabilities are classified as Level 1. Directly held equity securities, registered bond and equity mutual funds, and other miscellaneous investments classified in Level 1 are valued using prices quoted in active markets that the custodian and university have the ability to access.

Level 2 – Quoted prices in the markets that are not considered to be active, dealer quotations or alternative pricing sources for similar assets or liabilities for which all significant inputs are observable, either directly or indirectly, are classified as Level 2. Level 2 investments include US government agencies and obligations, corporate bonds, municipal bonds, foreign government bonds, repurchase agreements, commercial paper, and other debt related investments. The evaluated prices may be determined by factors which include, but are not limited to, market quotations, yields, maturities, call features, ratings, institutional size trading in similar groups of securities and developments related to specific securities.

Level 3 – Investments classified as Level 3 have significant unobservable inputs, as they trade infrequently or not at all. The inputs into the determination of fair value of these investments are based upon the best information in the circumstance and may require significant management judgment. Investments included in Level 3 consist primarily of the university's ownership in real estate, limited partnerships and equity positions in private companies.

Net Asset Value (NAV) – Investments whose fair value is measured at NAV are excluded from the fair value hierarchy. Investments in non-governmental entities that do not have a readily determinable fair value may be valued at NAV if the NAV is determined in accordance with the fair value measurement principles provided by the FASB standards relevant to investment companies. Interest in investment funds with a NAV reported under an alternative basis or meet the intent to sell criteria are reflected as Level 3 investments.

Investments measured at NAV consist mainly of non-publicly traded mutual funds, hedge funds, private equity, and other alternative funds. These assets are valued by the associated external investment manager/general partner and reviewed by the university using the most recent audited and unaudited financial statements available.

Not Leveled – Cash is not measured at fair value and, thus, is not subject to the fair value disclosure requirements. Cash not subject to such requirements amounted to \$123,786 and \$118,873 at June 30, 2021 and 2020, respectively.

Investments by fair value category for the primary institution at June 30, 2021 are as follows:

				1	Pri	mary Instituti	on		
	a	uoted Prices in Active Markets (Level 1)	Otl	Significant her Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		NAV as Practical Expedient (NAV)	Total Fair Value
U.S. equity	\$	1,182,411	\$	-	\$	-	\$	-	\$ 1,182,411
International equity		513,586		-		-		-	513,586
Equity mutual funds		357,359		-		-		851,850	1,209,209
U.S. government obligations		605		184,756		-		-	185,361
U.S. government agency									
obligations		-		128,991		-		-	128,991
Corporate bonds and notes		-		1,663,809		-		-	1,663,809
Bond mutual funds		948,268		-		-		122,322	1,070,590
Foreign government bonds		-		25,119		-		-	25,119
Real assets		127,615		-		94,137		564,758	786,510
Hedge funds		-		-		-		565,599	565,599
Private equity		-		-		403,773		1,879,972	2,283,745
Commercial paper		-		32,534		-		-	32,534
Cash equivalents		244,503		-		-		-	244,503
Other		-		44,584		23,652		-	68,236
Securities Lending Collateral Assets:									
Repurchase agreements		-		72,042		-		-	72,042
Other adjustments		-		46,224		-		-	46,224
	\$	3,374,347	\$	2,198,059	\$	521,562	\$	3,984,501	\$ 10,078,469

Investments by fair value category for the primary institution at June 30, 2020 are as follows:

		P	rimary Institution	1	
	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	NAV as Practical Expedient (NAV)	Total Fair Value
U.S. equity	\$ 664,055	\$ -	\$ - \$	- \$	664,055
International equity	475,277	-	-	-	475,277
Equity mutual funds	198,477	-	-	353,503	551,980
U.S. government obligations	1,448	118,503	-	-	119,951
U.S. government agency					
obligations	-	135,206	-	-	135,206
Corporate bonds and notes	-	1,297,564	-	-	1,297,564
Bond mutual funds	106,658	-	-	-	106,658
Foreign government bonds	-	7,542	-	-	7,542
Real assets	15,743	-	93,357	448,119	557,219
Hedge funds	-	-	-	504,888	504,888
Private equity	-	-	273,589	1,172,129	1,445,718
Commercial paper	-	26,480	-	-	26,480
Cash equivalents	1,325,374	-	-	-	1,325,374
Other	-	19,543	21,060	-	40,603
Securities Lending Collateral Assets:					
Repurchase agreements	-	4,877	-	-	4,877
Variable rate notes	-	525	-	-	525
Commercial paper	-	1,300	-	-	1,300
Certificates of deposit	-	4,850	-	-	4,850
Other adjustments	542	(2)			540
	\$ 2,787,574	\$ 1,616,388	\$ 388,006 \$	2,478,639 \$	7,270,607

Additional Information on Investments Measured at the NAV

Additional information on fair values, unfunded commitments, remaining life and redemption for investments measured at the NAV for the primary institution at June 30, 2021 is as follows:

	Fair Value	Unfunded Commitments	Remaining Life	Redemption Notice Period	Redemption Restrictions
Mutual funds - non-public international	\$ 974,172	-	No limit	1 to 30 days	None
Hedge funds - absolute return, credit, long/short equities	565,599	-	No limit	30 to 180 day notice periods	Lock-up provisions ranging from none to 2 years; side pockets on a few funds
Private equity - private credit, buyouts, venture, secondary	1,879,972	945,455	1-12 years	Partnerships ineligible for redemption	Not redeemable
Real assets - natural resources, real estate, intrastructure	564,758	138,354	1-12 years	Partnerships ineligible for redemption	Not redeemable
	\$ 3,984,501	\$ 1,083,809	- -		

Additional Risk Disclosures for Investments

GASB Statements No. 3 and 40 require certain additional disclosures related to the liquidity, interest-rate, custodial, credit and foreign currency risks associated with deposits and investments.

Liquidity risk – The university's private equity and real asset investments are illiquid and subject to redemption restrictions in accordance with their respective governing documents.

Interest-rate risk – Interest-rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments with interest rates that are fixed for longer periods are likely to be subject to more variability in their fair values as a result of future changes in interest rates.

The maturities of the university's interest-bearing investments for the primary institution at June 30, 2021 are as follows:

			P	rima	ary Institution				
				Inv	estment Matu	riti	ies (in years)	
	Fair Value	Le	ess than 1		1 to 5		6 to 10	Мо	re than 10
U.S. government obligations	\$ 185,361	\$	35,954	\$	147,691	\$	1,716	\$	-
U.S. government agency									
obligations	128,784		1,351		23,943		33,736		69,754
Commercial paper	32,534		32,534		-		-		-
Corporate bonds	1,663,809		373,786		968,603		154,052		167,368
Bond mutual funds	1,070,590		337,094		478,241		114,304		140,951
Other governmental bonds	44,584		5,803		31,732		253		6,796
Foreign governmental bonds	25,119		13,101		10,994		832		192
Securities Lending Collateral:									
Repurchase agreements	 72,042		72,042		-		-		-
Total	\$ 3,222,823	\$	871,665	\$	1,661,204	\$	304,893	\$	385,061

The maturities of the university's interest-bearing investments for the primary institution at June 30, 2020 are as follows:

			P	rima	ary Institutio	n			
				ln۱	estment Mat	turiti	ies (in years)		
	Fair Value	Les	ss than 1		1 to 5		6 to 10	More	than 10
U.S. government obligations	\$ 119,951	\$	18,089	\$	92,464	\$	9,398	\$	-
U.S. government agency	-								
obligations	135,100		4,045		22,649		24,953		83,453
Commercial paper	26,480		26,480		-		-		-
Corporate bonds	1,297,564		326,619		796,759		80,752		93,434
Bond mutual funds	106,658		1,800		66,342		23,578		14,938
Other governmental bonds	19,543		1,108		15,568		994		1,873
Foreign governmental bonds	7,542		-		7,542		-		-
Securities Lending Collateral:									
Repurchase agreements	4,877		4,877		-		-		-
Certificates of deposit	525		525		-		-		-
Commercial paper	1,300		1,300		-		-		-
Variable rate notes	4,850		4,850		-		-		-
Total	\$ 1,724,390	\$	389,693	\$	1,001,324	\$	139,675	\$:	193,698

Custodial credit risk – Custodial credit risk is the risk that, in the event of the failure of the custodian, university investments may not be recovered. It is the policy of the university to hold investments in custodial accounts, and the securities are registered solely in the name of the university. All investments are transacted with nationally reputable brokerage firms offering protection by the Securities Investor Protection Corporation.

Credit risk – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the holder of the investment. Credit quality information – as commonly expressed in terms of the credit ratings issued by nationally recognized statistical rating organizations such as Moody's Investors Service, Standard & Poor's, or Fitch Ratings – provides a current depiction of potential variable cash flows and credit risk.

Per GASB Statement No. 40, *Deposit and Investment Risk Disclosures, an amendment to GASB Statement No. 3,* securities with split ratings, or a different rating assignment, are disclosed using the rating indicative of the greatest degree of risk.

The credit ratings of the university's interest-bearing investments for the primary institution at June 30, 2021 are as follows:

						Primary I	nstitution					
	Total	AAA	AA	А	BBB	BB	В	ccc	cc	С	D	Not Rated
U.S. government												
and agency obligations	\$ 314,353 \$	2,892 \$	232,040 \$	75,785 \$	3,209 \$	- \$	- \$	- \$	- \$	- \$	-	\$ 427
Corporate bonds	1,663,809	128,683	151,803	556,677	582,777	35,585	7,559	-	-	-	-	200,725
Bond mutual funds	1,070,590	147,791	110,394	258,440	274,999	31,019	17,545	3,993	2,148	514	514	223,233
Foreign government bonds	25,119	1,069	13,189	6,364	2,195	-	2,024	-	-	-	-	278
Commercial paper	32,534	4,996	3,165	22,623	1,750	-	-	-	-	-	-	-
Other government bonds	44,584	655	24,123	13,591	1,483	-	-	-	-	-	-	4,732
Securities Lending Collateral:												
Repurchase agreements	72,042	-	-	-	-	-	-	-	-	-	-	72,042
Certificates of deposit	-	-	-	-	-	-	-	-	-	-	-	-
Commercial paper	-	-	-	-	-	-	-	-	-	-	-	-
Variable rate notes	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 3,223,031 \$	286,086 \$	534,714 \$	933,480 \$	866,413 \$	66,604 \$	27,128 \$	3,993 \$	2,148 \$	514	514	\$ 501,437

The credit ratings of the university's interest-bearing investments for the primary institution at June 30, 2020 are as follows:

					Prima	ry Institution					
	Total	AAA	AA	Α	BBB	ВВ	В	ccc	cc	С	Not Rated
U.S. government	<u> </u>										
and agency obligations	\$ 255,157 \$	6,431 \$	165,407 \$	77,729 \$	- \$	- \$	- \$	- \$	- \$	-	\$ 5,590
Corporate bonds	1,297,564	94,714	225,727	468,096	354,052	26,780	2,774	-	-	-	125,421
Bond mutual funds	106,658	20,084	49,875	17,267	17,139	932	680	654	-	-	27
Foreign government bonds	7,542	2,957	1,809	352	-	-	-	-	-	-	2,424
Commercial paper	26,480	-	-	26,480	-	-	-	-	-	-	-
Other government bonds	19,543	575	9,493	7,317	922	-	-	-	-	-	1,236
Securities Lending Collateral:											
Repurchase agreements	4,877	-	-	-	-	-	-	-	-	-	4,877
Certificates of deposit	525	-	-	525	-	-	-	-	-	-	-
Commercial paper	1,300	-	-	1,300	-	-	-	-	-	-	-
Variable rate notes	4,850	-	925	3,925	-	-	-	-	-	-	-
Total	\$ 1,724,496 \$	124,761 \$	453,236 \$	602,991 \$	372,113 \$	27,712 \$	3,454 \$	654 \$	- \$	-	\$ 139,575

Concentration of credit risk – Concentration of credit risk is the risk associated with a lack of diversification, such as having substantial investments in a few individual issuers, thereby exposing the university to greater risks resulting from adverse economic, political, regulatory, geographic or credit developments.

There is no investment in issuers other than U. S. government guaranteed securities that represents five percent or more of investments held at June 30, 2021 and June 30, 2020.

Foreign currency risk – Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit.

At June 30, 2021, exposure to foreign currency risk for the primary institution is as follows:

				Primary In	stitution		
			Equity	Bond	Corporate	Foreign	Partnerships
	C	Common	Mutual	Mutual	Bonds and	Government	and Hedge
		Stock	Funds	Funds	Notes	Bonds	Funds
Argentine Peso	\$	- \$	- \$	2	\$ - :	\$ - 5	-
Australian dollar		13,268	17,509	37	12,060	-	-
Bangladeshi taka		-	-	-	-	-	-
Brazilian real		904	14,857	42	-	-	-
Canadian dollar		34,149	19,543	18	10,822	-	-
Cayman Islands Dollar		-	1,489	-	-	-	-
Chilean peso		82	62	19	-	-	-
Chinese yuan		(202)	75,481	8	-	-	-
Columbian peso		27	24	-	-	-	-
Czech Republic koruna		27	931	-	-	-	-
Danish krone		3,142	5,062	2	-	-	-
Egyptian pound		14	13	-	-	-	-
Euro		157,006	90,616	10	8,176	42	173,594
Great Britain pound sterling		57,597	55,533	36	28,686	-	284,936
Hong Kong dollar		37,836	57,016	-	-	-	-
Hungarian forint		41	31	-	-	-	-
Iceland Krona		-	-	9	-	-	-
Indian rupee		1,739	26,530	9	-	-	-
Indonesian rupiah		192	2,123	10	-	-	-
Israeli shekel		123	237	-	-	5,860	-
Japanese yen		142,466	45,694	2	901	· -	-
Kenyan Shilling		-	504	-	-	-	-
Kuwaiti dinar		96	66	-	-	-	-
Malaysian ringgit		219	218	-	-	-	-
Mexican peso		301	4,933	52	-	-	-
New Taiwan dollar		6,806	33,480	-	-	_	-
New Turkish lira		41	592	-	-	-	-
New Zealand dollar		253	96	_	_	_	_
Norwegian krone		6,052	4,716	19	-	_	-
Pakistan rupee		, <u>-</u>	8	_	_	_	_
Peruvian nuevo sol		_	1,165	(2)	_	_	_
Philippine peso		109	1,624	-	_	_	_
Polish zloty		109	466	_	_	_	_
Qatarian rial		109	85	_	_	_	_
Romanian new leu		-	4	_	_	_	_
Russian ruble		397	6,511	19	_	_	_
Saudi Riyal		506	405	-	_	_	_
Singapore dollar		868	630	_	_	_	_
South African rand		616	4,737	_	_	_	_
South Korean Won		13,612	42,995	54	_	_	_
Sri Lanka rupee		15,012	42,555	34	_	_	_
Swedish krona		12,766	13,802	-	_	_	-
Swiss franc		21,945	11,961	(1)	-	_	26,429
Thailand bhat		21,943	3,809	(1)	-	-	20,429
UAE dirham		96	3,809 91	-	-	-	-
Total	\$	513,586 \$	545,649 \$	345	\$ 60,645	\$ 5,902 \$	484,959
iviai	2	213,300 \$	343,043 \$	343	٠ 45,00 ب	. ۲۰۵۲ ک	, 404,339

At June 30, 2020, exposure to foreign currency risk for the primary institution is as follows:

			Primary Inst	itution		
	•	Equity	Bond	Corporate	Foreign	Partnerships
	Common	Mutual	Mutual	Bonds and	Government	and Hedge
	Stock	Funds	Funds	Notes	Bonds	Funds
Argentine Peso	\$ - \$	- \$	10 \$	- \$	- \$	-
Australian dollar	10,707	18,220	(17)	-	-	-
Bangladeshi taka	-	-	-	-	-	-
Brazilian real	4,197	10,345	20	-	-	-
Canadian dollar	12,121	10,611	136	-	-	-
Chilean peso	482	82	-	-	-	-
Chinese yuan	3,403	81,917	6	-	-	-
Columbian peso	153	26	-	-	-	-
Czech Republic						
koruna	83	422	2	-	-	-
Danish krone	6,695	4,842	12	-	-	-
Egyptian pound	110	17	-	-	-	-
Euro	138,326	64,318	338	2,136	514	108,723
Great Britain pound	•	•		,		,
sterling	33,694	32,097	8	16,075	-	147,093
Hong Kong dollar	56,825	34,586	(2)	-	-	-
Hungarian forint	171	32	1	_	_	_
Iceland Krona		-	33	_	-	-
Indian rupee	6,536	6,898	-	_	_	_
Indonesian rupiah	1,180	1,989	3	_	_	_
Israeli shekel	162	6,909	9	_	_	_
Japanese yen	115,796	36,602	(4)	_	_	_
Kenyan Shilling	113,750	333	(4)	_	_	_
Kuwaiti dinar	_	76	_	_	_	_
Malaysian ringgit	1,493	751	1	_	_	_
Mexican peso	1,389	1,644	250	_	_	_
New Taiwan dollar	10,446	14,346	(18)			
New Turkish lira	414	826	(18)	_	_	_
New Zealand dollar	306	926	143	-	-	-
Norwegian krone	4,451	1,945	82	-	-	-
Pakistan rupee	4,431	1,943	-	-	-	-
				-	-	-
Peruvian nuevo sol	-	3	23	-	-	-
Philippine peso	657	1,031	-	-	-	-
Polish zloty	680	103	4	-	-	-
Qatarian rial	666	97	- (4)	-	-	-
Romanian new leu	- 2.442	-	(1)	-	-	-
Russian ruble	2,112	334	9	-	-	-
Saudi Riyal	2,093	315	-	-	-	-
Singapore dollar	928	2,295	3	-	-	-
South African rand	2,948	2,749	-	-	-	-
South Korean Won	14,830	8,782	(6)	-	-	-
Sri Lanka rupee	-	-	-	-	-	-
Swedish krona	10,618	14,990	30	-	-	-
Swiss franc	28,265	13,724	(43)	-	-	19,763
Thailand bhat	1,876	2,081	-	-	-	-
UAE dirham	415	67	-	-	-	-
Total	\$ 475,277 \$	377,339 \$	1,032 \$	18,211 \$	514 \$	275,579

Securities Lending

The university has engaged in a securities lending program through its custodian bank of the Long-Term Investment Pool. Securities loaned at June 30, 2021 and 2020 were comprised completely of equities, and these loans were secured by collateral in the form of cash, equities, U.S. government obligations, and foreign government/private debt. All loans must be secured by collateral amounting to no less than 102% of the current fair value of domestic securities loaned and no less than 105% of the current fair value of foreign securities loaned.

As of June 30, 2021, there was no credit risk on securities loaned due to the fair value of the collateral held being greater than the fair value of securities on loan to each individual broker. The university, the custodian, and the borrower each maintain the right to terminate a loan. Upon maturity or termination of a loan agreement, the custodian is contractually obligated to indemnify the university if the borrowers fail to return loaned securities and if liquidation of the collateral is insufficient to replace the value of the securities loaned. Noncash collateral cannot be pledged or sold by the university without a borrower's default. While earning fees received by the university during the loan period, cash collateral is simultaneously invested in short term, highly liquid securities in order to further increase interest earned while also matching a weighted average maturity of loans which is not to exceed 60 days.

As of June 30, 2021, securities loaned by the university amounted to a fair value of \$163,207 and were secured by collateral in the amount of \$171,796. The portion of this collateral that was received in cash amounted to \$118,266 and is reflected within the university's statement of net position as a current asset and a corresponding current liability.

As of June 30, 2020, securities loaned by the university amounted to a fair value of \$32,319 and were secured by collateral in the amount of \$34,499. The portion of this collateral that was received in cash amounted to \$12,091 and is reflected within the university's statement of net position as a current asset and a corresponding current liability.

NOTE 4 — ACCOUNTS, NOTES AND PLEDGES RECEIVABLE

Accounts receivable for the primary institution at June 30, 2021 and 2020 consist of the following:

	Primary Institution		
	2021		2020
Gross receivables - OSU Health System	\$ 1,180,623	\$	973,045
Grant and contract receivables	154,484		68,675
Tuition and fees receivable	16,486		20,184
Receivables for departmental and auxiliary sales and services	65,097		45,574
State and federal receivables	11,629		14,237
Other receivables	3,379		70
Total receivables	1,431,698		1,121,785
Less: Allowances	695,198		595,103
Total receivables, net	\$ 736,500	\$	526,682

Allowances consist primarily of allowances for doubtful accounts and contractual adjustments of receivables of the OSU Health System.

Notes receivable consist primarily of Perkins and health professions loans and are net of an allowance for doubtful accounts of \$16,294 and \$17,673 at June 30, 2021 and 2020, respectively. Federal capital contributions to the Perkins loan programs represent advances which are ultimately refundable to the federal government.

In accordance with GASB Statement No. 33, Accounting and Reporting for Non-exchange Transactions, the university has recorded \$168,613 in non-endowment pledges receivable and a related allowance for doubtful accounts of \$7,372 at June 30, 2021. The university recorded \$145,279 in non-endowment pledges receivable and a related allowance for doubtful accounts of \$6,790 at June 30, 2020.

Accounts receivable for the discretely presented component units at June 30, 2021 and 2020 consist of the following:

	Discretely Presented Component Units				
		2021		2020	
Gross receivables - OSU Physicians	\$	150,802	\$	118,780	
Other receivables		12,438		11,159	
Total receivables		163,240		129,939	
Less: Allowances		93,972		73,384	
Total receivables, net	\$	69,268	\$	56,555	

Allowances consist primarily of allowances for doubtful accounts and contractual adjustments of receivables of OSU Physicians.

NOTE 5 — CAPITAL ASSETS

Capital assets activity for the primary institution for the year ended June 30, 2021 is summarized as follows:

	Primary Institution				
		Beginning			Ending
		Balance	Additions	Retirements	Balance
Capital assets not being depreciated:					
Land	\$	108,136 \$	2,071 \$	- \$	110,207
Intangibles		18,563	-	98	18,465
Construction in progress		880,224	141,588	-	1,021,812
Total non depreciable assets		1,006,923	143,659	98	1,150,484
Capital assets being depreciated:					
Improvements other than buildings		950,770	26,476	-	977,247
Buildings and fixed equipment		6,902,736	538,939	24,749	7,416,926
Movable equipment, furniture and software		1,735,709	319,173	24,958	2,029,924
Library books		196,468	3,943	219	200,191
Total		9,785,683	888,531	49,926	10,624,288
Less: Accumulated depreciation		5,092,528	457,950	43,379	5,507,100
Total depreciable assets, net		4,693,155	430,581	6,547	5,117,188
Capital assets, net	\$	5,700,078 \$	574,240 \$	6,645 \$	6,267,672

The increase in construction in progress of \$141,588 in fiscal year 2021 represents the amount of capital expenditures for new projects of \$947,213, net of assets placed in service of \$805,625.

Capital assets activity for the primary institution for the year ended June 30, 2020 is summarized as follows:

			Primary I	nstitution	
		Beginning			Ending
		Balance	Additions	Retirements	Balance
Capital assets not being depreciated:	·				_
Land	\$	92,809 \$	15,380 \$	53 \$	108,136
Intangibles		18,413	150	-	18,563
Construction in progress		395,784	484,440	-	880,224
Total non depreciable assets		507,006	499,970	53	1,006,923
Capital assets being depreciated:					
Improvements other than buildings		922,499	28,271	-	950,770
Buildings and fixed equipment		6,735,607	168,253	1,124	6,902,736
Movable equipment, furniture and software		1,648,658	161,910	74,859	1,735,709
Library books		194,331	2,571	434	196,468
Total		9,501,095	361,005	76,417	9,785,683
Less: Accumulated depreciation		4,739,738	425,012	72,222	5,092,528
Total depreciable assets, net		4,761,357	(64,007)	4,195	4,693,155
Capital assets, net	\$	5,268,363 \$	435,963 \$	4,248 \$	5,700,078

The increase in construction in progress of \$484,440 in fiscal year 2020 represents the amount of capital expenditures for new projects of \$609,786, net of assets placed in service of \$125,346.

Capital assets activity for the discretely presented component units for the year ended June 30, 2021 is summarized as follows:

	Discretely Presented Component Units				
		Beginning			Ending
		Balance	Additions	Retirements	Balance
Capital assets not being depreciated:					
Land	\$	31,461	-	- \$	31,461
Intangibles		26	-	26	-
Construction in progress		70,498	-	20,341	50,157
Total non depreciable assets		101,985	-	20,367	81,618
Capital assets being depreciated:					
Improvements other than buildings		28,268	3,739	9	31,998
Buildings and fixed equipment		159,926	81,695	-	241,621
Movable equipment, furniture and software		35,944	11,054	11,718	35,280
Total		224,138	96,488	11,727	308,899
Less: Accumulated depreciation		82,846	12,754	1,292	94,308
Total depreciable assets, net		141,292	83,734	10,435	214,591
Capital assets, net	\$	243,277 \$	83,734 \$	30,802 \$	296,209

The decrease in construction in progress of \$20,341 in fiscal year 2020 represents the amount of capital expenditures for new projects of \$58,481, net of assets placed in service of \$78,822.

Capital assets activity for the discretely presented component units for the year ended June 30, 2020 is summarized as follows:

	Discretely Presented Component Units				
		Beginning			Ending
		Balance	Additions	Retirements	Balance
Capital assets not being depreciated:					
Land	\$	29,438 \$	2,023 \$	- \$	31,461
Intangibles		62	-	36	26
Construction in progress		41,676	28,822	-	70,498
Total non depreciable assets		71,176	30,845	36	101,985
Capital assets being depreciated:					
Improvements other than buildings		29,694	1,460	2,886	28,268
Buildings and fixed equipment		134,029	27,601	1,704	159,926
Movable equipment, furniture and software		43,161	4,403	11,620	35,944
Total		206,884	33,464	16,210	224,138
Less: Accumulated depreciation		85,896	10,272	13,322	82,846
Total depreciable assets, net		120,988	23,192	2,888	141,292
Capital assets, net	\$	192,164 \$	54,037 \$	2,924 \$	243,277

The increase in construction in progress of \$28,822 in fiscal year 2020 represents the amount of capital expenditures for new projects of \$54,390, net of assets placed in service of \$25,568.

The university recognized asset retirement obligations (AROs) of \$17,934 and \$17,934 at June 30, 2021 and 2020, respectively. Assets with AROs include university facilities in which radioactive materials are used, facilities handling hazardous chemicals or waste and fuel storage tanks, all of which are subject to regulation by the State of Ohio. Liability estimates are based on decommissioning funding plans (for facilities handling radioactive materials) and historical experience (for hazardous waste facilities and fuel storage tanks). The estimated remaining useful lives of these assets range from 0 to 26 years.

NOTE 6 — ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses for the primary institution at June 30, 2021 and 2020 consist of the following:

	Primary Institution				
		2021	2020		
Payables to vendors for supplies and services	\$	518,560	\$ 40	00,568	
Accrued compensation and benefits		132,067	14	43,389	
Retirement system contributions payable		67,256	ļ	55,826	
Other accrued expenses	<u> </u>	56,958	;	38,967	
Total payables and accrued expenses	\$	774,841	\$ 63	38,750	

NOTE 7 — DEPOSITS AND ADVANCE PAYMENTS FOR GOODS AND SERVICES

Deposits and advance payments for goods and services for the primary institution at June 30, 2021 and 2020 consist of the following:

	 Primary Institution		
	 2021		2020
Current deposits and advance payments:			
Tuition and fees	\$ 56,453	\$	47,900
Departmental and auxiliary sales and services	68,105		59,338
Affinity agreements	7,177		2,930
Advance from concessionaire	21,786		21,786
Grant and contract advances	156,179		122,426
Health system advances	24,263		-
Other deposits and advance payments	 37,077		14,101
Total current deposits and advance payments	\$ 371,040	\$	268,481
Noncurrent deposits and advance payments:			
Advance from concessionaire	\$ 980,953	\$	1,002,769

Deposits and advance payments for goods and services for the discretely presented component units at June 30, 2021 and 2020 consist of the following:

	Discretely Presented				
		Component Units			
		2021		2020	
Current deposits and advance payments:				_	
Unearned rental income and deposits - Campus Partners	\$	2,863	\$	1,579	
Unearned revenues - Transportation Research Center		1,597		1,095	
Unearned rental income - SciTech		282		467	
Total current deposits and advance payments	\$	4,742	\$	3,141	
Non-current deposits and advance payments:					
Unearned rental income - Campus Partners	\$	51,374	\$	37,440	
Unearned rental income and deposits - SciTech		8,587		1,775	
Total (shown as other non-current liabilities)	\$	59,961	\$	39,215	

NOTE 8 — SELF-INSURANCE ACCRUALS

The university maintains self-insurance programs for professional medical malpractice, employee health insurance and workers' compensation. Information on each of these programs is provided below.

Medical Malpractice

The university has established trusteed self-insurance funds for professional medical malpractice liability claims with a \$4,000 limit per occurrence and \$18,000 annual aggregate. The university self-insurance funds have insurance in excess of \$4,000 per occurrence through Oval Limited, a blended component unit of the university. Effective July 1, 2020, Oval Limited provides coverage with limits of \$80,000 per occurrence and in the aggregate.

Previous coverage levels for Oval Limited are as follows:

Gross Oval Limit (Occurrence and Annual Aggregate)
\$80,000
\$85,000
\$75,000
\$55,000
\$40,000
\$35,000
\$25,000
\$15,000
\$10,000

The limits are in excess of underlying policies with limits of \$4,000 per occurrence and \$18,000 in the aggregate. For the year ended June 30, 2021, Oval reinsured, in excess of the self-insured retention, 100% of the first \$15,000 of risk to Berkley Hathaway Speciality Insurance. The next \$20,000 was fully ceded to The Medical Protective Company, then \$10,000 ceded to Endurance Specialty Insurance Ltd, with the next \$10,000 ceded to Arch Specialty Insurance Company, then \$5,000 was ceded to The Medical Protective Company and above that the Company ceded \$10,000 of the risk to Liberty Specialty Markets Bermuda Limited, with the remaining \$10,000 of the risk to Berkshire Hathaway Specialty Insurance.

The estimated liability and the related contributions to the trustee fund are based upon an independent actuarial determination as of June 30, 2021. OSUP participates in the university self-insurance fund for professional medical malpractice liability claims.

The university's estimate of professional malpractice liability includes provisions for known claims and actuarially determined estimates of incurred but not reported claims and incidents. This liability at June 30, 2021 of the anticipated future payments on gross claims is estimated at its present value of \$54,118 discounted at an estimated rate of 3% (university funds) and an additional \$20,179 discounted at an estimated rate of 3% (Oval Limited).

Although actual experience upon the ultimate disposition of the claims may vary from this estimate, the self-insurance fund assets of \$222,299 (which primarily consist of bond and equity mutual funds, money market funds and U.S. treasury notes) are more than the recorded liability at June 30, 2021, and the surplus of \$148,002 is included in unrestricted net position.

At June 30, 2020, the anticipated future payments on gross claims was estimated at its present value of \$56,749 discounted at an estimated rate of 3% (university funds) and an additional \$19,417 discounted at an estimated rate of 3% (Oval Limited). The self-insurance fund assets of \$204,872 (which primarily consist of bond and equity mutual funds, money market funds and U.S. treasury notes) were more than the recorded liability at June 30, 2020, and the surplus of \$128,706 was included in unrestricted net position.

Employee Health Insurance

The university is also self-insured for employee health insurance. As of June 30, 2021 and 2020, \$46,333 and \$32,583, respectively is recorded as a liability relating to both claims received but not paid and estimates of claims incurred but not yet reported.

Workers' Compensation

Effective January 1, 2013, the university became self-insured for workers' compensation. As of June 30, 2021 and 2020, respectively, \$17,122 and \$18,102, are recorded as a liability relating to both claims received but not paid and estimates of claims incurred but not yet reported.

Changes in reported self-insurance liabilities for the primary institution since June 30, 2019 result from the following activities:

		Malpractice		Health		Workers' Compensation		
		2021	2020	2021	2020	2021	2020	
Liability at beginning of fiscal year	\$	76,166 \$	70,339 \$	32,583 \$	37,016 \$	18,102 \$	19,276	
Current year provision for losses		1,977	9,036	416,109	373,448	5,355	5,166	
Claim payments	_	(3,846)	(3,209)	(402,360)	(377,881)	(6,335)	(6,340)	
Balance at fiscal year end	\$	74,297 \$	76,166 \$	46,332 \$	32,583 \$	17,122 \$	18,102	

NOTE 9 — DEBT

The university may finance the construction, renovation and acquisition of certain facilities through the issuance of debt obligations, which include general receipts bonds, special purpose receipts bonds, capital lease obligations, and other borrowings.

Debt activity for the primary institution for the year ended June 30, 2021 is as follows:

		Primary Institution								
	· · · · ·	Beginning						Ending		Current
		Balance	Ad	ditions	Re	ductions		Balance		Portion
Direct Borrowings and Direct Placements - Notes:										
WOSU	\$	1,667	\$	-	\$	159	\$	1,508	\$	159
OH Air Quality Note Series A		1,771		-		433		1,338		440
OH Air Quality Note Series B		2,340		-		-		2,340		-
St. Stephens Church Note		2,489		-		88		2,401		93
Direct Borrowings and Direct Placements - Other:										
Capital Lease Obligations		24,698		11,316		9,981		26,033		9,341
Ohio State Energy Partners		141,932		101,507		7,570		235,869		12,148
General Receipts Bonds - Fixed Rate:										
2010A, due serially through 2020		6,125		-		6,125		-		-
2010C, due 2040		654,785		-		-		654,785		-
2010D, due serially through 2032		84,625		-		4,635		79,990		11,675
2011, due 2111		500,000		-		-		500,000		-
2012A, due 2030		49,310		-		7,870		41,440		8,190
2012B, due 2033		10,525		-		1,540		8,985		1,575
2014A, due serially through 2044		124,250		-		2,690		121,560		2,825
2016A, due serially through 2111		600,000		-		-		600,000		-
2016B, due serially through 2030		17,535		-		1,405		16,130		1,465
2017, due serially through 2028		62,915		-		7,320		55,595		7,640
2020A, due serially through 2030		185,995		-		-		185,995		7,195
Special Purpose General Receipts Bonds - Fixed Rate:										
2013A, due 2043		337,955		-		-		337,955		-
General Receipts Bonds - Variable Rate:										
1997, due serially through 2027		3,350		-		1,650		1,700		1,700
1999B1, due serially through 2029		1,640		-		820		820		820
2001, due serially through 2032		6,765		-		3,315		3,450		3,450
2003C, due serially through 2031		5,190		-		5,190		-		-
2005B, due serially through 2035		8,120		-		8,120		-		-
2008B, due serially through 2028		17,650		-		8,650		9,000		9,000
2010E, due serially through 2035		125,000		-		-		125,000		125,000
2014B, due serially through 2044	_	150,000		-		-		150,000		150,000
	_	3,126,632		112,823		77,561		3,161,894		352,716
Unamortized Bond Premiums		114,545		-		9,415		105,130		-
Total outstanding debt	\$	3,241,177	\$	112,823	\$	86,976	\$	3,267,024	\$	352,716

Debt activity for the primary institution for the year ended June 30, 2020 is as follows:

	Primary Institution								
		Beginning					Ending		Current
		Balance	,	Additions	Redu	ıctions	Balance		Portion
Direct Borrowings and Direct Placements - Notes:									
WOSU	\$	1,826	\$	-	\$	159	\$ 1,667	\$	159
OH Air Quality Note Series A		2,198		-		427	1,771		433
OH Air Quality Note Series B		2,340		-		-	2,340		-
St. Stephens Church Note		2,573		-		84	2,489		88
Direct Borrowings and Direct Placements - Other:									
Capital Lease Obligations		21,001		10,958		7,261	24,698		9,972
Ohio State Energy Partners		41,672		102,811		2,551	141,932		7,570
General Receipts Bonds - Fixed Rate:									
2010A, due serially through 2020		16,325		-		10,200	6,125		6,125
2010C, due 2040		654,785		-		-	654,785		-
2010D, due serially through 2032		84,625		-		-	84,625		4,635
2011, due 2111		500,000		-		-	500,000		-
2012A, due 2030		58,220		-		8,910	49,310		7,870
2012B, due 2033		12,035		-		1,510	10,525		1,540
2014A, due serially through 2044		126,810		-		2,560	124,250		2,690
2016A, due serially through 2111		600,000		-		-	600,000		-
2016B, due serially through 2030		20,465		-		2,930	17,535		1,405
2017, due serially through 2028		69,950		-		7,035	62,915		7,320
2020A, due serially through 2030		-		185,995		-	185,995		7,195
Special Purpose General Receipts Bonds - Fixed Rate:									
2013A, due 2043		337,955		-		-	337,955		-
General Receipts Bonds - Variable Rate:									
1997, due serially through 2027		17,160		-		13,810	3,350		3,350
1999B1, due serially through 2029		10,765		-		9,125	1,640		1,640
2001, due serially through 2032		53,035		-		46,270	6,765		6,765
2003C, due serially through 2031		44,960		-		39,770	5,190		5,190
2005B, due serially through 2035		62,730		-		54,610	8,120		8,120
2008B, due serially through 2028		86,025		-		68,375	17,650		17,650
2010E, due serially through 2035		150,000		-		25,000	125,000		125,000
2014B, due serially through 2044	_	150,000		-		-	150,000		150,000
	_	3,127,455		299,764	3	300,587	3,126,632		374,717
Unamortized Bond Premiums	_	73,328	<u> </u>	46,029		4,812	114,545		_
Total outstanding debt	\$	3,200,783	\$	345,793	\$ 3	305,399	\$ 3,241,177	\$	374,717

Debt activity for the discretely presented component units for the year ended June 30, 2021 is as follows:

	Discretely Presented Component Units								
		Beginning			Ending			Current	
		Balance	Additions		Reductions	Balance		Portion	
Direct Borrowings and Direct Placements:									
OSU Physicians - Series 2013 Health Care									
Facilities Revenue Bond, due through 2035	\$	11,340	\$ -		\$ 586	\$ 10,754	\$	601	
OSU Physicians - Term Loan Payable, due 2023		837	-		279	558		284	
TRC Ohio Development Service Agency Note Payable		4,454	-		238	4,216		318	
Campus Partners - Columbus Foundation Note Payable		-	-		-	-		-	
SciTech - Project Notes Series 2001		340	-		340	-		-	
SciTech - Credit Facility		419	-		167	252		167	
Campus Partners PPP Loan		288	20	66	278	276		-	
Campus Partners EIDL Loan		160	-		10	150		4	
Campus Partners Finance Fund Loan		59	-		15	44		30	
Capital Lease Obligations		-	15	52	37	115		51	
Total outstanding debt	\$	17,897	\$ 4:	L8	\$ 1,950	\$ 16,365	\$	1,455	

Debt activity for the discretely presented component units for the year ended June 30, 2020 is as follows:

	Discretely Presented Component Units							
		Beginning			Ending		Current	
		Balance	Additions	Reductions	Balance		Portion	
Direct Borrowings and Direct Placements:								
OSU Physicians - Series 2013 Health Care								
Facilities Revenue Bond, due through 2035	\$	11,673	\$ -	\$ 333	\$ 11,340	\$	586	
OSU Physicians - Term Loan Payable, due 2023		1,347	-	510	837		277	
TRC Ohio Development Service Agency Note Payable		4,691	-	237	4,454		237	
Campus Partners - Columbus Foundation Note Payable		1,747	-	1,747	-		-	
SciTech - Project Notes Series 2001		670	-	330	340		340	
SciTech - Credit Facility		586	-	167	419		167	
Campus Partners PPP Loan		-	288	-	288		-	
Campus Partners EIDL Loan		-	160	-	160		-	
Campus Partners Finance Fund Loan		-	59	-	59		-	
Capital Lease Obligations		46	-	46	-			
Total outstanding debt	\$	20,760	\$ 507	\$ 3,370	\$ 17,897	\$	1,607	

Debt obligations are generally callable by the university, bear interest at fixed and variable rates ranging from 0% to 6% and mature at various dates through 2111. Maturities and interest on debt obligations for the next five years and in five-year periods for the primary institution are as follows:

	Primary Institution								
		Bonds		ı	Direct Borrowing Placeme				
		Principal	Interest		Principal	Interest		Total	
2022	\$	330,535 \$	118,235	\$	22,181 \$	16,108	\$	487,059	
2023		66,320	115,781		21,151	15,220		218,472	
2024		60,775	112,646		18,467	14,167		206,055	
2025		61,635	109,654		15,200	13,241		199,730	
2026		48,645	106,760		12,420	12,392		180,217	
2027-2031		243,210	499,462		61,311	49,796		853,779	
2032-2036		117,145	459,661		49,917	32,063		658,786	
2037-2041		786,840	399,972		45,119	16,159		1,248,090	
2042-2046		77,300	242,710		23,723	4,217		347,950	
2047-2051		350,000	177,247		-	-		527,247	
2052-2056		-	170,600		-	-		170,600	
2057-2061		250,000	125,060		-	-		375,060	
2062-2066		-	120,000		-	-		120,000	
2067-2071		-	120,000		-	-		120,000	
2072-2076		-	120,000		-	-		120,000	
2077-2081		-	120,000		-	-		120,000	
2082-2086		-	120,000		-	-		120,000	
2087-2091		-	120,000		-	-		120,000	
2092-2196		-	120,000		-	-		120,000	
2097-2101		-	120,000		-	-		120,000	
2102-2106		-	120,000		-	-		120,000	
2107-2111	_	500,000	120,000		-	-		620,000	
	\$_	2,892,405 \$	3,837,788	\$	269,489 \$	173,363	\$	7,173,045	

Maturities and interest on debt obligations for the next five years and in five-year periods for the discretely presented component units are as follows:

		Discretely Presented Component Units					
	Dire	Direct Borrowings and Direct Placements					
	P	rincipal	Interest		Total		
2022	\$	1,455 \$	323	\$	1,778		
2023		1,640	296		1,936		
2024		974	274		1,248		
2025		980	255		1,235		
2026		1,001	234		1,235		
2027-2031		5,323	852		6,175		
2032-2036		4,907	305		5,212		
2037-2041		28	9		37		
2042-2046		31	5		36		
2047-2051		26	1		27		
	\$	16,365	2,554	\$	18,919		

General receipts bonds are backed by the unrestricted receipts of the university, excluding certain items as described in the bond indentures.

University bond indentures include provisions for Events of Default and Remedies. In general, if the university fails to pay any interest or principal when it is due and payable, the Trustee may, upon the request of the holders of at least 25% of the outstanding principal on the bonds, declare the principal and any accrued interest as immediately due and payable. For the Series 2013A Special Purpose General Receipts bonds, Events of Default also include failure to "set rates, charges and fees in each Fiscal Year so as to cause Special Purpose Pledged Revenues to be in an amount not less than 1.1 times the aggregate debt service for the then-current Fiscal Year on all Special Purpose General Receipts Obligations".

The university's private and direct placement debt consists primarily of long-term payables to Ohio State Energy Partners (OSEP) for capital improvements. The university's Utility System Lease and Concession Agreement with OSEP includes Events of Default, including the failure to pay the Utility Fee. If the university fails to remedy the default as specified in the agreement, OSEP may terminate the agreement and require the university to pay OSEP the Utility System Concession Value as of the date of such termination. The Utility System Concession Value is defined as the fair market value of the Concessionaire Interest in the lease and concession agreement and would include principal and interest on any outstanding long-term payables to OSEP.

The outstanding bond indentures do not require mandatory reserves for future payment of principal and interest. However, the university has set aside \$395,245 for future debt service which is included in unrestricted net position.

The university has defeased various bonds by placing the proceeds of new bonds into an irrevocable trust to provide for all future debt service payments on the old bonds. The defeased bonds for the primary institution are as follows:

•		Amount
	Amount	Outstanding at
	Defeased	June 30, 2021
General Receipts Bonds:		
Series 2010D	4,376	3,982
	\$ 4,376	\$ 3,982

Neither the outstanding indebtedness nor the related trust account assets for the above bonds are included in the university's financial statements.

Special-Purpose General Receipts Bonds

In January 2013, the university issued \$337,955 of Special Purpose General Receipts Bonds, Series 2013A. These bonds are solely payable from, and secured by, a pledge of the gross revenues of Special Purpose Revenue Facilities. Special Purpose Revenue Facilities are defined in the Series 2013 Supplement as all housing and dining facilities and such auxiliary facilities as shall constitute recreation facilities owned by the university. The bond indenture agreement includes a debt covenant, requiring the university "to set rates, charges and fees in each Fiscal Year so as to cause Special Purpose Pledged Revenues to be in an amount not less than 1.10 times the aggregate debt service for the then-current Fiscal Year on all Special Purpose General Receipts Obligations." At June 30, 2021, the university is in compliance with this covenant. Condensed financial information for the Special Purpose Revenue Facilities is provided in Note 23.

Variable Rate Demand Bonds

Series 1997, 1999B1, 2001, 2003C, 2005B, 2008B, 2010E and 2014B variable rate demand bonds bear interest at rates based upon yield evaluations at par of comparable securities. The maximum interest rate allowable and the effective average interest rate from issue date to June 30, 2021 are as follows:

	Interest Rate Not	Effective Average
Series:	to Exceed	Interest Rate
1997	12%	0.066%
1999B1	12%	0.070%
2001	12%	0.072%
2003C	12%	0.194%
2005B	12%	0.068%
2008B	12%	0.072%
2010E	8%	0.067%
2014B1	not specified	0.063%
2014B2	not specified	0.071%

At the discretion of the university, the interest rate on the bonds can be converted to a fixed rate. The bonds may be redeemed by the university or sold by the bondholders to a remarketing agent appointed by the university at any time prior to conversion to a fixed rate at a price equal to the principal amount plus accrued interest.

The university's variable rate demand bonds mature at various dates through 2044. GASB Interpretation No. 1, *Demand Bonds Issued by State and Local Governmental Entities*, provides guidance on the statement of net position classification of these bonds. Under GASB Interpretation No. 1, outstanding principal balances on variable rate demand bonds may be classified as non-current liabilities if the issuer has entered into a "take-out agreement" to convert bonds "put" but not resold into some other form of long-term obligation. In the absence of such an agreement, the total outstanding principal balances for these bonds are required to be classified as current liabilities.

Although it is the university's intent to repay its variable rate demand bonds in accordance with the maturities set forth in the bond offering circulars, the university does not have "take-out agreements" in place per the GASB Interpretation No. 1 requirements. Accordingly, the university has classified the total outstanding principal balances on its variable rate demand bonds as current liabilities. The obligations totaled \$289,970 and \$317,715 at June 30, 2021 and 2020, respectively.

Capital Lease Obligations

Some university equipment items and vehicles are financed as capital leases. The original cost and lease obligations related to these capital leases as of June 30, 2021 are \$44,355 and \$26,032, respectively. The original cost and lease obligations related to these capital leases as of June 30, 2020 are \$33,088 and \$24,698, respectively.

Capitalization of Interest

In 2021, the university implemented GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of the Construction Period*. This standard requires that interest cost incurred during the period of construction be recognized as an expense in the period in which the cost is incurred. For the year ended June 30, 2021, total interest costs incurred for the primary institution were \$125,687 and are reported as interest expense in the statement of revenues, expenses and changes in net position. For the year ended June 30, 2020, total interest costs incurred for the primary institution were \$121,125. Of this amount, interest of \$4,746 was capitalized. The remaining amount of \$116,379 is reported as interest expense in the statement of revenues, expenses and changes in net position.

NOTE 10 – DERIVATIVE INSTRUMENTS

In connection with the anticipated refunding of the university's Series 2013A Special Purpose General Receipts Bonds in June 2023, the university has entered into two forward-starting pay fixed/receive floating interest rate swap agreements to convert all or a portion of the associated variable rate debt (anticipated June 2023) to synthetic fixed rates to protect against the potential of rising interest rates.

The terms of the two agreements are summarized below (\$ in 1,000s):

	-	Notional Amount	University Pays	University Receives	Effective Date	Termination Date	Par Cancellation Option	Counterparty Credit Rating
Swap Agreement 1	\$	164,400	1.188% Fixed Rate	Variable rate based on Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Index	June 1, 2023	June 1, 2043	6/1/2035 at University's option	A1/A
Swap Agreement 2	\$	164,400	1.264% Fixed Rate	Variable rate based on SIFMA Municipal Swap Index	June 1, 2023	June 1, 2043	6/1/2035 at University's option	Aa2/A+

The forward-starting pay fixed/receive floating interest rate swap agreements are considered effective hedging derivatives as of June 30, 2021. The fair value of these swaps generally represents the estimated amount that the university would pay to terminate the swap agreements at the statement of net position date taking into account market interest rates as of June 30, 2021. The valuation inputs used to determine the fair value of these instruments are considered Level 2, as they rely on observable inputs other than quoted market prices. The notional amount represents the underlying reference of the instrument and does not represent the amount of the university's settlement obligations.

Fair values, changes in fair value and financial classification of the swap agreements are summarized below:

Effective hedging derivatives: floating-to-fixed interest rate swaps	Amount	Financial Statement Classification
Fair Value as of June 30, 2021	\$ 12,298	Other non-current asset
Change in Fair Value for Year Ended June 30, 2021	\$ 18,927	Deferred inflows - other

Effective Hedging derivatives: floating-to fixed interest rate swaps	Amount	Financial Statement Classification
Fair Value as of June 30, 2020	\$ (6,629)	Other non-current liability
Change in Fair Value for Year Ended June 30, 2020	\$ (6,629)	Deferred outflows - other

Using rates in effect as of June 30, 2021, the projected cash flows for the pay fixed/receive floating interest rate swaps deemed effective cash flow hedges, along with the debt service requirements of the associated variable rate debt (anticipated June 2023), are summarized as follows:

	Primary Institution											
	Variable Rat	e Bonds*	Swap	Total								
	Principal	Interest	Payments, Net	Payments								
2024	-	99	4,261	4,360								
2025	-	99	4,261	4,360								
2026	-	99	4,261	4,360								
2027-2031	53,655	480	20,729	74,864								
2032-2036	109,355	348	15,032	124,735								
2037-2041	116,855	180	7,755	124,790								
2042-2043	48,955	22	954	49,931								
	328.820	1.327	57.253	387.400								

^{*} Variable rate bond interest based on 6/30/2021 SIFMA rate of 0.03%.

Hedging Derivative Instrument Risk Factors

By using derivative financial instruments to hedge exposure to changes in interest rates, the university is exposed to certain risk factors. A discussion of the risk factors applicable to the university's swaps and the steps that have been taken to mitigate each risk factor is presented below.

Termination Risk

There is termination risk with pay fixed/receive floating interest rate swaps as the university or swap counterparty may terminate a swap if the other party fails to perform under the terms of the contract. The swaps also contain ratings-based termination provisions where a swap agreement

may be terminated if the counterparty's or the university's General Receipts credit ratings fall below Baa2 or BBB. The university's swaps specify Market Quotation, Second Method as the method for determining the termination value. Additionally, the university holds a par cancellation option which enables the university to cancel the swap at no cost starting June 1, 2035. This option also acts to limit the calculation of negative fair value to just the years remaining between the termination date and the date of the par termination option, which in turn mitigates any potential termination payment which may be owed by the university.

Credit Risk

Contracts with positive fair values to the university expose the university to credit risk to the extent the counterparty is unable to pay the termination value upon a Termination Event or an Event of Default. As a mitigant to this risk, the university's swaps include non-parallel collateral posting thresholds under which the counterparties must post collateral if the counterparties' ratings fall to the A+/A1 ratings category for fair values in excess of \$75 million, with that threshold declining at each lower ratings category until reaching a threshold of \$5 million at BBB/Baa2. No collateral had been posted at June 30, 2021.

NOTE 11 — OPERATING LEASES

The university leases various buildings, office space, and equipment under operating lease agreements. These facilities and equipment are not recorded as assets on the statement of net position. The total rental expense under these agreements was \$22,752 and \$26,458 for the years ended June 30, 2021 and 2020, respectively.

Future minimum payments for all significant operating leases with initial or remaining terms in excess of one year as of June 30, 2021 are as follows:

	Primary			Discretely Presented				
Year Ending June 30,		Institution	Component Units					
2022	\$	21,687	\$	7,649				
2023		19,655		7,256				
2024		17,769		6,374				
2025		13,596		6,585				
2026		12,948		8,068				
2027-2031		53,369		30,103				
2032-2036		20,266		1,873				
2037-2041		19,804		-				
2042-2046		22,090		-				
2047-2051		24,277		-				
2052-2056		1,323		-				
2057-2061		1,382		-				
2062-2066		1,370		<u>-</u> _				
Total minimum lease payments	\$	229,536	\$	67,908				

NOTE 12 — COMPENSATED ABSENCES

University employees earn vacation and sick leave on a monthly basis.

Classified civil service employees may accrue vacation benefits up to a maximum of three years credit. Administrative and professional staff and faculty may accrue vacation benefits up to a maximum of 240 hours. For all classes of employees, any earned but unused vacation benefit is payable upon termination.

Sick leave may be accrued without limit. However, earned but unused sick leave benefits are payable only upon retirement from the university with ten or more years of service with the state. The amount of sick leave benefit payable at retirement is one fourth of the value of the accrued but unused sick leave up to a maximum of 240 hours.

The university accrues sick leave liability for those employees who are currently eligible to receive termination payments as well as other employees who are expected to become eligible to receive such payments. This liability is calculated using the "termination payment method" which is set forth in Appendix C, Example 4 of the GASB Statement No. 16, *Accounting for Compensated Absences*. Under the termination method, the university calculates a ratio, Sick Leave Termination Cost per Year Worked, that is based on the university's actual historical experience of sick leave payouts to terminated employees. This ratio is then applied to the total years-of-service for current employees.

Certain employees of the university (mostly classified civil service employees) receive compensation time in lieu of overtime pay. Any unused compensation time must be paid to the employee at termination or retirement.

NOTE 13 — OTHER LIABILITIES

Other liability activity for the primary institution for the year ended June 30, 2021 is as follows:

Compensated absences
Self-insurance accruals
Amounts due to third party payors
Irrevocable split-interest agreements
Refundable advances for Federal Perkins loans
Other noncurrent liabilities
Other current liabilities

Primary Institution													
Beginning Ending													
	Balance		Additions		Reductions		Balance		Portion				
\$	225,561	\$	37,451	\$	24,292	\$	238,720	\$	24,292				
	126,851		423,441		412,541		137,751		52,668				
	110,819		12,337		3,366		119,790		29,387				
	35,117		8,130		3,655		39,592		3,264				
	29,695		-		3,690		26,005		-				
	104,255		190,039		10,651		283,643		-				
	316		1,236		316		1,236		1,236				
\$	632,614	\$	672,634	\$	458,511	\$	846,737	\$	110,847				

Other liability activity for the primary institution for the year ended June 30, 2020 is as follows:

Compensated absences
Self-insurance accruals
Amounts due to third party payors
Irrevocable split-interest agreements
Refundable advances for Federal Perkins loans
Other noncurrent liabilities
Other current liabilities

_	Primary Institution													
	Beginning Ending Current													
	Balance		Additions		Reductions		Balance		Portion					
\$	192,940	\$	48,024	\$	15,403	\$	225,561	\$	15,403					
	126,631		382,121		381,901		126,851		38,923					
	76,470		43,395		9,046		110,819		50,303					
	31,727		7,045		3,655		35,117		3,264					
	33,478		-		3,783		29,695		-					
	122,292		-		18,037		104,255		-					
	-		316		-		316		316					
\$	583,538	\$	480,901	\$	431,825	\$	632,614	\$	108,209					

NOTE 14 — RENTALS UNDER OPERATING LEASES

The university is the lessor of certain land, buildings, office and retail space under operating lease agreements. Future minimum rental income from non-cancelable operating leases for the primary institution as of June 30, 2021 is as follows:

Year Ending June 30,	
2022	\$ 7,496
2023	6,121
2024	5,288
2025	4,232
2026	3,067
2027-2031	11,838
2032-2036	1,484
2037-2041	610
2042-2046	610
2047-2051	606
2052 and beyond	 1,000
Total minimum future rentals	\$ 42,352

The discretely presented component units are the lessor of certain land, buildings, office and retail space under operating lease agreements. Future minimum rental income from non-cancelable operating leases as of June 30, 2021 is as follows:

Year Ending June 30,	
2022	\$ 9,405
2023	8,638
2024	8,280
2025	7,913
2026	6,771
2027-2031	31,561
2032-2036	24,487
2037-2041	20,806
2042-2046	21,083
2047-2051	20,368
Total minimum future rentals	\$ 159,312

NOTE 15 — OPERATING EXPENSES BY OBJECT

In accordance with requirements set forth by the Ohio Board of Regents, the university reports operating expenses by functional classification on the Statement of Revenues, Expenses and Changes in Net Position. Operating expenses by object for the primary institution for the years ended June 30, 2021 and 2020 are summarized as follows:

Year Ended June 30, 2021

	Primary Institution									
	Compensation and		Supplies and	Scholarship and						
		Benefits		Services		Fellowships		Depreciation	Total	
Instruction	\$	859,138	\$	98,366	\$	-	\$	- \$	957,504	
Separately budgeted research		258,895		177,991		-		-	436,886	
Public service		60,829		78,759		-		-	139,588	
Academic support		119,728		70,369		-		-	190,097	
Student services		40,796		11,290		-		-	52,086	
Institutional support		165,206		64,787		-		-	229,993	
Operation and maintenance of plant		6,714		88,958		-		-	95,672	
Scholarships and fellowships		8,227		4,054		133,906		-	146,187	
Auxiliary enterprises		88,875		117,248		-		-	206,123	
OSU Health System		936,366		1,796,775		-		-	2,733,141	
Depreciation		-		-		=		457,950	457,950	
Total operating expenses	\$	2,544,774	\$	2,508,597	\$	133,906	\$	457,950 \$	5,645,227	

Year Ended June 30, 2020

	Primary Institution									
	Compensation and		Supplies and	Scholarships and						
		Benefits	Services	Fellowships		Depreciation		Total		
Instruction	\$	981,056 \$	115,198	\$ -	\$	- :	\$	1,096,254		
Separately budgeted research		360,402	177,510	-		-		537,912		
Public service		108,396	79,458	-		-		187,854		
Academic support		212,169	38,505	-		-		250,674		
Student services		76,683	18,387	-		-		95,070		
Institutional support		239,028	139,524	-		-		378,552		
Operation and maintenance of plant		34,247	88,202	-		-		122,449		
Scholarships and fellowships		7,802	1,957	130,611		-		140,370		
Auxiliary enterprises		185,666	134,726	-		-		320,392		
OSU Health System		1,733,288	1,611,879	-		-		3,345,167		
Depreciation		=	-	-		425,012		425,012		
Total operating expenses	\$	3,938,737 \$	2,405,346	\$ 130,611	\$	425,012	\$	6,899,706		

NOTE 16 — RETIREMENT PLANS

University employees are covered by one of three retirement systems. The university faculty is covered by the State Teachers Retirement System of Ohio (STRS Ohio). Substantially all other employees are covered by the Public Employees Retirement System of Ohio (OPERS). Employees may opt out of STRS Ohio and OPERS and participate in the Alternative Retirement Plan (ARP) if they meet certain eligibility requirements.

STRS Ohio and OPERS offer statewide cost-sharing multiple-employer defined benefit pension plans. STRS Ohio and OPERS provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. In addition, the retirement systems provide other post-employment benefits (OPEB), consisting primarily of healthcare. Benefits are established by state statute and are calculated using formulas that include years of service and final average salary as factors.

In accordance with GASB Statements Nos. 68 and 75, employers participating in cost-sharing multiple-employer plans are required to recognize a proportionate share of the collective net pension and OPEB liabilities of the plans. Although changes in the net pension and OPEB liabilities generally are recognized as expense in the current period, certain items are deferred and recognized as expense in future periods. Deferrals for differences between projected and actual investment returns are amortized to pension expense over five years. Deferrals for employer contributions subsequent to the measurement date are amortized in the following period (one year). Other deferrals are amortized over the estimated remaining service lives of both active and inactive employees (amortization periods range from 3 to 10 years).

The collective net pension liabilities of the retirement systems and the university's proportionate share of these liabilities as of June 30, 2021 are as follows:

	STRS-Ohio	OPERS	Total
Net pension liability - all employers	\$ 24,196,442 \$	14,500,930	
Proportion of the net pension liability - university	4.9%	10.4%	
Proportionate share of net pension liability	\$ 1,175,836 \$	1,503,497	\$ 2,679,333

The collective net OPEB assets of the retirement systems and the university's proportionate share of these assets as of June 30, 2021 are as follows:

	STRS-Ohio		OPERS	Total
Net OPEB (asset) liability - all employers	\$	(1,757,498) \$	(1,781,580)	
Proportion of the net OPEB (asset) liability - university		4.9%	10.7%	
Proportionate share of net OPEB (asset) liability	\$	(85,406) \$	(189,776)	\$ (275,182)

The collective net pension liabilities of the retirement systems and the university's proportionate share of these liabilities as of June 30, 2020 are as follows:

	STRS-Ohio	OPERS	Total
Net pension liability - all employers	\$ 22,114,399	¢ 10 552 27/	
Proportion of the net pension liability - university	4.7%	10.2%	
Proportionate share of net pension liability	\$ 1,040,149	\$ 1,984,880_\$	3,025,029

The collective net OPEB assets and liabilities of the retirement systems and the university's proportionate share of these assets and liabilities as of June 30, 2020 are as follows:

	STRS-Ohio		(OPERS		Total
Net OPEB (asset) liability - all employers	\$	(1,656,240)	5 :	13,812,598		
Proportion of the net OPEB (asset) liability - university		4.7%		10.4%		
Proportionate share of net OPEB (asset) liability	\$	(77,901)	\$	1,436,889	\$	1,358,988

Deferred outflows of resources and deferred inflows of resources for pensions were related to the following sources as of June 30, 2021:

	STRS-Ohio	OPERS	Total
Deferred Outflows of Resources:			
Differences between expected and actual experience	2,638	1,578	4,216
Changes in assumptions	63,120	2,577	65,697
Net difference between projected and actual earnings on pension plan investments	57,181	-	57,181
Changes in proportion of university contributions	1,947	4,836	6,783
University contributions subsequent to the	87,064	118,738	205,802
measurement date			
Total	211,950	127,729	339,679
Deferred Inflows of Resources:			
Differences between expected and actual experience	\$ 7,519	\$ 72,258	\$ 79,777
Net difference between projected and actual earnings	-	602,692	602,692
on pension plan investments			
Changes in proportion of university contributions	_	21	21
Total	\$ 7,519	\$ 674,971	\$ 682,490

Deferred outflows of resources and deferred inflows of resources for OPEB were related to the following sources as of June 30, 2021:

	S	TRS-Ohio	OPERS	Total
Deferred Outflows of Resources:				
Differences between expected and actual experience	\$	5,472	\$ -	\$ 5,472
Changes in assumptions		1,410	91,112	92,522
Net difference between projected and actual earnings on OPEB plan investments		2,993	-	2,993
Changes in proportion of university contributions		119	3,076	3,195
Total	\$	9,994	\$ 94,188	\$ 104,182
Deferred Inflows of Resources:				
Differences between expected and actual experience	\$	17,012	\$ 170,003	\$ 187,015
Changes in assumptions		81,122	307,493	388,615
Net difference between projected and actual earnings		-	100,068	100,068
on pension plan investments				
Total	\$	98,134	\$ 577,564	\$ 675,698

Deferred outflows of resources and deferred inflows of resources for pensions were related to the following sources as of June 30, 2020:

	S	TRS-Ohio	OPERS	Total
Deferred Outflows of Resources:				
Differences between expected and actual experience	\$	8,469	\$ 1,582	\$ 10,051
Changes in assumptions		122,186	107,584	229,770
Net difference between projected and actual earnings on pension plan investments		-	-	-
Changes in proportion of university contributions		1,187	5,966	7,153
University contributions subsequent to the measurement date		82,657	116,139	198,796
Total	\$	214,499	\$ 231,271	\$ 445,770
Deferred Inflows of Resources:				
Differences between expected and actual experience	\$	4,503	\$ 32,072	\$ 36,575
Net difference between projected and actual earnings on pension plan investments		50,837	399,896	450,733
Changes in proportion of university contributions		-	40	40
Total	\$	55,340	\$ 432,008	\$ 487,348

Deferred outflows of resources and deferred inflows of resources for OPEB were related to the following sources as of June 30, 2020:

	STRS-Ohio	OPERS	Total
Deferred Outflows of Resources:			_
Differences between expected and actual experience	\$ 7,062	\$ 36	\$ 7,098
Changes in assumptions	1,637	227,196	228,833
Net difference between projected and actual earnings on OPEB plan investments	-	-	-
Changes in proportion of university contributions	135	3,562	3,697
University contributions subsequent to the measurement date	-	-	-
Total	\$ 8,834	\$ 230,794	\$ 239,628
Deferred Inflows of Resources:			
Differences between expected and actual experience	\$ 3,963	\$ 131,362	\$ 135,325
Changes in assumptions	85,409	-	85,409
Net difference between projected and actual earnings on pension plan investments	4,893	72,837	77,730
Changes in proportion of university contributions	-	-	-
Total	\$ 94,265	\$ 204,199	\$ 298,464

Net deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense during the years ending June 30 as follows:

	STRS-Ohi	o C	PERS	Total
2022	126	,428	(126,694)	(266)
2023	19	,960	(91,050)	(71,090)
2024	32	,020	(244,892)	(212,872)
2025	26	,023	(83,567)	(57,544)
2026		-	(457)	(457)
2027 and Thereafter		-	(581)	(581)
Total	\$ 204	,431 \$	(547,241) \$	(342,810)

Net deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense during the years ending June 30 as follows:

	STRS-Ohio	OPERS	Total
2022	(21,688)	(251,639)	(273,327)
2023	(19,791)	(176,653)	(196,444)
2024	(19,085)	(43,175)	(62,260)
2025	(18,664)	(11,912)	(30,576)
2026	(4,439)	-	(4,439)
2027 and Thereafter	(4,471)	-	(4,471)
Total	\$ (88,138) \$	(483,379) \$	(571,517)

The following table provides additional details on the benefit formulas, contribution requirements and significant assumptions used in the measurement of total pension and OPEB liabilities for the retirement systems (information below applies to both pensions and OPEB unless otherwise indicated).

	STRS-Ohio	OPERS
Statutory	Ohio Revised Code Chapter 3307	Ohio Revised Code Chapter 145
Authority		

Benefit Formula

Pensions -- The annual retirement allowance based on final average salary multiplied by a

percentage that varies based on years of service. Effective August 1, 2015, the calculation is 2.2% of final average salary for the five highest years of earnings multiplied by all years of service. Eligibility changes

will be phased in until Aug. 1, 2026, when retirement eligibility for unreduced benefits will be five years of service credit and age 65, or 35 years of service credit and at least age 60. Eligibility changes for DB Plan members who retire with actuarially reduced benefits will be phased in until Aug. 1, 2023 when retirement eligibility will be five years of qualifying service credit and age 60, or 30 years of service credit at any age.

OPEB - STRS Ohio provides access to health care coverage for eligible retirees who participated in the Defined Benefit or Combined Plans and their eliaible dependents. Coverage under the current includes hospitalization, program physicians' fees and prescription drugs and reimbursement of a portion of the monthly Medicare Part B premiums. Medicare Part premium reimbursements will be discontinued effective January 1, 2021. Pursuant to the Ohio Revised Code, the Retirement Board has discretionary

authority over how much, if any, of the associated health care costs will be absorbed by the plan. All benefit recipients pay a portion of the health care costs in the form of a monthly premium. Benefit recipients contributed \$295.8 million or 60% of the total health care costs in fiscal 2020 (excluding deductibles, coinsurance and copayments).

Medicare Part D is a federal program to help cover the costs of prescription drugs for Medicare beneficiaries. This program allows STRS Ohio to recover part of the cost for providing prescription coverage since all eligible STRS Ohio health care plans include creditable prescription drug coverage.

Pensions -- Benefits are calculated on the basis of age, final average salary (FAS), and service credit. State and Local members in transition Groups A and B are eligible for retirement benefits at age 60 with five years of service credit or at age 55 with 25 or more years of service credit. Group C for State and Local is eligible for retirement at age 57 with 25 years of service or at age 62 with five years of service. For Groups A and B, the annual benefit is based on 2.2% of FAS multiplied by the actual years of service for the first 30 years of service credit and 2.5% for years of service in excess of 30 years. For Group C, the annual benefit applies a factor of 2.2% for the first 35 years and a factor of 2.5% for the years of service in excess of 35. FAS represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member's career.

The base amount of a member's pension benefit is locked in upon receipt of the initial benefit payment for calculation of annual cost-of-living adjustment.

OPEB – The Ohio Revised Code permits, but does not require, OPERS to offer postemployment health care coverage. The ORC allows a portion of the employers' contributions to be used to fund health care coverage. The health care portion of the employer contribution rate for the Traditional Pension Plan and Combined Plan is comparable, as the same coverage options are provided to participants in both plans. Beginning January 1, 2015, the service eligibility criteria for health care coverage increased from 10 years to 20 years with a minimum age of 60, or 30 years of qualifying service at any age. Beginning with January 2016 premiums, Medicare-eligible retirees could select supplemental coverage through the Connector, and may be eligible for monthly allowances deposited to an HRA to be used for reimbursement of eligible health care expenses. Coverage for non-Medicare retirees includes hospitalization, medical expenses and prescription drugs. The System determines the amount, if any, of the

	STRS-Ohio	OPERS
	For the year ended June 30, 2020, STRS Ohio received \$81.9 million in Medicare Part D reimbursements.	associated health care costs that will be absorbed by the System and attempts to control costs by using managed care, case management, and other programs. Additional details on health care coverage can be found in the Plan Statement in the OPERS 2020 CAFR.
		OPERS no longer participates in the Medicare Part D program as of December 31, 2016.
Cost-of-Living Adjustments (COLAs)	Effective July 1, 2017, the COLA was reduced to 0%.	Once a benefit recipient retiring under the Traditional Pension Plan has received benefits for 12 months, current law provides for an annual COLA. The COLA is calculated on the member's base pension benefit at the date of retirement and is not compounded. Members retiring under the Combined Plan receive a COLA on the defined benefit portion of their pension benefit. For those who retired prior to January 7, 2013, current law provides for a 3% COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, current law provides that the adjustment will be based on the average percentage increase in the Consumer Price Index, capped at 3%.
Contribution Rates	Employer and member contribution rates are established by the State Teachers Retirement Board and limited by Chapter 3307 of the Ohio Revised Code. The statutory employer rate is 14% and the statutory member rate is 14% of covered payroll. Under Ohio law, funds to pay health care costs may be deducted from employer contributions. For the year ended June 30, 2020, no employer allocation was made to the health care fund.	Employee and member contribution rates are established by the OPERS Board and limited by Chapter 145 of the Ohio Revised Code. For 2019, employer rates for the State and Local Divisions were 14% of covered payroll (and 18.1% for the Law Enforcement and Public Safety Divisions). Member rates for the State and Local Divisions were 10% of covered payroll (13% for Law Enforcement and 12% for Public Safety).
Measurement Date	June 30, 2020	December 31, 2020 (OPEB is rolled forward from December 31, 2019 actuarial valuation date)

	STRS-Ohio	OPERS
Actuarial Assumptions	Valuation Date: June 30, 2020 for pensions and OPEB Actuarial Cost Method: Individual entry age Investment Rate of Return: 7.45% Inflation: 2.50% Projected Salary Increases: 12.50% at age 20 to 2.50% at age 65 Cost-of-Living Adjustments: 0% effective July 1, 2017 Payroll Increases: 3.00% Health Care Cost Trends: 5.00% to 11.87% initial; 4% ultimate	Valuation Date: December 31, 2020 for pensions; December 31, 2019 for OPEB Actuarial Cost Method: Individual entry age Investment Rate of Return: 7.2% for pensions; 6.0% for OPEB Inflation: 3.25% Projected Salary Increases: 3.25% - 10.75% Cost-of-Living Adjustments: Pre-1/7/2013 Retirees: 3.00% Simple Post-1/7/2013 Retirees: 0.50% Simple through 2021, then 2.15% Simple Health Care Cost Trends: 8.50% initial;
Mortality Rates	Post-retirement mortality rates for healthy retirees are based on the RP-2014 Annuitant Mortality Table with 50% of rates through age 69, 70% of rates between ages 70 and 79, 90% of rates between ages 80 and 84, and 100% of rates thereafter, projected forward generationally using mortality improvement scale MP-2016. Preretirement mortality rates are based on RP-2014 Employee Mortality Tables, projected forward generationally using mortality improvement scale MP-2016. Post-retirement disabled mortality rates are based on the RP2014 Disabled Mortality Table with 90% of rates for males and 100% of rates for females, projected forward generationally using mortality improvement scale MP-2016.	Pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all of the above described tables.
Date of Last Experience Study	June 30, 2016	December 31, 2015

Investment Return Assumptions

The 10 year expected real rate of return on defined benefit pension and health care plan investments was determined by STRS Ohio's investment consultant by developing best estimates of expected future real rates of return for each major asset class. The target allocation and long-term expected real rate of return for each major asset class are summarized as follows:

STRS-Ohio

		Long Term
	Target	Expected
Asset Class	Allocation	Return*
Domestic Equity	28.0%	7.35%
International Equity	23.0%	7.55%
Alternatives	17.0%	7.09%
Fixed Income	21.0%	3.00%
Real Estate	10.0%	6.00%
Liquidity Reserves	1.0%	2.25%
Total	100%	-"

^{*} Returns presented as geometric means

OPERS

The long term expected rates of return on defined benefit pension and health care investment assets were determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

The following table displays the Boardapproved asset allocation policy for defined benefit pension assets for 2020 and the longterm expected real rates of return:

		Long Term
	Target	Expected
Asset Class	Allocation	Return*
Fixed Income	25.0%	1.32%
Domestic Equity	21.0%	5.64%
Real Estate	10.0%	5.39%
Private Equity	12.0%	10.42%
International Equity	23.0%	7.36%
Other Investments	9.0%	4.75%
Total	100.0%	

^{*} Returns presented as arithmetic means

The following table displays the Boardapproved asset allocation policy for health care assets for 2020 and the long-term expected real rates of return:

	Target	Long Term Expected
Asset Class	Allocation	Return*
Fixed Income	34.0%	1.07%
Domestic Equities	25.0%	5.64%
REITs	7.0%	6.48%
International Equities	25.0%	7.36%
Other Investments	9.0%	4.02%
Total	100.0%	

⁷⁸

Discount Rate

Pensions -- The discount rate used to measure the total pension liability was 7.45% as of June 30, 2020. The projection of cash flows used to determine the discount rate assumes that member and employer contributions will be made at the statutory contribution rates in accordance with the rate increases described above. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Based on those assumptions, STRS Ohio's fiduciary net position was projected to be available to make all projected future benefit payments to current plan members as of June 30, 2020. Therefore, the long-term expected rate of return on pension plan investments of 7.45% was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2020.

OPEB -- The discount rate used to measure the total OPEB liability was 7.45% as of June 30, 2020. The projection of cash flows used to determine the discount rate assumes STRS Ohio continues to allocate no employer contributions to the health care fund. Based on these assumptions, the OPEB plan's fiduciary net position was projected to be sufficient to make all projected future

benefit payments of current plan members. Therefore, the long-term expected rate of return on health care plan investments of 7.45% was applied to all periods of projected health care costs to determine the total OPEB liability as of June 30, 2020.

Pensions -- The discount rate used to measure the total pension liability was 7.2% for the

Traditional Pension Plan, the Combined Plan and the Member-Directed Plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

OPEB – A single discount rate of 6.00% was used to measure the OPEB liability on the measurement date of December 31, 2020. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average

AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate are not met). This single discount rate was based on an expected rate of return on the health care investment portfolio of 6.00% and a municipal bond rate of 2.00%. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care costs through 2120. As a result, the long-term expected rate of return on health care investments was applied to projected costs through the year 2120, the duration of the projection period

	STRS-Ohio	OPERS				
	0.1110	through which projected health care payments are fully funded.				
Changes in Assumptions Since the Prior	Pensions – There were no changes in assumptions since the prior measurement date of June 30, 2019.	Pensions – There were no changes in assumptions since the prior measurement date of December 31, 2019.				
Measurement Date	OPEB There were no changes in assumptions since the prior measurement date of June 30, 2019.	OPEB The discount rate was increased from 3.16% to 6.00% based on the methodology defined under GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB).				
Benefit Term Changes Since the Prior	Pensions – There were no changes in benefit terms since the prior measurement date of June 30, 2019.	Pensions – There were no changes in benefit terms since the prior measurement date of December 31, 2019.				
Measurement Date	OPEB The non-Medicare subsidy percentage was increased effective January 1, 2021 from 1.984% to 2.055% per year of service. The non-Medicare frozen subsidy base premium was increased effective January 1, 2021. The Medicare subsidy percentages were adjusted effective January 1, 2021 to 2.1% for the AMA Medicare plan. The Medicare Part B monthly reimbursement elimination date was postponed indefinitely.	approved several changes to the health care plan offered to Medicare and pre-Medicare retirees in efforts to decrease costs and increase the solvency of the health care plan. These changes are effective January 1, 2022, and include changes to base allowances and eligibility for Medicare retirees, as well as replacing OPERS-sponsored medical plans for pre-Medicare retirees with monthly				
Sensitivity of Net Pension Liability to	1% Decrease Current Rate 1% Increase (6.45%) (7.45%) (8.45%)	1% Decrease Current Rate 1% Increase (6.2%) (7.2%) (8.2%)				
Changes in Discount Rate Sensitivity of	\$ 1,674,185 \$ 1,175,835 \$ 753,526	\$ 2,906,112 \$ 1,503,497 \$ 338,004				
Net OPEB Liability	1% Decrease Current Rate 1% Increase (6.45%) (7.45%) (8.45%)	1% Decrease Current Rate 1% Increase (5.00%) (6.00%) (7.00%)				
(Asset) to Changes in Discount Rate	\$ (74,309) \$ (85,406) \$ (94,822)	\$ (47,204) \$ (189,776) \$ (307,093)				
Sensitivity of Net OPEB Liability (Asset) to	1% Decrease in Current 1% Increase in Trend Rate Trend Rate Trend Rate	1% Decrease in Current 1% Increase in Trend Rate Trend Rate Trend Rate				
Changes in Medical Trend Rate	\$ (94,237) \$ (85,406) \$ (74,649)	\$ (194,464) \$ (189,776) \$ (184,661)				

Defined Contribution Plans

ARP is a defined contribution pension plan. Full-time administrative and professional staff and faculty may choose enrollment in ARP in lieu of OPERS or STRS Ohio. Classified civil service employees hired on or after August 1, 2005 are also eligible to participate in ARP. ARP does not provide disability benefits, annual cost-of-living adjustments, post-retirement health care benefits or death benefits to plan members and beneficiaries. Benefits are entirely dependent on the sum of contributions and investment returns earned by each participant's choice of investment options.

OPERS also offers a defined contribution plan, the Member-Directed Plan (MD). The MD plan does not provide disability benefits, annual cost-of-living adjustments, post-retirement health care benefits or death benefits to plan members and beneficiaries. Benefits are entirely dependent on the sum of contributions and investment returns earned by each participant's choice of investment options.

STRS Ohio also offers a defined contribution plan in addition to its long established defined benefit plan. All employee contributions and employer contributions at a rate of 9.53% are placed in an investment account directed by the employee. Disability benefits are limited to the employee's account balance. Employees electing the defined contribution plan receive no post-retirement health care benefits.

Combined Plans

STRS Ohio offers a combined plan with features of both a defined contribution plan and a defined benefit plan. In the combined plan, employee contributions are invested in self- directed investments, and the employer contribution is used to fund a reduced defined benefit. Employees electing the combined plan receive post-retirement health care benefits.

OPERS also offers a combined plan. This is a cost-sharing multiple-employer defined benefit plan that has elements of both a defined benefit and defined contribution plan. In the combined plan, employee contributions are invested in self-directed investments, and the employer contribution is used to fund a reduced defined benefit. Employees electing the combined plan receive post-retirement health care benefits. OPERS provides retirement, disability, survivor and post-retirement health benefits to qualifying members of the combined plan.

Summary of Employer Pension and OPEB Expense

Total pension and OPEB expense for the year ended June 30, 2021, including employer contributions and accruals associated with recognition of net pension liabilities, net OPEB assets and liabilities, and related deferrals, is presented below.

Employer Contributions	
GASB 68 Pension Accruals	
GASB 75 OPEB Accruals	
Total Pension and OPEB Expense	

S	STRS-Ohio		OPERS	ARP	Total		
\$	86,909	\$	240,142	\$	68,579	\$ 395,630	
\$	90,414	\$	(134,879)			\$ (44,465)	
\$	(4,796)	\$	(1,116,692)			\$ (1,121,488)	
\$	172,527	\$	(1,011,429)	\$	68,579	\$ (770,323)	

Notes to Financial Statements – Years Ended June 30, 2021 and 2020

(dollars in thousands)

Total pension and OPEB expense for the year ended June 30, 2020, including employer contributions and accruals associated with recognition of net pension liabilities, net OPEB assets and liabilities, and related deferrals, is presented below.

	S	TRS-Ohio	OPERS	ARP			Total
Employer Contributions	\$	82,576 \$	231,977	\$	65,362	\$	379,915
GASB 68 Pension Accruals		76,001	182,925				258,926
GASB 75 OPEB Accruals		(23,500)	193,012				169,512
Total Pension and OPEB Expense	\$	135,077 \$	607,914	\$	65,362	\$	808,353

Pension and OPEB expenses are allocated to institutional functions on the Statement of Revenues, Expenses and Changes in Net Position.

Both STRS Ohio and OPERS issue separate, publicly available financial reports that include financial statements and required supplemental information. These reports may be obtained by contacting the two organizations.

STRS Ohio	OPERS
275 East Broad Street	277 East Town Street
Columbus, OH 43215-3371	Columbus, OH 43215-4642
(614) 227-4090	(614) 222-5601
(888) 227-7877	(800) 222-7377
www.strsoh.org	www.opers.org/investments/cafr.shtml

OSU Physicians Retirement Plan

Retirement benefits are provided for the employees of OSUP through a tax-sheltered 403(b) and 401(a) defined contribution plan administered by an insurance company. OSUP is required to make nondiscretionary contributions of no less than 7.5% under the Interim Retirement Plan; however, some subsidiaries make an additional discretionary contribution of up to 17.5%, for a range of total employer contributions of 7.5% to 25%. Employees are allowed, but not required, to make contributions to the 403(b) plan. OSUP's share of the cost of these benefits was \$6,600 and \$6,400 for the years ended June 30, 2021 and 2020, respectively. Employee contributions were \$2,700 and \$2,500 for the years ended June 30, 2021 and 2020, respectively.

415(m) Plans

The university maintains two supplemental 415(m) retirement plans. These plans are unfunded and constitute an unsecured promise by the university to make benefit payments in the future from its general assets. The university sets aside assets for the 415(m) plans, which are invested primarily in mutual funds. At June 30, 2021, these assets totaled \$190,613 and are reported as Other Noncurrent Assets and Other Noncurrent Liabilities in the Statement of Net Position.

NOTE 17 — CAPITAL PROJECT COMMITMENTS

At June 30, 2021, the university is committed to future contractual obligations for capital expenditures of approximately \$1,743,370 for the primary institution and \$24,000 for discretely presented component units. These projects are funded by the following sources:

	Primary Institution	Discretely Presente Component Units			
State appropriations	\$ 27,771	\$	-		
Internal and other sources	 1,715,600		24,000		
Total	\$ 1,743,371	\$	24,000		

NOTE 18 — CONTINGENCIES AND RISK MANAGEMENT

The university is a party in a number of legal actions. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on the university's financial position.

The university is self-insured for the Health System's professional malpractice liability, employee health benefits, workers' compensation and employee life, accidental death and dismemberment benefits. Additional details regarding these self-insurance arrangements are provided in Note 8. The university also carries commercial insurance policies for various property, casualty and excess liability risks. Over the past three years, settlement amounts related to these insured risks have not exceeded the university's coverage amounts.

Under the terms of federal grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursements to the grantor agencies. While questioned costs may occur, ultimate repayments required of the university have been infrequent in prior years.

The global outbreak of COVID-19, a new strain of coronavirus that can result in severe respiratory disease, was first detected in December of 2019 and subsequently spread across six continents impacting many countries, including the United States. The COVID-19 outbreak has altered the behavior of businesses and people in a manner that has had and is expected to continue to have effects on global and local economies, including the State of Ohio.

On March 13, 2020, the university announced that it would suspend face-to face instruction and transition to remote instruction for the remainder of the spring semester. On April 1, 2020, the university announced that the suspension of face-to-face instruction would extend through the summer semester. With limited exceptions, all university events scheduled to occur during the summer months of 2020, including summer camps and sports camps, were cancelled. Nearly all university housing and dining facilities were closed on March 22, 2020 and remained closed through the summer 2020 semester.

On June 3, 2020, the university announced that it would resume in-person classes for the Autumn 2020 semester, with a mix of on-line, in-person and blended courses to reduce the number of students, faculty and staff that were on campus at any one time. The university conducted extensive testing of students, faculty and staff throughout the 2020-2021 academic year. All other on-campus protocols (masking, social distancing and limits on group gatherings) remained in place, and throughout the Spring 2021 semester, the university observed a low positivity rate among its students. As vaccination rates continued to increase and other health and safety protocols remained effective, the university announced that it expected to return to more of a traditional university experience for the Autumn 2021 semester. The University State of Emergency, which was declared by the university president on March 22, 2020, was lifted effective July 1, 2021.

While vaccination rates have continued to increase and other health and safety protocols have remained effective, the university has made certain recent policy changes in response to the increased spread of the Delta variant of the COVID-19 virus, which is more contagious than previous versions of the virus. As of August 2, 2021, all students, faculty, staff and visitors to all university campuses will be required to wear masks indoors, regardless of vaccination status. In addition, all students, faculty and staff are required to report their vaccination status to the university to allow the university to make public health decisions.

The impact of COVID-19 on university finances and operations may continue to be felt for at least the coming (FY2022) fiscal year, depending on vaccination rates and whether the COVID-19 virus or variations of the virus continue to spread in the United States and around the world. Future adverse consequences of the COVID-19 pandemic may include, but are not limited to: a decline in enrollment (including a disproportional decline in enrollment by international students); a decline in demand for university programs that involve travel or that have international connections; cancellation, postponement and/or reduced attendance for athletic events; and an increase in costs associated with purchasing of personal protective equipment and implementing community-wide testing programs. University management continues to monitor the course of the pandemic and is prepared to take additional measures to protect the health of the university community and promote the continuity of its academic mission.

NOTE 19 — PARKING LEASE AND CONCESSION AGREEMENT

On September 21, 2012, the university entered into a 50-year lease and concession agreement with QIC Global Infrastructure (QIC GI). CampusParc LP, a QIC GI affiliate, owns and operates the university's parking concession on QIC GI's behalf. Under the agreement, CampusParc operates, maintains and retains parking revenues from the university's parking lots and garages. This agreement also regulates the parking rates that may be charged and future increases in these rates. The university received lump-sum payments totaling \$483,000 from QIC GI and used the proceeds to establish endowment funds, with income distributions internally designated to support student scholarships, faculty initiatives and research, transportation and sustainability and the university arts district.

The lump-sum payment under this service concession arrangement is reported as a deferred inflow of resources and is being amortized to operating revenue over the life of the agreement. Deferred inflows related to the parking agreement were \$397,283 and \$406,914 at June 30, 2021

and 2020, respectively. The university reports the parking lots and garages as capital assets with a carrying amount of \$122,968 and \$128,250 at June 30, 2021 and 2020, respectively.

NOTE 20 — UTILITY SYSTEM LEASE AND CONCESSION AGREEMENT

On April 10, 2017, the university entered into a 50-year agreement to lease the university's utility system to Ohio State Energy Partners (OSEP) and grant it the exclusive right to operate the utility system and provide utility services to the Columbus campus. On July 6, 2017, the university received an upfront payment of \$1,089,914. The upfront payment is reported as an Advance from Concessionaire and is being amortized as a reduction to operating expense (Operation and Maintenance of Plant) on a straight-line basis over the term of the agreement.

Under the agreement, OSEP operates, maintains and makes capital investments in the utility system and charges the university a Utility Fee, which includes fixed, variable and operating and maintenance (O&M) components. OSEP capital investments in the utility system are recognized as capital assets and a related long-term payable to the concessionaire. The fixed and O&M components of the Utility Fee are recognized as operating expense. The variable component of the Utility Fee will be recognized as a reduction in the long-term payable to the concessionaire and interest expense.

The university recognized fixed and O&M utility fees totaling \$59,372 and \$56,075, respectively for the years ended June 30, 2021 and 2020. The carrying amounts of OSEP capital investments and related payable to the concessionaire at June 30, 2021 and 2020 were \$235,869 and \$141,932, respectively.

NOTE 21 — COMBINING INFORMATION FOR BLENDED COMPONENT UNITS

As indicated in the Basis of Presentation in Note 1, the university consolidates certain component units in a blended presentation. Condensed combining financial information for the years ended June 30, 2021 and 2020 is presented below.

Condensed Combining Information – Year Ended June 30, 2021

	OSU		OSU		Oval				
	F	oundation	H	Health Plan		Limited	Pelotonia	Eli	iminations
Condensed statements of net position:									
Current assets	\$	59,498	\$	5,584	\$	57,136	\$ 19,706	\$	(12,617)
Capital assets, net		-		41		-	2,043		-
Other assets		1,576,137		731		-	3,000		(76,715)
Amounts receivable from the university		-		(6)		-			-
Total assets	\$	1,635,635	\$	6,350	\$	57,136	\$ 24,749	\$	(89,332)
Current liabilities	\$	3,652	\$	850	\$	42	\$ 311	\$	-
Noncurrent liabilities		42,735		680		20,179	89,333		(89,332)
Amounts payable to the university		-		782		-	-		-
Deferred inflows		17,194		-		-	-		-
Total liabilities and deferred inflows		63,581		2,312		20,221	89,644		(89,332)
Net investment in capital assets		-		-		-	-		-
Restricted:									
Nonexpendable		1,073,269		-		-	-		-
Expendable		481,161		-		-	-		(89,333)
Unrestricted		17,624		4,038		36,915	(64,895)		89,333
Total net position		1,572,054		4,038		36,915	(64,895)		-
Total liabilities, deferred inflows and net position	\$	1,635,635	\$	6,350	\$	57,136	\$ 24,749	\$	(89,332)

		OSU	OSU		Oval		
	F	oundation	Health Plan		Limited	Pelotonia	Eliminations
Condensed statements of revenues, expenses							
and changes in net position:							
Operating revenues:							
Other sales, services and rental income	\$	15	\$ 12,70	2 \$	(1,781) \$	281	\$ -
Total operating revenues	<u> </u>	15	12,70)2	(1,781)	281	-
Operating expenses, excluding depreciation		5,270	12,65	6	(202)	4,428	-
Depreciation expense		-	3	3	-	162	-
Total operating expenses		5,270	12,68	19	(202)	4,590	-
Net operating income (loss)		(5,255)	1	.3	(1,579)	(4,309)	-
Non-operating revenues and expenses:							
Gifts for current use		136,414	-		-	23,249	-
Net investment income (loss)		335,238	1	.8	6,542	-	-
Federal COVID-19 assistance programs		-	-		-	625	-
Other non-operating revenue (expense)		3,186	-		-	-	-
Net non-operating revenue (expense)		474,838	1	.8	6,542	23,874	-
Capital contributions and additions to permanent endowments		142,943	-		-	-	-
Transfers from (to) the university		(258,132)	12	20	-	12,795	-
Change in net position		354,394	15	1	4,963	32,360	-
Beginning net position, as reported Cumulative effect of Pelotonia merger		1,217,660 -	3,88	37	31,952	(97,255) -	-
Ending net position	\$	1,572,054	\$ 4,03	8 \$	36,915 \$	(64,895)	\$ -
Condensed statements of cash flows:							
Net cash provided (used) by:							
Operating activities	\$	(4,850)	\$ (87	'5) \$	(2,028) \$	(4,677)	\$ -
Noncapital financing activities		(60,754)	. 90		-	8,103	-
Capital and related financing activities		79,612	-		-	(2,205)	-
Investing activities		(14,026)	(70	18)	2,223	-	-
Net increase (decrease) in cash		(18)	(67		195	1,221	-
Beginning cash and cash equivalents	_	235	4,77	9	1,095	4,903	<u>-</u>
Ending cash and cash equivalents	\$	217	\$ 4,10)4 \$	1,290 \$	6,124	\$ -

Condensed Combining Information – Year Ended June 30, 2020

	 OSU Foundation	OSU Health Plan		Oval Limited		Pelotonia		El	iminations
Condensed statements of net position:									
Current assets	\$ 57,833	\$	5,357	\$	51,409	\$	5,421	\$	(12,638)
Capital assets, net	2,770		74		-		-		-
Other assets	1,224,212		734		-		543		(89,490)
Total assets	\$ 1,284,815	\$	6,165	\$	51,409	\$	5,964	\$	(102,128)
Current liabilities	\$ 3,473	\$	2,279	\$	39	\$	13,728	\$	(12,638)
Noncurrent liabilities	53,541		-		19,417		89,490		(89,490)
Amounts payable to the university	1		-		-		-		-
Deferred inflows	10,141		-		-		-		-
Total liabilities and deferred inflows	67,156		2,279		19,456		103,218		(102,128)
Net investment in capital assets Restricted:	2,770		-		-		-		-
Nonexpendable	954,856		-		-		-		-
Expendable	246,392		-		-		-		(102,128)
Unrestricted	13,641		3,886		31,953		(97,254)		102,128
Total net position	 1,217,659		3,886		31,953		(97,254)		-
Total liabilities, deferred inflows and net position	\$ 1,284,815	\$	6,165	\$	51,409	\$	5,964	\$	(102,128)

	OS Found		OSU ealth Plan	Oval Limited	Pelotonia	Elimi	nations
Condensed statements of revenues, expenses							
and changes in net position:							
Operating revenues:							
Other sales, services and rental income	\$	77 \$	12,747	\$ (1,217)	\$ 580	\$	_
Total operating revenues	<u> </u>	77	12,747	(1,217)	580	7	-
Operating expenses, excluding depreciation		5,627	12,784	(214)	8,128		-
Depreciation expense		183	60	-	-		-
Total operating expenses		5,810	12,844	(214)	8,128		-
Net operating income (loss)		(5,733)	(97)	(1,003)	(7,548)		-
Non-operating revenues and expenses:							
Gifts for current use	2	02,985	-	-	(3,111)		-
Net investment income (loss)		10,302	-	776	482		-
Other non-operating revenue (expense)		1,418	-	-	-		-
Net non-operating revenue (expense)	2	14,705	-	776	(2,629)		-
Capital contributions and additions to	1	41,121	-	-	-		-
permanent endowments							
Transfers from (to) the university	(2	70,292)	-	-	137		-
Change in net position		79,801	(97)	(227)	(10,040)		-
Beginning net position, as reported	1,1	52,909	3,983	32,180	(102,265)		-
Cumulative effect of Pelotonia merger	(15,051)			15,051		
Ending net position	\$ 1,2	17,659 \$	3,886	\$ 31,953	\$ (97,254)	\$	-
Condensed statements of cash flows:							
Net cash provided (used) by:							
Operating activities	\$	(4,765) \$	392	\$ (1,596)	\$ (6,940)	\$	-
Noncapital financing activities	(98,868)	-	-	11,362		-
Capital and related financing activities		77,425	(22)	-	-		-
Investing activities		17,193)	(54)	1,482	482		-
Net increase (decrease) in cash	(43,401)	316	(114)	4,904		-
Beginning cash and cash equivalents		43,635	4,463	1,210	-		-
Ending cash and cash equivalents	\$	234 \$	4,779	\$ 1,096	\$ 4,904	\$	-

NOTE 22 — COMBINING INFORMATION FOR DISCRETELY PRESENTED COMPONENT UNITS

As indicated in the Basis of Presentation in Note 1, the university consolidates certain component units in a discrete presentation. Condensed combining financial information for the years ended June 30, 2021 and 2020 is presented below.

Condensed Combining Information – Year Ended June 30, 2021

	P	OSU hysicians	Campus Partners			ansportation Research Center	Dental Faculty Practice Plan		Science nd Technology pus Corporation
Condensed statements of net position:									
Current assets	\$	298,779	\$	9,069	\$	10,966	\$	4,625	\$ 12,824
Capital assets, net		24,753		194,459		48,579		271	28,147
Other assets		27		1,465		-		-	530
Amounts receivable from the university		70,514		-		4,908		-	-
Deferred outflows		-		-		-		-	-
Total assets and deferred outflows	\$	394,073	\$	204,993	\$	64,453	\$	4,896	\$ 41,501
Current liabilities	\$	35,974	\$	13,656	\$	10,811	\$	2	\$ 1,332
Noncurrent liabilities		10,491		51,811		3,899		-	8,670
Amounts payable to the university		132,276		146,887		15,113		614	10,010
Deferred inflows		-		-		-		-	-
Total liabilities and deferred inflows		178,741		212,354		29,823		616	20,012
Net investment in capital assets		13,327		185,856		44,362		(73)	27,895
Unrestricted		202,005		(193,217)		(9,732)		4,353	(6,406)
Total net position		215,332		(7,361)		34,630		4,280	21,489
Total liabilities, deferred inflows and net position	\$	394,073	\$	204,993	\$	64,453	\$	4,896	\$ 41,501

	D	OSU hysicians		Campus Partners	Tra	ansportation Research Center	Dental Faculty Practice Plan		Dental Faculty Practice Plan
Condensed statements of revenues, expenses		Trysicians		raitheis		Center	Fractice Fian		Fractice Fian
and changes in net position:									
Operating revenues:									
Grants and contracts	\$	_	Ś	8,280	Ś	41,303	\$ -	\$	6,847
Sales and services of OSU Physicians	,	647,601	•	-	•	-	-	,	-
Other sales, services and rental income		-		_		_	10,053		-
Total operating revenues		647,601		8,280		41,303	10,053		6,847
Operating expenses, excluding depreciation		603,324		6,209		40,625	7,782		3,547
Depreciation expense		3,122		3,881		4,354	65		1,332
Total operating expenses		606,446		10,090		44,979	7,847		4,879
Net operating income (loss)		41,155		(1,810)		(3,676)	2,206		1,968
Non-operating revenues and expenses:									
Net investment income		53		109		1,241	332		18
Interest expense		(300)		-		(726)	-		(523)
Other non-operating revenue (expense)		(31,237)		1,119		(327)	-		-
Net non-operating revenue (expense)		(31,484)		1,228		188	332		(505)
Changes in net position									
Capital contributions and changes in net position		-		278		663	-		-
Change in net position		9,671		(304)		(2,825)	2,538		1,463
Beginning net position, as previously reported		205,661		(7,057)		37,455	1,742		20,026
Ending net position	\$	215,332	\$	(7,361)	\$	34,630	\$ 4,280	\$	21,489
Condensed statements of cash flows:									
Net cash provided (used) by:									
Operating activities	\$	88,921	\$	16,377	\$	1,266	\$ 1,720	\$	10,209
Noncapital financing activities		(30,532)		37,855		2,442	-		(984)
Capital and related financing activities		(4,057)		(56,923)		(5,549)	217		(1,354)
Investing activities		13,908		-		519	-		18
Net increase (decrease) in cash		68,240		(2,691)		(1,322)	1,937		7,889
Beginning cash and cash equivalents		169,007		8,465		4,415	625		4,193
Ending cash and cash equivalents	\$	237,247	\$	5,774	\$	3,093	\$ 2,562	\$	12,082

Condensed Combining Information – Year Ended June 30, 2020

	OSU Physicians		Campus Partners		Tr	ransportation Research Center	Dental Faculty Practice Plan			Science and Technology Campus Corporation
Condensed statements of net position:										
Current assets	\$	232,020	\$	11,741	\$	12,030	\$	1,892	\$	5,415
Capital assets, net		25,602		139,605		48,760		156		29,154
Other assets		-		800		-		-		50
Amounts receivable from the university		22,532		-		3,844		-		-
Deferred outflows		-		-		-		-		-
Total assets and deferred outflows	\$	280,154	\$	152,146	\$	64,634	\$	2,048	\$	34,619
Current liabilities	\$	33,830	\$	12,221	\$	9,647	\$	90	\$	1,575
Noncurrent liabilities		11,315		37,947		4,218		-		2,025
Amounts payable to the university		29,349		109,031		13,315		216		10,995
Deferred inflows		-		-		-		-		-
Total liabilities and deferred inflows		74,494		159,199		27,180		306		14,595
Net investment in capital assets		13,399		132,124		42,254		(60)		28,394
Unrestricted		192,261		(139,177)		(4,800)		1,802		(8,370)
Total net position		205,660		(7,053)		37,454		1,742		20,024
Total liabilities, deferred inflows and net position	\$	280,154	\$	152,146	\$	64,634	\$	2,048	\$	34,619

		OSU (Physicians P		Transportatior Research Center	Den Facu Practice	lty	Science and Technology Campus Corporation
Condensed statements of revenues, expenses	<u></u>						
and changes in net position:							
Operating revenues:							
Grants and contracts	\$	- \$	9,513	\$ 36,682	2 \$	- :	\$ 6,603
Sales and services of OSU Physicians		584,222	-	-		-	-
Other sales, services and rental income		-	-	-		9,354	-
Total operating revenues		584,222	9,513	36,682	2	9,354	6,603
Operating expenses, excluding depreciation		563,200	8,614	37,028	3	8,822	3,631
Depreciation expense		3,394	2,871	2,60	5	72	1,330
Total operating expenses		566,594	11,485	39,63	3	8,894	4,961
Net operating income (loss)		17,628	(1,972)	(2,95	1)	460	1,642
Non-operating revenues and expenses:							
CARES Assistance		11,805	-	-		-	-
Net investment income		1,668	175	2:		-	57
Interest expense		(278)	(78)	(58	'	-	(588)
Other non-operating revenue (expense)		(22,527)	601	8,91		(98)	-
Net non-operating revenue (expense)		(9,332)	698	8,352	2	(98)	(531)
Changes in net position							
Capital contributions and changes in net position		-	-	5,079	9	-	-
Change in net position		8,296	(1,274)	10,480)	362	1,111
Beginning net position, as previously reported Cumulative effect of accounting change		197,364 -	(5,779) -	26,974 -	1	1,380	18,913
Ending net position	\$	205,660 \$	(7,053)	\$ 37,45	1 \$	1,742	\$ 20,024
Condensed statements of cash flows:		-	-	-		-	-
Net cash provided (used) by:							
Operating activities	\$	46,739 \$	15,105	\$ 3,470) \$	412	\$ 3,414
Noncapital financing activities	7	(9,987)	19,759	8,908	•	(98)	(939)
Capital and related financing activities		(2,800)	(30,117)	(11,112		(68)	(3,556)
Investing activities		3,106	322	-	•	(63)	57
Net increase (decrease) in cash		37,058	5,069	1,260	5	183	(1,024)
Beginning cash and cash equivalents		131,951	3,395	3,149	9	441	5,217
Ending cash and cash equivalents	\$	169,009 \$	8,464	\$ 4,41!	5 \$	624	\$ 4,193

NOTE 23 — SEGMENT INFORMATION

A segment is an identifiable activity for which one or more revenue bonds are outstanding. A segment has a specific identifiable revenue stream pledged in support of revenue bonds or other revenue-backed debt and has related expenses, gains, losses, assets and liabilities that can be identified. The university has one segment that meets the GASB reporting requirements.

The Office of Student Life operates student housing, dining and recreational sports facilities on the university's main and regional campuses. In January 2013, the university issued \$337,955 of Special Purpose General Receipts Bonds, Series 2013A. These bonds are solely payable from, and secured by, a pledge of the gross revenues of Special Purpose Revenue Facilities. Special Purpose Revenue Facilities are defined in the Series 2013 Supplement as all housing and dining facilities and such auxiliary facilities as shall constitute recreation facilities owned by the university. Special Purpose Pledged Revenues include all revenues, fees, rentals, rates, charges, insurance proceeds and other moneys derived from the ownership or operation of these facilities. Special Purpose Pledged Revenues totaled \$125,371 and \$185,362 for the years ended June 30, 2021 and 2020, respectively.

Condensed financial information for the Special Purpose Revenue Facilities, before the elimination of certain intra-university transactions, as of and for the years ended June 30, 2021 and 2020 is as follows:

	2021	2020
Condensed Statement of Net Position		
Assets and deferred outflows:		
Current assets	\$ 51,391 \$	26,329
Capital assets	673,588	693,545
Total assets	\$ 724,979 \$	719,874
Liabilities and deferred inflows:		
Current liabilities	\$ 6,571 \$	7,485
Amounts payable to the university	706,190	723,980
Total liabilities	712,761	731,465
Net position:		
Net investment in capital assets	(31,886)	(30,434)
Unrestricted	44,104	18,843
Total net position	 12,218	(11,591)
Total liabilities and net position	\$ 724,979 \$	719,874
	2021	2020
Condensed Statement of Revenues, Expenses		
and Changes in Net Position		
Special-purpose pledged revenues - operating	\$ 125,370 \$	185,362
Operating expenses, excluding depreciation	(90,296)	(145,821)
Depreciation expense	(33,726)	(35,554)
Operating income	 1,348	3,987
Nonoperating revenues, net	(29,746)	(29,647)
Net income (loss) before transfers	(28,398)	(25,660)
Transfers from (to) other university units, net	52,207	(402)
Increase (decrease) in net position	 23,809	(26,062)
Beginning net position	(11,591)	14,471
Ending net position	\$ 12,218 \$	(11,591)
Condensed Statement of Cash Flows Net cash provided (used) by:		
Operating activities	\$ 34,804 \$	105,163
Capital and related financing activities	(10,007)	(106,513)
Investing activities	242	693
Net increase (decrease) in cash	 25,039	(657)
Beginning cash and cash equivalents	 25,779	26,436
Ending cash and cash equivalents	\$ 50,818 \$	25,779

NOTE 24 – SUBSEQUENT EVENTS

Debt Issuance

On September 30, 2021, the University closed on \$600,000 in tax-exempt fixed rate General Receipts Bonds - Series 2021A. The Series 2021A bonds are structured on a level debt service basis with annual principal payments beginning December 1, 2022 through final maturity on December 1, 2051. The interest rate coupons on the Series 2021A bonds range from 2.50% to 5.00%. The proceeds of the bonds will be used to fund construction of the Wexner Medical Center's new Inpatient Hospital, scheduled to open in 2026.

The Ohio State University Required Supplementary Information on GASB 68 Pension Liabilities (Unaudited) Year Ended June 30, 2021

The schedule of the university's proportionate shares of STRS-Ohio and OPERS net pension liabilities are presented below:

(dollars in thousands)	2015	2016	2017	2018	2019	2020	2021
STRS-Ohio:							
University's proportion of the net pension liability	4.4%	4.5%	4.5%	4.6%	4.6%	4.7%	4.9%
University's proportionate share of the net pension liability	\$ 1,070,914	\$ 1,238,470	\$ 1,510,814	\$ 1,081,053	\$ 1,019,690	\$ 1,040,149	\$ 1,175,835
University's covered payroll	\$ 381,669	\$ 388,309	\$ 392,797	\$ 412,149	\$ 434,106	\$ 452,084	\$ 476,374
University's proportionate share of the net pension liability as a percentage of its covered payroll	281%	319%	385%	262%	235%	230%	247%
Plan fiduciary net position as a percentage of the total pension liability	74.7%	72.1%	66.8%	75.3%	77.3%	77.4%	75.5%
OPERS:							
University's proportion of the net pension liability	8.8%	9.0%	9.1%	9.4%	9.9%	10.2%	10.4%
University's proportionate share of the net pension liability	\$ 1,059,519	\$ 1,556,156	\$ 2,054,548	\$ 1,466,955	\$ 2,695,368	\$ 1,984,881	\$ 1,503,497
University's covered payroll	\$ 1,188,828	\$1,236,914	\$1,289,346	\$ 1,381,054	\$ 1,521,447	\$ 1,574,490	\$ 1,704,763
University's proportionate share of the net pension liability as a percentage of its covered payroll	89%	126%	159%	106%	177%	126%	88%
Plan fiduciary net position as a percentage of the total pension liability	86.5%	81.2%	77.4%	84.9%	74.9%	82.4%	87.2%

The schedule of the university's contributions to STRS-Ohio and OPERS are presented below:

(dollars in thousands)		2015		2016	2017	2018		2019		2020		2021
STRS-Ohio:												
Contractually required contribution	\$	65,738	\$	66,975	\$ 70,373	\$ 74,356	\$	77,781	\$	82,576	\$	86,909
Contributions in relation to the contractually required	\$	65,738	\$	66,975	\$ 70,373	\$ 74,356	\$	77,781	\$	82,576	\$	86,909
Contribution deficiency (excess)	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-
University's covered payroll	\$	388,309	\$	392,797	\$ 412,149	\$ 434,106	\$	452,084	\$	476,374	\$	498,344
Contributions as a percentage of covered payroll		16.9%		17.1%	17.1%	17.1%		17.2%		17.3%		17.4%
OPERS:												
Contractually required contribution	\$	170,979	\$	178,293	\$ 188,762	\$ 201,072	\$	220,062	\$	231,977	\$	240,142
Contributions in relation to the contractually required	\$	170,979	\$	178,293	\$ 188,762	\$ 201,072	\$	220,062	\$	231,977	\$	240,142
Contribution deficiency (excess)	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-
University's covered payroll	\$:	1,208,710	\$:	1,260,366	\$ 1,334,350	\$ 1,421,367	\$:	1,525,502	\$:	1,607,469	\$:	1,664,980
Contributions as a percentage of covered payroll		14.1%		14.1%	14.1%	14.1%		14.4%		14.4%		14.4%

The Ohio State University Required Supplementary Information on GASB 75 Net OPEB Liabilities (Unaudited) Year Ended June 30, 2021

The schedule of the university's proportionate shares of STRS-Ohio and OPERS net OPEB liabilities are presented below:

(dollars in thousands)	2018	2019		2020	2021
STRS-Ohio:					
University's proportion of the net OPEB liability	4.6%	4.6%		4.7%	4.9%
University's proportionate share of the net OPEB liability	\$ 177,556	\$ (74,520) \$	5	(77,901)	\$ (85,406)
University's covered payroll	\$ 412,149	\$ 434,106	5	452,084	\$ 452,084
University's proportionate share of the net OPEB liability as a percentage of its covered payroll	43%	-17%		-17%	-19%
Plan fiduciary net position as a percentage of the total OPEB liability	47.1%	176.0%		174.7%	182.1%
OPERS:					
University's proportion of the net OPEB liability	9.7%	10.1%		10.4%	10.7%
University's proportionate share of the net OPEB liability	\$ 1,055,239	\$ 1,321,019	5	1,436,889	\$ (189,776)
University's covered payroll	\$ 1,381,054	\$ 1,521,447	5	1,574,490	\$ 1,574,490
University's proportionate share of the net OPEB liability as a percentage of its covered payroll	76%	87%		91%	-12%
Plan fiduciary net position as a percentage of the total OPEB liability	54.1%	46.3%		47.8%	115.6%

The Ohio State University Notes to Required Supplementary Information (Unaudited) Year Ended June 30, 2021

STRS-Ohio - Pensions:

Changes of benefit terms. Amounts reported in 2019 reflect a reduction in the COLA rate to 0%, effective July 1, 2017.

Changes of assumptions. Amounts reported in 2018 also reflect an adjustment of mortality assumptions based on the use of the RF-2014 Annuitant Mortality Table rather than the RP-2000 Combined Mortality Table. Amounts reported in 2017 reflect an adjustment of the discount rate from 7.75% to 7.45%.

OPERS – Pensions:

Changes of assumptions. Amounts reported in 2019 reflect an adjustment of the discount rate from 7.50% to 7.20%. Amounts reported in 2017 reflect an adjustment of the discount rate from 8.00% to 7.50%. Amounts reported in 2017 also reflect an updated healthy and disabled mortality assumptions, based on the RP-2014 mortality tables with generational improvement scale MP-2016. Rates of retirement, termination and disability were modified to better reflect anticipated future experience.

STRS-Ohio - OPEB:

Changes of benefit terms. Amounts reported in 2020 reflect postponement of the Medicare Part B monthly reimbursement elimination date to January 1, 2021. Amounts reported in 2019 reflect adoption of a new premium subsidy plan for 2019 and future years that is intended to extend the fund's solvency to 2047. Amounts reported in 2019 also reflect postponement of the Medicare Part B monthly reimbursement elimination date to January 1, 2020. Amounts reported in 2018 reflect discontinuation of Medicare Part B premium reimbursements for certain survivors and beneficiaries and all remaining Medicare Part B premium reimbursements, beginning January 2019.

Changes of assumptions. Amounts reported in 2019 reflect an adjustment of the discount rate from 4.13% to 7.45%. Amounts reported in 2018 reflect an adjustment of the discount rate from 3.26% to 4.13%. Amounts reported in 2018 also reflect an adjustment of mortality assumptions based on the use of the RF-2014 Annuitant Mortality Table rather than the RP-2000 Combined Mortality Table.

OPERS - OPEB:

Changes of benefit terms. Amounts reported in 2021 reflect several changes to the health care plan offered to Medicare and non-Medicare retirees in efforts to decrease costs and increase the solvency of the health care plan. These changes, which were approved by the OPERS Board on January 15, 2020, are effective January 1, 2022 and include changes to base allowances and eligibility for Medicare retirees, as well as replacing OPERS-sponsored medical plans for non-Medicare retirees with monthly allowances.

Changes of assumptions. Amounts reported in 2021 reflect an adjustment of the discount rate from 3.16% to 6.00%. Amounts reported in 2020 reflect an adjustment of the discount rate from 3.96% to 3.16%. Amounts reported in 2019 reflect an adjustment of the discount rate from 3.85% to 3.96%.

The Ohio State University Supplementary Information on the Long-Term Investment Pool Year Ended June 30, 2021

The following section of the financial report provides additional information on the university's Long-Term Investment Pool, including a summary of changes in market value, investment returns and related expenses. Additional details on university investments, including asset allocations, endowment distribution policies, investment by type and risk disclosures, are provided in Notes 1 and 3 to the Financial Statements.

In 2021, the market value of the university's Long-Term Investment Pool – which includes gifted endowments, long-term investments of university operating funds and other funds internally designated to function as endowments – increased \$1.75 billion, to \$7.04 billion at June 30, 2021. The Long-Term Investment Pool activity for 2021 is summarized below:

Long-Term Investment Pool Activity (in thousands)

	Gifted End	dowments	Quasi-End	dowments	
	University	Foundation	Operating	Designated	Total
Balance at June 30, 2020	\$1,038,113	\$ 996,177	\$ 1,363,204	\$ 1,889,637	\$ 5,287,131
Net Principal Additions (Withdrawals)	7,417	64,712	-	178,695	250,824
Change in Fair Value	325,617	320,566	426,399	621,066	1,693,648
Income Earned	26,384	25,914	34,562	50,073	136,933
Distributions	(47,680)	(46,581)	(62,499)	(90,073)	(246,833)
Expenses	(16,015)	(15,729)	(20,979)	(27,007)	(79,730)
Balance at June 30, 2021	\$ 1,333,836	\$1,345,059	\$1,740,687	\$ 2,622,391	\$7,041,973

Net principal additions (withdrawals) for gifted endowments include new endowment gifts and reinvestment of unused endowment distributions. **Change in fair value** includes realized gains and losses for assets sold during the year and unrealized gains and losses for assets held in the pool at June 30, 2021. **Income earned** includes interest and dividends and is used primarily to fund **distributions**. **Expenses** include investment management expenses (\$59 million), University Development related expenses (\$20 million) and other investment related expenses (\$1 million).

Investment Returns and Expenses:

The investment return for the Long-Term Investment Pool was 29.2% for fiscal year 2021. The annualized investment returns for the three-year and five-year periods were 9.7% and 10.3%, respectively. These returns -- which are net of investment management expenses as defined by Cambridge Associates for its annual survey -- are used for comparison purposes with other endowments and various benchmarks. In addition to the \$59 million of investment management expenses, which reduced the pool by 1.0% in fiscal year 2021, the \$20 million of University Development expenses and \$1 million of other investment related expenses further reduced the pool by 0.3%.

Additional Information:

For more information on how the Long-Term Investment Pool is invested, please visit the Office of Investments website at: investments.osu.edu.

Additional details on university and foundation endowments, including balances for individual funds, are available on the Office of the Controller's website at: qo.osu.edu/EndowAdmin (click on the "Endowment Descriptions and Balances" link).

Assistance Listin			Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Development Funds received directly from					
Department of Agriculture					
10.001	USDA Agricultural Research Service		58-0206-0-180	\$ 115,368	\$ -
10.001	USDA Agricultural Research Service		58-2080-0-017	11,461	· -
10.001	USDA Agricultural Research Service		58-5080-1-002	9,093	-
10.001	USDA Agricultural Research Service		58-5080-9-004	20,323	-
10.001	USDA Agricultural Research Service		58-5082-0-001	12,496	-
10.001	USDA Agricultural Research Service		58-5082-0-002	4,076	-
10.001	USDA Agricultural Research Service		58-5082-0-004	36,635	-
10.001	USDA Agricultural Research Service		58-5082-0-006	49,933	-
10.001	USDA Agricultural Research Service		58-5082-0-013	52,488	-
10.001	USDA Agricultural Research Service		58-5082-1-001	40,929	-
10.001	USDA Agricultural Research Service		58-5082-1-005	417	_
10.001	USDA Agricultural Research Service		58-5082-1-007	353	-
10.001	USDA Agricultural Research Service		58-5082-7-014	37,559	_
10.001	USDA Agricultural Research Service		58-5082-8-006	19,452	_
10.001	USDA Agricultural Research Service		58-5082-8-010	266,930	_
10.001	USDA Agricultural Research Service		58-5082-8-018	134,611	_
10.001	USDA Agricultural Research Service		58-5082-8-020	86,661	_
10.001	USDA Agricultural Research Service		58-5082-8-024	123,786	_
10.001	USDA Agricultural Research Service		5850829009	17,430	-
10.001	USDA Agricultural Research Service		58-5082-9-013	76,277	_
10.001	USDA Agricultural Research Service		58-5082-9-015	4,201	_
10.001	USDA Agricultural Research Service		58-5082-9-017	1,067	-
10.001	USDA Agricultural Research Service		58-5082-9-024	17,601	-
10.001	USDA Agricultural Research Service		58-5802-9-008	(22)	_
10.001	USDA Agricultural Research Service		58-8010-5-019	760	_
10.001	USDA Agricultural Research Service		59-0206-0-131	54,968	-
10.001	USDA Agricultural Research Service		59-0206-0-149	233,904	_
10.001	USDA Agricultural Research Service		59-0206-0-174	26,374	_
10.001	USDA Agricultural Research Service		59-0206-8-187	19,620	-
10.001	USDA Agricultural Research Service		59-0206-8-208	46,299	_
10.001	USDA Agricultural Research Service		59-5080-9-001	17,155	_
10.025	Animal and Plant Health Inspection Service		AP21VSSP0000C019	35,561	-
10.025	Animal and Plant Health Inspection Service		AP21VSSP0000C021	367	_
10.025	Animal and Plant Health Inspection Service		AP21VSSP0000C024	51,030	_
10.025	Animal and Plant Health Inspection Service		AP21VSSP0000C033	4,707	_
10.174	Agricultural Marketing Service		AM190100XXXXG074	177,181	26,352
10.174	Agricultural Marketing Service		AM200100XXXXG009	53,225	-
10.200	National Institute of Food and Agriculture		20197000730369	39,561	2,317
10.202	Cooperative Forestry Research		2010100010000	440,195	-
10.203	Pmts to Agricult Exp Station			9,956,677	_
10.207	Animal Health & Disease Research			(5,745)	_
10.207	National Institute of Food and Agriculture		NI19AHDRXXXXG002	17,788	_
10.207	National Institute of Food and Agriculture		NI20AHDRXXXXG042	15,003	_
10.210	National Institute of Food and Agriculture		20193842028968	73,698	_
10.210	National Institute of Food and Agriculture		2020-38420-30725	37,084	- -
10.217	National Institute of Food and Agriculture		20167000324835	242,027	70,673
. 5.2				,021	. 0,0. 0

Assistance Lis	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme Funds received directly fro					
10.220	National Institute of Food and Agriculture		20183841328141	11,419	-
10.250	Economic Research Service		58-3000-9-0049	12,612	-
10.250	Economic Research Service		58-6000-0-0046	11,380	-
10.303	National Institute of Food and Agriculture		20165110625714	43,203	9,906
10.307	National Institute of Food and Agriculture		20195130030255	119,686	6,836
10.310	National Institute of Food and Agriculture		20146701322419	11,356	-
10.310	National Institute of Food and Agriculture		20156800423131	686,265	319,589
10.310	National Institute of Food and Agriculture		20156800623270	(13,817)	-
10.310	National Institute of Food and Agriculture		20156800632555	30,047	-
10.310	National Institute of Food and Agriculture		20166701324727	115,338	-
10.310	National Institute of Food and Agriculture		20166701925146	10,711	-
10.310	National Institute of Food and Agriculture		20166701925177	44,632	44,115
10.310	National Institute of Food and Agriculture		20166702124434	5,520	-
10.310	National Institute of Food and Agriculture		20176700926770	342,486	32,809
10.310	National Institute of Food and Agriculture		20176701326595	28,251	6,646
10.310	National Institute of Food and Agriculture		20176701526540	(343)	-
10.310	National Institute of Food and Agriculture		20176701726469	31,342	-
10.310	National Institute of Food and Agriculture		20176701726471	60,486	-
10.310	National Institute of Food and Agriculture		20176702126141	121,827	-
10.310	National Institute of Food and Agriculture		20176702326268	17,401	-
10.310	National Institute of Food and Agriculture		20176800126353	141,143	-
10.310	National Institute of Food and Agriculture		20176800826337	43,294	-
10.310	National Institute of Food and Agriculture		20186700128246	269,669	-
10.310	National Institute of Food and Agriculture		20186701228011	23,189	-
10.310	National Institute of Food and Agriculture		20186701327555	83,257	18,417
10.310	National Institute of Food and Agriculture		20186701328490	161,103	48,505
10.310	National Institute of Food and Agriculture		20186701727519	69,284	-
10.310	National Institute of Food and Agriculture		20186701727557	59,588	-
10.310	National Institute of Food and Agriculture		20186701727914	170,302	38,886
10.310	National Institute of Food and Agriculture		20186701927803	76,253	-
10.310	National Institute of Food and Agriculture		20186702327643	195,347	=
10.310	National Institute of Food and Agriculture		20186800227932	214,494	=
10.310	National Institute of Food and Agriculture		2018-68003-27466	170,382	60,486
10.310	National Institute of Food and Agriculture		20186800828356	26,663	14,367
10.310	National Institute of Food and Agriculture		20186801128370	772,762	22,538
10.310	National Institute of Food and Agriculture		20196701129551	7,036	-
10.310	National Institute of Food and Agriculture		20196701129558	68,741	_
10.310	National Institute of Food and Agriculture		20196701229652	65,536	_
10.310	National Institute of Food and Agriculture		20196701329297	193,842	_
10.310	National Institute of Food and Agriculture		20196701529574	156,142	30,267
10.310	National Institute of Food and Agriculture		20196701529815	62,958	2,613
10.310	National Institute of Food and Agriculture		20196701529843	140,403	_,:.0
10.310	National Institute of Food and Agriculture		20196701729259	152,241	-
10.310	National Institute of Food and Agriculture		20196701929310	369,605	76,367
10.310	National Institute of Food and Agriculture		20196702129944	40,436	-
10.310	National Institute of Food and Agriculture		20196703029003	17,926	-
10.310	National Institute of Food and Agriculture		20196800629681	70,133	19,513
10.010			2010000020001	70,100	10,010

Assistance Listing			Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Development Cluster -					
Funds received directly from the follow	wing agencies				
10.310 Nationa	ll Institute of Food and Agriculture		20196801529229	138,384	_
	Il Institute of Food and Agriculture		2020-67013-30874	46,911	4,642
	Il Institute of Food and Agriculture		20206701330876	125,185	,0.2
	Il Institute of Food and Agriculture		20206701531401	49,711	_
	Il Institute of Food and Agriculture		20206701531537	121,848	_
	I Institute of Food and Agriculture		20206701531618	133,830	_
	Il Institute of Food and Agriculture		20206701531677	33,321	_
	Il Institute of Food and Agriculture		20206701730794	97,618	_
	Il Institute of Food and Agriculture		20206701731798	89,834	_
	Il Institute of Food and Agriculture		20206701931161	79,112	-
10.310 Nationa	Il Institute of Food and Agriculture		2020-67021-31142	139,681	_
	Il Institute of Food and Agriculture		20206703031338	67,803	_
	Il Institute of Food and Agriculture		20206703431885	26,399	_
	Il Institute of Food and Agriculture		20206801530856	39,766	_
	Il Institute of Food and Agriculture		2021-67013-33575	5,454	_
	l Institute of Food and Agriculture		20216701333615	19,718	-
	Il Institute of Food and Agriculture		20216701533838	8,251	_
	Il Institute of Food and Agriculture		20216701733443	1,410	_
	Il Institute of Food and Agriculture		20216701933425	39,643	_
	Il Institute of Food and Agriculture		20216702333820	5,937	4,460
	Il Institute of Food and Agriculture		20216703434974	5,405	-
	Il Institute of Food and Agriculture		20216800634177	5,030	_
	Il Institute of Food and Agriculture		20181000828571	667,773	329,124
10.318 Nationa	l Institute of Food and Agriculture		2021-38503-34818	1,477	-
	Il Institute of Food and Agriculture		20177002027260	18,611	_
	Il Institute of Food and Agriculture		20187002028852	65,597	60,401
	l Institute of Food and Agriculture		20197000630447	72,150	-
	Il Institute of Food and Agriculture		20164871125897	2,414,040	_
10.500 Nationa	l Institute of Food and Agriculture		20184152028897	143,937	56,681
	Il Institute of Food and Agriculture		20204871132407	913	-
10.652 USDA	Forest Service		15-CR-11330129-033	(152)	_
10.664 USDA	Forest Service		17-CA-11132546-023	8,045	-
10.675 USDA	Forest Service		19-DG-11132544-028	70,343	18,256
10.684 USDA	Forest Service		19-DG-11132762-222	118,222	49,209
10.699 USDA	Forest Service		15-CS-11242302-122	21,247	-
10.699 USDA	Forest Service		15-JV-11242302-033	(26)	-
10.699 USDA	Forest Service		17-CR-11242316-059	146,685	-
10.699 USDA	Forest Service		18-CR-11242316-026	25,079	-
10.699 USDA	Forest Service		18-JV-11242309-040	7,930	-
10.707 USDA	Forest Service		19-JV-11242306-045	50,309	-
10.771 USDA	Rural Development		41066213647780	150,074	-
10.771 USDA	Rural Development		GLSX0002266360	55,420	-
10.777 USDA	Foreign Agricultural Service		FX19BF-10777R017	32	-
10.903 Natural	Resources Conservation Service		NR203A750025C011	92,387	-
10.RD USDA	Agricultural Research Service		12905B20P0181	4,087	-
Total D	epartment of Agriculture Direct Awards			23,602,526	1,373,975

Assistance Lis Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme Funds received directly fro					
r unus received directly inc	on the following agencies				
Department of Commerc	ee e				
11.417	National Oceanic & Atmospheric Administration		NA18OAR4170100	1,320,848	353,958
11.417	COVID-19 National Oceanic & Atmospheric Administration		NA18OAR4170100	50,787	-
11.417	National Oceanic & Atmospheric Administration		NA19OAR4170009	1,542	1,542
11.417	National Oceanic & Atmospheric Administration		NA20OAR4170004	41,201	-
11.417	National Oceanic & Atmospheric Administration		NA20OAR4170016	34,803	-
11.417	National Oceanic & Atmospheric Administration		NA20OAR4170038	34,983	-
11.417	National Oceanic & Atmospheric Administration		NA20OAR4170071	36,662	-
11.417	National Oceanic & Atmospheric Administration		NA20OAR4170463	4,638	-
11.417	National Oceanic & Atmospheric Administration		NA21OAR4170004	27,025	-
11.417	National Oceanic & Atmospheric Administration		NA21OAR4170016	23,181	-
11.417	National Oceanic & Atmospheric Administration		NA21OAR4170029	42,668	-
11.417	National Oceanic & Atmospheric Administration		NA21OAR4170040	1,265	-
11.417	National Oceanic & Atmospheric Administration		NA21OAR4170068	26,880	-
11.420	National Oceanic & Atmospheric Administration		NA20NOS4200150	52,826	-
11.431	National Oceanic & Atmospheric Administration		NA16OAR4310109	3,570	-
11.478	National Oceanic & Atmospheric Administration		NA17NOS4780186	135,371	54,263
11.999	National Oceanic & Atmospheric Administration		NA18NOS9990032	13,898	-
	Total Department of Commerce Direct Awards			1,852,148	409,763
Department of Defense					
12.300	Naval Postgraduate School		N00244-17-2-0004	3	-
12.300	Office of Naval Research		N00014-16-1-2620	33,830	-
12.300	Office of Naval Research		N00014-16-1-2756	(18,226)	-
12.300	Office of Naval Research		N00014-16-1-2989	(4,043)	-
12.300	Office of Naval Research		N00014-17-1-2034	52,914	-
12.300	Office of Naval Research		N00014-17-1-2412	(457)	-
12.300	Office of Naval Research		N00014-17-1-2417	65,396	54,623
12.300	Office of Naval Research		N00014-17-1-2440	248,718	84,638
12.300	Office of Naval Research		N00014-17-1-2528	81,677	-
12.300	Office of Naval Research		N00014-17-1-2584	138,275	-
12.300	Office of Naval Research		N00014-17-1-2928	160,974	-
12.300	Office of Naval Research		N00014-18-1-2033	112,457	112,457
12.300	Office of Naval Research		N00014-18-1-2033	(107,880)	-
12.300	Office of Naval Research		N00014-18-1-2034	161,197	161,197
12.300	Office of Naval Research		N00014-18-1-2034	(33,041)	-
12.300	Office of Naval Research		N00014-18-1-2361	180,655	40,224
12.300	Office of Naval Research		N00014-18-1-2389	132,208	-
12.300	Office of Naval Research		N00014-18-1-2512	5,063	-
12.300	Office of Naval Research		N00014-18-1-2577	208,151	-
12.300	Office of Naval Research		N00014-18-1-2581	113,706	-
12.300	Office of Naval Research		N00014-18-1-2589	109,408	-
12.300	Office of Naval Research		N00014-19-1-2207	128,229	-
12.300	Office of Naval Research		N00014-20-1-2100	183,914	-

Assistance Numb	_	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Develop	oment Cluster —				
Funds received directly	y from the following agencies				
12.300	Office of Naval Research		N00014-20-1-2141	61,079	-
12.300	Office of Naval Research		N00014-20-1-2163	1,634,310	1,254,946
12.300	Office of Naval Research		N00014-20-1-2194	54,540	-
12.300	Office of Naval Research		N00014-20-1-2364	360,000	-
12.300	Office of Naval Research		N00014-20-1-2663	143,760	-
12.300	Office of Naval Research		N00014-20-1-2810	52,689	-
12.300	Office of Naval Research		N00014-21-1-2108	17,284	-
12.351	Defense Threat Reduction Agency		HDTRA11710034	8,888	-
12.351	Defense Threat Reduction Agency		HDTRA11810050	272,099	-
12.351	Defense Threat Reduction Agency		HDTRA11910024	201,020	54,124
12.420	Army Medical Research Acquisition Activity		W81XWH-15-1-0074 P00001	257,386	13,919
12.420	Army Medical Research Acquisition Activity		W81XWH-16-1-0036	150,305	-
12.420	Army Medical Research Acquisition Activity		W81XWH-16-1-0037	1,967	-
12.420	Army Medical Research Acquisition Activity		W81XWH-16-1-0291	66,069	19,951
12.420	Army Medical Research Acquisition Activity		W81XWH-16-1-0293	88,651	-
12.420	Army Medical Research Acquisition Activity		W81XWH-16-1-0560	46,817	-
12.420	Army Medical Research Acquisition Activity		W81XWH-16-2-0062	5,852	-
12.420	Army Medical Research Acquisition Activity		W81XWH-17-1-0025	238,651	-
12.420	Army Medical Research Acquisition Activity		W81XWH-17-1-0026	29,823	-
12.420	Army Medical Research Acquisition Activity		W81XWH-17-1-0519	252,660	-
12.420	Army Medical Research Acquisition Activity		W81XWH1810059	428,442	207,258
12.420	Army Medical Research Acquisition Activity		W81XWH1810304	18,383	-
12.420	Army Medical Research Acquisition Activity		W81XWH1810787	387,987	2,556
12.420	Army Medical Research Acquisition Activity		W81XWH1810805	332,174	8,322
12.420	Army Medical Research Acquisition Activity		W81XWH1910088	330,838	-
12.420	Army Medical Research Acquisition Activity		W81XWH1910210	98,067	-
12.420	Army Medical Research Acquisition Activity		W81XWH1910233	373,872	-
12.420	Army Medical Research Acquisition Activity		W81XWH1910309	128,092	-
12.420	Army Medical Research Acquisition Activity		W81XWH1910732	123,990	-
12.420	Army Medical Research Acquisition Activity		W81XWH1920003	371,352	17,933
12.420	Army Medical Research Acquisition Activity		W81XWH1920065	202,972	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010046	57,014	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010047	295,019	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010361	148,578	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010373	284,167	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010618	169,178	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010788	94,458	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010828	188,391	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010878	167,076	-
12.420	Army Medical Research Acquisition Activity		W81XWH2010933	137,971	66,458
12.420	Army Medical Research Acquisition Activity		W81XWH2110021	129,632	-
12.420	Army Medical Research Acquisition Activity		W81XWH2110287	8,438	-
12.420	Defense Health Agency		W81XWH2010868	137,392	13,220
12.431	Army Research Office		W911NF-14-1-0016	(123)	-
12.431	Army Research Office		W911NF-17-1-0110	53,253	-
12.431	Army Research Office		W911NF-17-1-0140	333	-
12.431	Army Research Office		W911NF-17-1-0412	89,872	-
	•			•	

Assistance List Number	ing Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
	• • •			•	•
Research and Developmen	nt Cluster —				
Funds received directly fro	m the following agencies				
12.431	Army Research Office		W911NF-17-1-0519	61,758	_
12.431	Army Research Office		W911NF-18-1-0086	125,919	_
12.431	Army Research Office		W911NF1820185	51,715	_
12.431	Army Research Office		W911NF1910359	254,577	101,816
12.431	Army Research Office		W911NF1920032	186,396	87,907
12.431	Army Research Office		W911NF1920256	182,334	-
12.431	Army Research Office		W911NF2010152	71,251	-
12.431	Army Research Office		W911NF2020063	101,113	-
12.431	Army Research Office		W911NF2020238	10,126	-
12.431	Army Research Office		W911NF2120089	2,201	-
12.617	Department of Defense Office of Economic Adjustment		HQ00052010025	1,364,091	-
12.630	Army Corps of Engineers		W912HZ2120012	46,917	-
12.630	Army Corps of Engineers		W912HZ2120013	89,895	-
12.630	National Geospatial-Intelligence Agency		HM04761912013	105,948	-
12.740	Defense POW/MIA Accounting Agency		HQ0761-19-2-0001	221,079	142,376
12.800	Air Force Academy		FA7000-18-2-0001	141,309	44,512
12.800	Air Force Academy		FA7000-19-2-0005	111,615	35,583
12.800	Air Force Academy		FA7000-19-2-0021	128,795	-
12.800	Air Force Office of Scientific Research		FA9550-15-1-0464	(23)	=
12.800	Air Force Office of Scientific Research		FA9550-16-1-0013	1,312,214	990,976
12.800	Air Force Office of Scientific Research		FA9550-16-1-0053	124,067	-
12.800	Air Force Office of Scientific Research		FA9550-16-1-0212	140,811	-
12.800	Air Force Office of Scientific Research		FA9550-17-1-0106	341,978	117,222
12.800	Air Force Office of Scientific Research		FA9550-17-1-0168	58,982	-
12.800	Air Force Office of Scientific Research		FA9550-17-1-0227	186,903	-
12.800	Air Force Office of Scientific Research		FA9550-17-1-0228	236,793	166,306
12.800	Air Force Office of Scientific Research		FA9550-17-1-0307	(1,093)	-
12.800	Air Force Office of Scientific Research		FA9550-17-1-0350	11,973	-
12.800	Air Force Office of Scientific Research		FA9550-17-1-0370	140,833	-
12.800	Air Force Office of Scientific Research		FA9550-18-1-0066	25,377	-
12.800	Air Force Office of Scientific Research		FA9550-18-1-0102	135,776	-
12.800	Air Force Office of Scientific Research		FA9550-18-1-0107	94,836	=
12.800	Air Force Office of Scientific Research		FA9550-18-1-0123	162,516	-
12.800	Air Force Office of Scientific Research		FA9550-18-1-0335	247,717	=
12.800	Air Force Office of Scientific Research		FA9550-18-1-0378	40,861	-
12.800	Air Force Office of Scientific Research		FA9550-19-1-0184	157,134	-
12.800	Air Force Office of Scientific Research		FA9550-19-1-0378	239,941	102,199
12.800	Air Force Office of Scientific Research		FA9550-19-1-0388	(165)	-
12.800	Air Force Office of Scientific Research		FA9550-20-1-0015	45,954	-
12.800	Air Force Office of Scientific Research		FA9550-20-1-0083	83,843	-
12.800	Air Force Office of Scientific Research		FA9550-20-1-0231	66,031	=
12.800	Air Force Office of Scientific Research		FA9550-20-1-0278	80,306	-
12.800	Air Force Office of Scientific Research		FA9550-21-1-0176	1,123	-
12.800	Air Force Research Laboratory		FA8650-13-2-2347	30,479	=
12.800	Air Force Research Laboratory		FA8650-17-1-5277	81,768	=
12.800	Air Force Research Laboratory		FA8650-18-2-5279	188,442	=
12.800	Air Force Research Laboratory		FA8650-18-2-5295	600,697	-

Assistance Listi	-		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developmen	t Cluster —				
Funds received directly fron					
,	3 3				
12.800	Air Force Research Laboratory		FA8650-19-1-5227	12,247	-
12.800	Air Force Research Laboratory		FA8650-19-2-2204	575,487	197,658
12.800	Air Force Research Laboratory		FA8650-20-2-5853	105,609	-
12.800	Air Force Research Laboratory		FA8651-13-2-0007	172,347	95,827
12.901	National Security Agency		H98230-19-1-0265	657	-
12.910	Air Force Research Laboratory		FA8650-19-1-1741	770,377	276,439
12.910	Defense Advanced Research Projects Agency		D16AP00110	69,443	-
12.910	Defense Advanced Research Projects Agency		D18AP00008	1,217,240	=
12.910	Defense Advanced Research Projects Agency		HR0011-17-2-0054	2,420,529	1,685,121
12.RD	Air Force Research Laboratory		FA8650-16-C-1729	56,196	-
12.RD	Air Force Research Laboratory		FA8650-19-C-6067	120,550	-
12.RD	Air Force Research Laboratory		FA9451-19-C-0011	13,347	=
12.RD	Army Contracting Command		W56HZV-17-P-L530	56,681	-
12.RD	Army Natick Research, Development and Engineering Center		W911QY20P0086	2,401	=
12.RD	Defense Advanced Research Projects Agency		Agreement Dated 09/03/2020	99,036	-
12.RD	National Geospatial-Intelligence Agency		HM157519C0012	329,043	-
12.RD	National Geospatial-Intelligence Agency		HM157519C0014	374,575	27,500
12.RD	National Reconnaissance Office		NRO000-21-C-0092	116,397	-
12.RD	Naval Medical Research Unit - Dayton		Agreement dated 1-31-2018	148,682	-
12.RD	Naval Medical Research Unit - Dayton		N3239820P0600	173,116	-
	Total Department of Defense Direct Awards		-	25,580,869	6,183,268
Department Housing and	Urban Development				
14.900	US Department of Housing and Urban Development		OHHHU0057-20	87,776	_
14.000	Co Bopartinont of Floading and Orban Bovolophiont		G11111100007 20	01,770	
	Total Department of Housing and Urban Development Direct Awards		-	87,776	-
Department of the Interior					
15.229	Bureau of Land Management		L15AC00146	14,428	_
15.232	Bureau of Land Management		L17AC00238	145,648	28,250
15.608	US Fish and Wildlife Service		F18AC00859	(1,594)	-
15.647	US Fish and Wildlife Service		F18AC00618	5,068	_
15.662	US Fish and Wildlife Service		F20AP10641	16,259	_
15.678	US Fish and Wildlife Service		F16AC01281	52,255	-
15.805	US Geological Survey		G16AP00076	70,908	47,186
15.808	US Geological Survey		G17AC00350	56,744	-
15.808	US Geological Survey		G19AC00418	88,440	-
15.944	National Park Service		P19AC00964	41,259	_
15.RD	Bureau of Ocean Energy Management		140M0119P0041	37,750	-
	Total Department of the Interior Direct Awards		-	527,165	75,436
Department of Justice					
16.560	National Institute of Justice		2019-DU-BX-0040	297,140	12,984
16.560	National Institute of Justice		2020-R2-CX-0021	4,567	12,904
10.500	reduction institute of publico		2020-112-071-0021	4,507	•
			-		

Assistance List Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developmen					
Funds received directly fro	in the following agencies				
	Total Department of Justice Direct Awards			301,707	12,984
Danastora et al abas					
Department of Labor 17.502	US Department of Labor		SH99053SH0	19,023	
17.502 17.RD	Bureau of Labor Statistics		1625DC-19-C-0004	12,472,133	10,087,386
17.RD	Bureau of Labor Statistics		DOL-BLS-15-D-0005	1,943,147	1,058,595
17.00	Buleau of Labor Statistics		DOL-BL3-15-D-0005	1,943,147	1,000,090
	Total Department of Labor Direct Awards			14,434,303	11,145,981
Department of Transport	ation				
20.108	Federal Aviation Administration		16-G-007	420.899	
20.108	Federal Aviation Administration		692M152140002	91,743	_
20.109	Federal Aviation Administration		12-C-GA-OSU	24,875	_
20.109	Federal Aviation Administration		15-C-UAS-OSU-A	423,172	8,387
20.109	Federal Aviation Administration		16-C-TTHP-OSU-A	13,966	-
20.514	Federal Transit Administration		OH-2017-041-00	(64)	_
20.530	Federal Transit Administration		OH-2019-009-00	258,103	8,296
20.701	US Department of Transportation		Grant No. 69A3552047138	78,326	-
20.724	US Department of Transportation		693JK31850002CAAP	30,839	_
20.RD	National Highway Traffic Safety Administration		DTNH22-14-D-00348	24,264	-
	Total Department of Transportation Direct Awards			1,366,123	16,683
National Aeronautics and	d Space Administration				
43.001	Goddard Space Flight Center		80NSSC20K0128	124,487	_
43.001	Goddard Space Flight Center		NNX16AC25G	185	_
43.001	National Aeronautics and Space Administration		80NSSC 20K1422	79,141	_
43.001	National Aeronautics and Space Administration		80NSSC17K0200	75,891	-
43.001	National Aeronautics and Space Administration		80NSSC18K0703	131,449	-
43.001	National Aeronautics and Space Administration		80NSSC18K0981	155,261	65,606
43.001	National Aeronautics and Space Administration		80NSSC18K1023	8,421	-
43.001	National Aeronautics and Space Administration		80NSSC18K1497	152,700	-
43.001	National Aeronautics and Space Administration		80NSSC18K1582	68,209	-
43.001	National Aeronautics and Space Administration		80NSSC19K1250	3,592	-
43.001	National Aeronautics and Space Administration		80NSSC19K1362	46,131	-
43.001	National Aeronautics and Space Administration		80NSSC20K0491	178,488	20,570
43.001	National Aeronautics and Space Administration		80NSSC20K1009	57,777	-
43.001	National Aeronautics and Space Administration		80NSSC20K1292	57,079	-
43.001	National Aeronautics and Space Administration		80NSSC20K1339	57,562	-
43.001	National Aeronautics and Space Administration		80NSSC21K0613	13,854	-
43.001	National Aeronautics and Space Administration		NNX16AH82G	717	717
43.001	National Aeronautics and Space Administration		NNX16AO97G	52,682	40,541
43.001	National Aeronautics and Space Administration Headquarters		80NSSC18K0232	78,128	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC18K0526	28,590	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC18K0712	49,730	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC18K0748	63,359	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC18K1014	128,258	69,469

Assistance Numbe	-	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Develop					
Funds received directly	from the following agencies				
43.001	National Aeronautics and Space Administration Headquarters		80NSSC18K1027	143,547	_
43.001	National Aeronautics and Space Administration Headquarters		80NSSC19K0115	6,513	_
43.001	National Aeronautics and Space Administration Headquarters		80NSSC19K0367	8,323	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC19K0756	36,070	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC19K1070	(37)	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC19K1519	17,565	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC19K1709	4,035	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC20K0494	120,469	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC20K0531	59,070	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC20K0773	118,114	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC20K1354	19,653	12,598
43.001	National Aeronautics and Space Administration Headquarters		80NSSC20K1658	27,492	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC20K1741	34,205	-
43.001	National Aeronautics and Space Administration Headquarters		80NSSC21K0267	6,181	-
43.001	National Aeronautics and Space Administration Headquarters		NNX16AF49G	52,241	-
43.002	National Aeronautics and Space Administration Headquarters		80NSSC19K1686	54,893	-
43.002	National Aeronautics and Space Administration Headquarters		NNX14AL87A	69,578	-
43.002	National Aeronautics and Space Administration Headquarters		NNX17AJ92A	1,871,331	605,681
43.003	National Aeronautics and Space Administration Headquarters		80NSSC18K1691	74,527	-
43.003	National Aeronautics and Space Administration Headquarters		80NSSC20M0187	31,750	-
43.007	National Aeronautics and Space Administration		80NSSC19K0137	4,522	-
43.007	National Aeronautics and Space Administration Headquarters		80NSSC19K0429	63,203	-
43.012	National Aeronautics and Space Administration		80NSSC18K1163	58,769	-
43.012	National Aeronautics and Space Administration		80NSSC18K1504	166,221	-
43.012	National Aeronautics and Space Administration		80NSSC21K0765	2,120	-
43.012	National Aeronautics and Space Administration		NNX16AM50H	5,882	-
43.012	National Aeronautics and Space Administration Headquarters		80NSSC18K1506	28,403	-
43.012	National Aeronautics and Space Administration Headquarters		80NSSC19K0216	124,560	-
43.012	National Aeronautics and Space Administration Headquarters		80NSSC21K0325	12,566	-
43.012	National Aeronautics and Space Administration Headquarters		NNX17AD13G	10,789	-
43.RD	Johnson Space Center		80NSSC19P0999	272	-
43.RD	Johnson Space Center		80NSSC20P1162	39,327	-
43.RD	National Aeronautics and Space Administration		PO # 80NSSC20P0494	10,570	-
43.RD	National Aeronautics and Space Administration Headquarters		80NSSC19P2060	40,341	-
43.RD	National Aeronautics and Space Administration Headquarters		NNG16PJ32C	332,488	241,988
	Total National Aeronautics and Space Administration Direct Awards			5,267,244	1,057,170
National Endowment	for the Humanities				
45.163	National Endowment For The Humanities		FS-272433-20	10,946	8,388
45.169	National Endowment For The Humanities		HAA-256078-17	27,577	-
	Total National Endowment for the Humanities Direct Awards			38,523	8,388
National Science Fou	ndation				
47.041	National Science Foundation Div of Bioengineering & Environmental Systems		2038055	15,716	_
47.041	National Science Foundation Div of Electrical, Communications and CyberSys		1509727	(1,016)	-
77.071	Tallotta. Solotto i dandalion bir of Elocatori, communications and cybercys		1000121	(1,010)	•

Assi	istance Listing Number	Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
	Development Cluster directly from the foll					
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1609299	(3,140)	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1610797	680	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1710598	6,479	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1710977	2,922	2,583
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1711048	67,708	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1711102	56,894	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1711278	(15,590)	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1711733	3,330	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1740119	27,156	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1808169	22,604	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1808932	69,007	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1809570	143,551	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1809682	132,729	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1809875	16,528	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1809894	99,114	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1810041	57,743	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1815930	116,703	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1818904	16,819	16,074
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1845370	133,395	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1848872	9,477	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		1916740	156,818	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2011785	47,538	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2019753	21,638	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2020015	99,749	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2029461	46,422	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2030141	29,701	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2034140	11,307	-
47.0	041 Natio	nal Science Foundation Div of Electrical, Communications and CyberSys		2105873	47,343	-
47.0	041 Natio	nal Science Foundation Div of Emerging Frontiers		1433467	(23)	-
47.0	041 Natio	nal Science Foundation Div of Emerging Frontiers		1741666	254,719	218,763
47.0	041 Natio	nal Science Foundation Div of Emerging Frontiers		1933344	344,461	102,913
47.0	041 Natio	nal Science Foundation Div of Emerging Frontiers		2029282	183,258	-
47.0	041 Natio	nal Science Foundation Div of Emerging Frontiers		2029397	84,195	26,433
47.0	041 COVI	D-19 National Science Foundation Div of Emerging Frontiers		2029643	50,773	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1531641	3,191	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1664266	29,417	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1763357	131,650	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1830814	34,704	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1840484	9,053	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1852298	19,756	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1936963	64,613	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		1943934	79,908	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		2024736	17,293	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		2029446	9,343	-
47.0	041 Natio	nal Science Foundation Div of Engineering Education and Centers		2030083	19,712	-
47.0	041 COVI	D-19 National Science Foundation Div of Engineering Education and Cente	ers	2030083	7,321	-
47.0	041 Natio	nal Science Foundation Div of Mathematical Sciences		1554896	34,378	-

Assistance Lis Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme Funds received directly fro					
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1403574	(2,301)	_
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1508994	(28)	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1604305	9,655	_
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1605037	(139)	_
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1608058	53,571	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1653587	64,834	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1749701	50,270	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1752106	47,384	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1803022	89,503	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1804943	13,304	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1805047	28,133	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1824617	75,746	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1932638	100,907	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		1942501	13,994	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		2000469	48,116	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		2001125	81,103	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		2001127	25,497	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		2015669	65,137	-
47.041	COVID-19 NSF Div of Chemical, Bioengineering, Environmental, and Transpo	ort Systems	2029847	138,239	28,374
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		2037398	118,730	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transport Systems		2037707	28,167	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1531785	41,691	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1537423	5,044	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1554063	37,413	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1563372	65,625	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1563504	30,776	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1635569	2,489	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1637656	26,299	21,450
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1661572	7,995	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1662646	91,941	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1708819	100,727	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1727894	318,519	203,048
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1762918	57,069	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1826149	175,775	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1833345	64,061	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1853632	76,497	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1902408	90,298	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1921881	236,428	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1929873	18,287	-
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1933856	4,002	-
47.041 47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation		1943070	12,841	-
47.041 47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation NSF Division of Civil, Mechanical and Manufacturing Innovation		2019238 2019648	68,685 81,089	-
47.041 47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation NSF Division of Civil, Mechanical and Manufacturing Innovation		2019648	42,709	-
47.041 47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation NSF Division of Civil, Mechanical and Manufacturing Innovation		2023857 2036193	42,709 123,424	-
47.041 47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation NSF Division of Civil, Mechanical and Manufacturing Innovation		2036193 2044526	123,424 3,726	-
47.041 47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation NSF Division of Industrial Innovation and Partnerships		2044526 1539992	3,726 14,411	-
47.041	Not Division of industrial inflovation and Partnerships		1009992	14,411	-

Parameter Para		stance Listing Number	Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
47.041 NSF Division of industrial Innovation and Partnerships 170038 (11,711) - 47.041 NSF Division of Industrial Innovation and Partnerships 170038 (11,711) - 47.041 NSF Division of Industrial Innovation and Partnerships 1700223 130,459 - 47.041 NSF Division of Industrial Innovation and Partnerships 182744 345,773 - 47.041 NSF Division of Industrial Innovation and Partnerships 182744 345,773 - 47.041 NSF Division of Industrial Innovation and Partnerships 182744 345,773 - 47.041 NSF Division of Industrial Innovation and Partnerships 182744 345,773 - 47.041 NSF Division of Industrial Innovation and Partnerships 19474 204,470,470,470,470,470,470,470,470,470,4	Research and De	evelopment Cluster –	-				
47.041 NSP Division of Industrial Innovation and Partnerships 170938 (1,171) - 47.041 NSP Division of Industrial Innovation and Partnerships 1822446 348,773 - 47.041 NSP Division of Industrial Innovation and Partnerships 1827465 48,771 - 47.041 NSP Division of Industrial Innovation and Partnerships 1919024 48,771 - 47.041 NSP Division of Industrial Innovation and Partnerships 1919024 28,15,55 - 47.041 NSP Division of Industrial Innovation and Partnerships 1919024 28,15,55 - 47.041 NSP Division of Industrial Innovation and Partnerships 2044704 5,665 - 47.041 National Science Foundation Directorate Marhematical & Physical Sciences 1723003 32,775 - 47.049 National Science Foundation Directorate Marhematical & Physical Sciences 189368 54,014 - 47.049 National Science Foundation Directorate Marhematical & Physical Sciences 1813028 54,014 - 47.049 National Science Foundation Directorate Markematical & Physical Sciences 1813028 <	Funds received d	lirectly from the follow	ring agencies				
47 0.14 NSF Division of Industrial Immoration and Partnerships 1301.459 - 47 0.41 NSF Division of Industrial Immoration and Partnerships 182746 48,778 - 47 0.41 NSF Division of Industrial Immoration and Partnerships 196661 48,771 - 47 0.41 NSF Division of Industrial Immoration and Partnerships 2016449 127,030 - 47 0.41 NSF Division of Industrial Immoration and Partnerships 2016449 127,030 - 47 0.41 NSF Division of Industrial Immoration and Partnerships 2016449 127,030 - 47 0.41 NSF Division of Industrial Immoration and Partnerships 2016449 127,030 - 47 0.42 NSF Division of Industrial Immoration and Partnerships 2014714 5,056 - 47 0.43 NSF Division of Industrial Immoration and Partnerships 2014714 5,056 - 47 0.44 NSE Division of Industrial Immoration and Partnerships 2014714 5,056 - 47 0.45 NSE Division of Industrial Immoration and Partnerships 2014714 5,056 - 47 0.46 <td< td=""><td>47.04</td><td>41 NSF Div</td><td>rision of Industrial Innovation and Partnerships</td><td></td><td>1650541</td><td>23,336</td><td>-</td></td<>	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1650541	23,336	-
47.041 NSF Division of Industrial Innovation and Partnerships 182746 54,771 -	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1701038	(11,711)	-
AF DATE NSF Division of Industrial Innovation and Partnerships 196551 68,77	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1738723	130,459	-
47.041 NSF Division of Industrial Imnovation and Partmerships 1916681 46,873 - 47.041 NSF Division of Industrial Imnovation and Partmerships 2016445 127,856 - 47.041 NSF Division of Industrial Imnovation and Partmerships 2044704 5,566 - 47.041 NSF Division of Industrial Imnovation and Partmerships 2044704 5,566 - 47.049 National Science Foundation Divectorize Mathematical & Physical Sciences 1722003 32,775 - 47.049 National Science Foundation Divectorize Mathematical & Physical Sciences 1908877 97.223 - 47.049 National Science Foundation Divectorize Mathematical & Physical Sciences 1908877 97.223 - 47.049 National Science Foundation Divectorize Mathematical & Physical Sciences 1918967 97.223 - 47.049 National Science Foundation Diversional Mathematical & Physical Sciences 1917964 0.047 - 47.049 National Science Foundation Diversional Mathematical & Physical Sciences 1917964 0.047 - 47.049 National Science Foundation Diversional Mathematical & Physical	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1822144	348,778	=
47.041 NSF Division of Industrial Innovation and Partmenhips 1919204 23,3654 -1 47.041 NSF Division of Industrial Innovation and Partmenhips 2014404 5,665 -1 47.041 National Science Foundation Directorate Mathematical & Physical Sciences 1721405 24,665 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1723003 32,775 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1808887 97,223 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1819268 51,014 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1819268 51,014 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1819268 51,014 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1819261 3,041 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1919261 3,041 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1919261 3,041 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1919261 3,041 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1919261 3,041 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1919261 3,041 -1 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 191927 (1,1816) -1 47.040 National Science Foundation Directorate Mathematical & Physical Sciences 191927 (1,1816) -1 47.040 National Science Foundation Directorate Mathematical & Physical Sciences 191927 (1,1816) -1 47.040 National Science Foundation Directorate Mathematical & Physical Sciences 191927 (1,1816) -1 47.040 National Science Foundation Directorate Mathematical & Physical Sciences 1918261 (1,1816) -1 47.040 National Science Fou	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1827545	48,771	-
47,041 NSF Division of Industrial Innovation and Partmerships 2044454 5.685 - 4.7498 NSF Division of Industrial Innovation and Partmerships 2044704 5.685 - 4.7498 National Science Foundation Directorale Mathematical & Physical Sciences 172,1445 24,865 - 4.7499 National Science Foundation Directorale Mathematical & Physical Sciences 172,3003 32,775 - 4.7499 National Science Foundation Directorale Mathematical & Physical Sciences 189837 97,223 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1817964 60,847 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1817964 60,847 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1913261 8,509 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1916446 33,154 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1916446 33,154 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1916446 33,154 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1916446 33,154 - 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1916447 7.7499 National Science Foundation Directorale Mathematical & Physical Sciences 1515927 (1,916) - 7.7499 National Science Foundation Directorale Sciences 1615927 (1,916) - 7.7499 National Science Foundation Directorale Sciences 1615927 (1,916) - 7.7499 National Science Foundation Directorale Sciences 1615928 12,441 - 7.7499 National Science Foundation Directorale Sciences 1615928 12,441 - 7.7499 National Science Foundation Directorale Sciences 1715284 13,342 - 7.7499 National Science Foundation Directorale Sciences 1715284 13,342 - 7.7499 National Science Foundation Directorale Sciences 1715284 13,342 - 7.7499 National Science Foundation Directorale Sci	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1916651	46,873	=
47,041 NSF Division of Industrial Innovation and Partnerships 2047704 5,665 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 1723003 32,775 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 1809837 97,223 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 1813628 54,014 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 18137861 85,94 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 19137861 85,94 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 19137861 8,76 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 1916446 38,76 - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 1916467 8,76 (1,916) - 47,049 National Science Foundation Directorate Mathematicial & Physical Sciences 15,56067 8,26 4 -	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		1919204	263,654	-
47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1721405 32.775 - 3 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 18080837 97.233 - 3 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 18080837 97.233 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 18173628 65.04 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 18173621 8.504 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1912261 8.504 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1912261 8.504 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1912261 8.504 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1912261 8.504 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1912261 8.504 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1912267 19169 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067 2.664 - 4 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1915067	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		2016445	127,636	-
17.049 National Science Foundation Directorate Mathematical & Physical Sciences 1200837 9.223 - 1.200837 9.223	47.04	41 NSF Div	rision of Industrial Innovation and Partnerships		2044704	5,665	-
47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1808837 57.223 47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1847964 60.847 -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1847964 60.847 -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1916446 38,154 -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1916446 38,154 -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1312441 8,716 -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 131927 (1.916) -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1519027 (1.916) -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1519027 (1.916) -4.049 National Science Foundation Directorate Mathematical & Physical Sciences 1519027 (1.916) -4.049 National Science Foundation Directorate Mathematical Physical Sciences 1815105 (1.916) -4.049 National Science Foundation Directorate Mathematical Physical Sciences 1815105 (1.916) -4.049 National Science Foundation Directorate Mathematical Physical Sciences 1815105 (1.916) -4.049 National Science Foundation Directorate Mathematical Sciences 1815105 (1.916) -4.049 National Science Foundation Directorate Mathematical Physical Sciences 1715284 (1.614) -4.049 National Science Foundation Directorate Mathematical Physical Sciences 1908570 (3.203) -4.049 National Science Foundation Directorate Mathematical Physical Phys	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1721445	24,665	-
47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1847664 60,047	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1723003	32,775	-
47,049	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1809837	97,223	-
47.049	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1813628	54,014	-
47.049 National Science Foundation Directorate Mathematical & Physical Sciences 1916446 38,154 - 47.049 National Science Foundation Div of Astronomical Sciences 1515927 (1916) - 47.049 National Science Foundation Div of Astronomical Sciences 1515927 (1916) - 47.049 National Science Foundation Div of Astronomical Sciences 1615105 33,920 - 47.049 National Science Foundation Div of Astronomical Sciences 1615505 44,411 - 47.049 National Science Foundation Div of Astronomical Sciences 1615838 12,441 - 47.049 National Science Foundation Div of Astronomical Sciences 1653300 28,783 - 47.049 National Science Foundation Div of Astronomical Sciences 1653300 28,783 - 47.049 National Science Foundation Div of Astronomical Sciences 1814440 107,370 - 47.049 National Science Foundation Div of Astronomical Sciences 1908871 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 1909841 82,059 -	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1847964	60,847	-
A7049	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1913261	8,504	-
Art	47.04	49 Nationa	Science Foundation Directorate Mathematical & Physical Sciences		1916446	38,154	-
47.049	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1312441	8,716	-
47.049 National Science Foundation Div of Astronomical Sciences 161505 33,920 - 47.049 National Science Foundation Div of Astronomical Sciences 1615533 44,411 - 47.049 National Science Foundation Div of Astronomical Sciences 1653300 28,783 - 47.049 National Science Foundation Div of Astronomical Sciences 1715284 16,342 - 47.049 National Science Foundation Div of Astronomical Sciences 1715284 16,342 - 47.049 National Science Foundation Div of Astronomical Sciences 19088570 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 19088670 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 19088670 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 1909841 82,059 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,233 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 -	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1515927	(1,916)	-
47.049	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1516967	62,664	-
47.049 National Science Foundation Div of Astronomical Sciences 1615838 12.441 - 47.049 National Science Foundation Div of Astronomical Sciences 1715284 16.342 - 47.049 National Science Foundation Div of Astronomical Sciences 1814440 107,370 - 47.049 National Science Foundation Div of Astronomical Sciences 1814440 107,370 - 47.049 National Science Foundation Div of Astronomical Sciences 1908570 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 1908941 82,059 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,323 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2008739 19,755 - 47.049 National Science Foundation Div of Chemistry 145289 90,678 - <td< td=""><td>47.04</td><td>49 Nationa</td><td>Science Foundation Div of Astronomical Sciences</td><td></td><td>1615105</td><td>33,920</td><td>-</td></td<>	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1615105	33,920	-
47.049 National Science Foundation Div of Astronomical Sciences 1653300 28,783 - 47.049 National Science Foundation Div of Astronomical Sciences 1715284 16,342 - 47.049 National Science Foundation Div of Astronomical Sciences 1814440 107,370 - 47.049 National Science Foundation Div of Astronomical Sciences 1908570 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,323 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2008735 1,415 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1469424 22,619 - 47.049	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1615553	44,411	-
47.049 National Science Foundation Div of Astronomical Sciences 1715284 16,342 - 47.049 National Science Foundation Div of Astronomical Sciences 1804670 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 1908570 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 1909841 82,059 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,233 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2037839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 N	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1615838	12,441	-
47.049 National Science Foundation Div of Astronomical Sciences 1814440 107,370 - 47.049 National Science Foundation Div of Astronomical Sciences 1908570 63,203 - 47.049 National Science Foundation Div of Astronomical Sciences 1909841 82,059 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,323 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2009739 19,755 - 47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1608404 81,477 - 47.049 National Science Foundation Div of Chemistry 160989 (15,489) - 47.049 National S	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1653300	28,783	-
47.049 National Science Foundation Div of Astronomical Sciences 1908570 63.203 - 47.049 National Science Foundation Div of Astronomical Sciences 1909841 82.059 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 33.2323 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58.241 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2007839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90.678 - 47.049 National Science Foundation Div of Chemistry 1454289 90.678 - 47.049 National Science Foundation Div of Chemistry 1456162 108.923 - 47.049 National Science Foundation Div of Chemistry 1566106 16.133 - 47.049 National Science Foundation Div of Chemistry 1608404 81,477 - 47.049 National Science Founda	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1715284	16,342	-
47.049 National Science Foundation Div of Astronomical Sciences 1909841 82,059 - 47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,323 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 52,421 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2037839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 160464 47,240 - 47.049 National Science Foundation Div of	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1814440	107,370	-
47.049 National Science Foundation Div of Astronomical Sciences 2007023 32,323 - 47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2037839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry <td>47.04</td> <td>49 Nationa</td> <td>Science Foundation Div of Astronomical Sciences</td> <td></td> <td>1908570</td> <td>63,203</td> <td>-</td>	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1908570	63,203	-
47.049 National Science Foundation Div of Astronomical Sciences 2008110 58,241 - 47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2037839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1608404 81,477 - 47.049 National Science Foundation Div of Chemistry 1608404 81,477 - 47.049 National Science Foundation Div of Chemistry 1608404 81,477 - 47.049 National Science Foundation Div of Chemistry 1608404 81,477 - 47.049 National Science Foundation Div of Chemistry 1664566 47,210 - 47.049 N	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		1909841	82,059	-
47.049 National Science Foundation Div of Astronomical Sciences 2009735 1,415 - 47.049 National Science Foundation Div of Astronomical Sciences 2037839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1606404 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 61,118 - 47.049 National Scie	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		2007023	32,323	=
47.049 National Science Foundation Div of Astronomical Sciences 2037839 19,755 - 47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1600404 81,477 - 47.049 National Science Foundation Div of Chemistry 16008404 81,477 - 47.049 National Science Foundation Div of Chemistry 16008404 81,477 - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundat	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		2008110	58,241	-
47.049 National Science Foundation Div of Chemistry 1454289 90,678 - 47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		2009735	1,415	-
47.049 National Science Foundation Div of Chemistry 1455162 108,923 - 47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 170890 7,101 - 47.049 National Science Foundation Div of Chemistry 176666 79,091 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Che	47.04	49 Nationa	Science Foundation Div of Astronomical Sciences		2037839	19,755	=
47.049 National Science Foundation Div of Chemistry 1464924 22,619 - 47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of C	47.04	49 Nationa	Science Foundation Div of Chemistry		1454289	90,678	-
47.049 National Science Foundation Div of Chemistry 1566106 16,133 - 47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1768390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1455162	108,923	-
47.049 National Science Foundation Div of Chemistry 1606404 81,477 - 47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1756666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1464924	22,619	-
47.049 National Science Foundation Div of Chemistry 1609889 (15,489) - 47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1756666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1566106	16,133	-
47.049 National Science Foundation Div of Chemistry 1610254 65,140 - 47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1606404	81,477	=
47.049 National Science Foundation Div of Chemistry 1654656 47,210 - 47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 -	47.04	49 Nationa	Science Foundation Div of Chemistry		1609889	(15,489)	-
47.049 National Science Foundation Div of Chemistry 1665280 6,473 - 47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1610254	65,140	-
47.049 National Science Foundation Div of Chemistry 1665322 61,118 - 47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1654656	47,210	-
47.049 National Science Foundation Div of Chemistry 1708390 7,101 - 47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1665280	6,473	-
47.049 National Science Foundation Div of Chemistry 1750666 79,091 - 47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1665322	61,118	-
47.049 National Science Foundation Div of Chemistry 1764170 164,464 - 47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1708390	7,101	-
47.049 National Science Foundation Div of Chemistry 1800239 60,077 - 47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1750666	79,091	-
47.049 National Science Foundation Div of Chemistry 1800395 239,546 110,450	47.04	49 Nationa	Science Foundation Div of Chemistry		1764170	164,464	-
	47.04	49 Nationa	Science Foundation Div of Chemistry		1800239	60,077	-
47.049 National Science Foundation Div of Chemistry 1800414 89,083 -			Science Foundation Div of Chemistry			,	110,450
	47.04	19 Nationa	Science Foundation Div of Chemistry		1800414	89,083	-

Assistan Nur		Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Devel	nment Cluster				
	ly from the following agencies				
	,				
47.049	National Science Foundation Div of Chemistry		1800471	138,367	-
47.049	National Science Foundation Div of Chemistry		1807922	82,846	-
47.049	National Science Foundation Div of Chemistry		1827084	5,534	-
47.049	National Science Foundation Div of Chemistry		1856442	138,768	-
47.049	National Science Foundation Div of Chemistry		1900064	117,691	-
47.049	National Science Foundation Div of Chemistry		1900141	119,342	-
47.049	National Science Foundation Div of Chemistry		1900271	203,292	-
47.049	National Science Foundation Div of Chemistry		1904560	158,170	-
47.049	National Science Foundation Div of Chemistry		1935885	1,387,962	102,518
47.049	National Science Foundation Div of Chemistry		1955282	113,582	-
47.049	National Science Foundation Div of Chemistry		2002781	83,173	-
47.049	National Science Foundation Div of Chemistry		2003648	58,941	-
47.049	National Science Foundation Div of Chemistry		2044648	42,212	-
47.049	National Science Foundation Div of Chemistry		2044904	15,524	-
47.049	National Science Foundation Div of Design & Manufacturing Innovation		1553355	86,963	-
47.049	National Science Foundation Div of Materials Research		1420451	2,077,073	584,801
47.049	National Science Foundation Div of Materials Research		1454343	53,321	-
47.049	National Science Foundation Div of Materials Research		1609142	101,937	-
47.049	National Science Foundation Div of Materials Research		1610631	(1,458)	-
47.049	National Science Foundation Div of Materials Research		1625349	1,143	-
47.049	National Science Foundation Div of Materials Research		1629382	136,109	-
47.049	National Science Foundation Div of Materials Research		1653769	86,574	-
47.049	National Science Foundation Div of Materials Research		1708957	78,569	-
47.049	National Science Foundation Div of Materials Research		1709236	5,864	-
47.049	National Science Foundation Div of Materials Research		1709290	102,266	-
47.049	National Science Foundation Div of Materials Research		1719316	17,277	-
47.049	National Science Foundation Div of Materials Research		1729086	28,368	-
47.049	National Science Foundation Div of Materials Research		1755479	47,065	18,692
47.049	National Science Foundation Div of Materials Research		1800130	118,031	-
47.049	National Science Foundation Div of Materials Research		1802432	204,687	-
47.049	National Science Foundation Div of Materials Research		1807928	23,765	-
47.049	National Science Foundation Div of Materials Research		1808145	68,062	-
47.049	National Science Foundation Div of Materials Research		1808704	52,866	-
47.049	National Science Foundation Div of Materials Research National Science Foundation Div of Materials Research		1905748 1905835	141,884	-
47.049				143,788	-
47.049	National Science Foundation Div of Materials Research		1922076 1922239	120,642	-
47.049 47.049	National Science Foundation Div of Materials Research National Science Foundation Div of Materials Research		1922239	383,803 27,815	-
47.049	National Science Foundation Div of Materials Research		1943870	121,503	-
	National Science Foundation Div of Materials Research		2003793		-
47.049 47.049	National Science Foundation Div of Materials Research National Science Foundation Div of Materials Research		2003793	142,128 191,266	-
	National Science Foundation Div of Materials Research				124 264
47.049 47.049	National Science Foundation Div of Materials Research National Science Foundation Div of Materials Research		2011876 2045742	1,289,843 24,660	124,261
47.049 47.049	National Science Foundation Div of Materials Research National Science Foundation Div of Materials Research		2047308	24,660 576	-
47.049 47.049	National Science Foundation Div of Mathematical Sciences		2047308 1440386		-
47.049 47.049	National Science Foundation Div of Mathematical Sciences National Science Foundation Div of Mathematical Sciences		1454864	14,183 61,471	-
47.049 47.049	National Science Foundation Div of Mathematical Sciences		1515755	4,715	-
41.049	regional ocience i oungation div di Mathematical ociences		1010100	4,7 10	-

Assistance Listi Number	ing Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developmen					
Funds received directly from	if the following agencies				
47.049	National Science Foundation Div of Mathematical Sciences		1547357	312,848	_
47.049	National Science Foundation Div of Mathematical Sciences		1550117	(396)	-
47.049	National Science Foundation Div of Mathematical Sciences		1553637	20,581	-
47.049	National Science Foundation Div of Mathematical Sciences		1554896	166,473	-
47.049	National Science Foundation Div of Mathematical Sciences		1564395	27,073	-
47.049	National Science Foundation Div of Mathematical Sciences		1613054	1,252	113
47.049	National Science Foundation Div of Mathematical Sciences		1613110	6,661	-
47.049	National Science Foundation Div of Mathematical Sciences		1654159	51,486	-
47.049	National Science Foundation Div of Mathematical Sciences		1700194	36,550	-
47.049	National Science Foundation Div of Mathematical Sciences		1712580	5,328	-
47.049	National Science Foundation Div of Mathematical Sciences		1714770	54,638	-
47.049	National Science Foundation Div of Mathematical Sciences		1748837	60,017	-
47.049	National Science Foundation Div of Mathematical Sciences		1752345	50,215	-
47.049	National Science Foundation Div of Mathematical Sciences		1753581	46,795	-
47.049	National Science Foundation Div of Mathematical Sciences		1757423	64,015	-
47.049	National Science Foundation Div of Mathematical Sciences		1800777	18,960	-
47.049	National Science Foundation Div of Mathematical Sciences		1812028	38,598	-
47.049	National Science Foundation Div of Mathematical Sciences		1813071	47,090	-
47.049	National Science Foundation Div of Mathematical Sciences		1814737	29,276	-
47.049	National Science Foundation Div of Mathematical Sciences		1823150	26,344	-
47.049	National Science Foundation Div of Mathematical Sciences		1829955	21,912	-
47.049	National Science Foundation Div of Mathematical Sciences		1830547	36,412	12,366
47.049	National Science Foundation Div of Mathematical Sciences		1839600	423	-
47.049	National Science Foundation Div of Mathematical Sciences		1853561	44,788	-
47.049	National Science Foundation Div of Mathematical Sciences		1853587	105,463	-
47.049	National Science Foundation Div of Mathematical Sciences National Science Foundation Div of Mathematical Sciences		1901082	13,426	-
47.049 47.049	National Science Foundation Div of Mathematical Sciences		1902199 1916231	37,441 15,308	-
47.049 47.049	National Science Foundation Div of Mathematical Sciences National Science Foundation Div of Mathematical Sciences		1923038	15,308	-
47.049 47.049	National Science Foundation Div of Mathematical Sciences National Science Foundation Div of Mathematical Sciences		1936283	1,240 547	-
47.049 47.049	National Science Foundation Div of Mathematical Sciences		1945212	56,126	-
47.049	National Science Foundation Div of Mathematical Sciences		1949369	523	_
47.049	National Science Foundation Div of Mathematical Sciences		1954463	426	_
47.049	National Science Foundation Div of Mathematical Sciences		1955564	31,453	_
47.049	National Science Foundation Div of Mathematical Sciences		2000885	462	_
47.049	National Science Foundation Div of Mathematical Sciences		2005297	41,151	_
47.049	National Science Foundation Div of Mathematical Sciences		2005630	60,010	-
47.049	National Science Foundation Div of Mathematical Sciences		2015226	17,466	-
47.049	National Science Foundation Div of Mathematical Sciences		2015490	81,270	-
47.049	National Science Foundation Div of Mathematical Sciences		2015552	42,657	-
47.049	COVID-19 National Science Foundation Div of Mathematical Sciences		2027001	101,678	-
47.049	National Science Foundation Div of Mathematical Sciences		2115518	18,560	-
47.049	National Science Foundation Div of Mathematical Sciences		2120325	28,427	-
47.049	National Science Foundation Div of Physics		1605042	158,532	-
47.049	National Science Foundation Div of Physics		1614460	22,217	-
47.049	National Science Foundation Div of Physics		1614835	26,087	-
47.049	National Science Foundation Div of Physics		1619563	19,604	-

Assistance Li Number		Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developm					
Funds received directly to	rom the following agencies				
47.049	National Science Foundation Div of Physics		1714479	16,753	-
47.049	National Science Foundation Div of Physics		1806923	160,395	-
47.049	National Science Foundation Div of Physics		1913069	121,474	-
47.049	National Science Foundation Div of Physics		2012955	124,887	-
47.049	National Science Foundation Div of Physics		2012980	25,454	=
47.049	National Science Foundation Div of Physics		2013134	69,251	-
47.049	National Science Foundation SBE Office of Multidisciplinary Activities		1936219	370,885	314,478
47.050	National Science Foundation Directorate for Education & Human Resources		1645399	(2,039)	-
47.050	National Science Foundation Directorate for Geosciences		1744067	71,852	-
47.050	National Science Foundation Directorate for Geosciences		1752882	61,286	-
47.050	National Science Foundation Directorate for Geosciences		1854991	26,445	-
47.050	National Science Foundation Directorate for Geosciences		1911482	78,995	-
47.050	National Science Foundation Directorate for Geosciences		1927920	62,077	-
47.050	National Science Foundation Div of Atmospheric Sciences		1502919	1,706	-
47.050	National Science Foundation Div of Atmospheric Sciences		1805819	207,678	-
47.050	National Science Foundation Div of Atmospheric Sciences		2002521	113,745	-
47.050	National Science Foundation Div of Atmospheric Sciences		2002539	139,927	-
47.050	National Science Foundation Div of Atmospheric Sciences		2029804	51,491	-
47.050	National Science Foundation Div of Atmospheric Sciences		2032559	18,611	-
47.050	National Science Foundation Div of Earth Sciences		1424138	5,364	-
47.050	National Science Foundation Div of Earth Sciences		1520870	64,742	44,889
47.050	National Science Foundation Div of Earth Sciences		1656907	58,711	-
47.050	National Science Foundation Div of Earth Sciences		1724693	45,366	-
47.050	National Science Foundation Div of Earth Sciences		1752995	58,004	-
47.050	National Science Foundation Div of Earth Sciences		1810681	32,134	-
47.050	National Science Foundation Div of Earth Sciences		1819086	93,460	-
47.050	National Science Foundation Div of Earth Sciences		1831126	61,038	-
47.050	National Science Foundation Div of Earth Sciences		2002506	23,703	-
47.050	National Science Foundation Div of Earth Sciences		2038207	17,296	-
47.050	National Science Foundation Div of Ocean Sciences		1459536	(4,374)	-
47.050	National Science Foundation Div of Ocean Sciences		1536989	13,500	8,766
47.050	National Science Foundation Div of Ocean Sciences		1829640	170,372	-
47.050	National Science Foundation Div of Ocean Sciences		1829831	304,897	-
47.050	National Science Foundation Div of Ocean Sciences		1830726	64,691	-
47.050	National Science Foundation Div of Ocean Sciences		1838667	128,590	-
47.050	National Science Foundation Div of Ocean Sciences		1945543	63,972	-
47.050	National Science Foundation Division of Polar Programs		1249631	6,486	-
47.050	National Science Foundation Division of Polar Programs		1543453	235	-
47.050	National Science Foundation Division of Polar Programs		1543501	(149)	-
47.050	National Science Foundation Division of Polar Programs		1612741	22,218	-
47.050	National Science Foundation Division of Polar Programs		1643713	295,181	-
47.050	National Science Foundation Division of Polar Programs		1654922	(938)	-
47.050	National Science Foundation Division of Polar Programs		1724786	62,342	-
47.050	National Science Foundation Division of Polar Programs		1744961	86,391	-
47.050	National Science Foundation Division of Polar Programs		1745074	442,132	-
47.050	National Science Foundation Division of Polar Programs		1823135	173,609	85,825
47.050	National Science Foundation Division of Polar Programs		1838401	137,329	-

Assistance Listi	na		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
				•	
Research and Developmen					
Funds received directly fror	n the following agencies				
47.050	National Science Foundation Division of Polar Programs		1841228	92.686	_
47.070	National Science Foundation Directorate for Engineering		1912166	137,158	73,121
47.070	National Science Foundation Div of Computer and Network Systems		1314538	115	- -
47.070	National Science Foundation Div of Computer and Network Systems		1514260	25,177	-
47.070	National Science Foundation Div of Computer and Network Systems		1518829	241,596	-
47.070	National Science Foundation Div of Computer and Network Systems		1618520	129,104	-
47.070	National Science Foundation Div of Computer and Network Systems		1618566	35,657	-
47.070	National Science Foundation Div of Computer and Network Systems		1717045	68,295	-
47.070	National Science Foundation Div of Computer and Network Systems		1717060	66,027	-
47.070	National Science Foundation Div of Computer and Network Systems		1718084	71,325	-
47.070	National Science Foundation Div of Computer and Network Systems		1719371	19,109	-
47.070	National Science Foundation Div of Computer and Network Systems		1731698	58,069	-
47.070	National Science Foundation Div of Computer and Network Systems		1750809	8,129	-
47.070	National Science Foundation Div of Computer and Network Systems		1814923	24,317	-
47.070	National Science Foundation Div of Computer and Network Systems		1823070	135,319	-
47.070	National Science Foundation Div of Computer and Network Systems		1824337	44,211	-
47.070	National Science Foundation Div of Computer and Network Systems		1834213	213,242	-
47.070	National Science Foundation Div of Computer and Network Systems		1834215	157,808	-
47.070	National Science Foundation Div of Computer and Network Systems		1834216	55,227	-
47.070	National Science Foundation Div of Computer and Network Systems		1901057	40,316	-
47.070	National Science Foundation Div of Computer and Network Systems		1908020	141,712	-
47.070	National Science Foundation Div of Computer and Network Systems		1931341	(14)	-
47.070	National Science Foundation Div of Computer and Network Systems		2007231	11,042	-
47.070	National Science Foundation Div of Computer and Network Systems		2007581	121,298	-
47.070	COVID-19 National Science Foundation Div of Computer and Network Systems		2028547	78,281	-
47.070	National Science Foundation Div of Computer and Network Systems		2042715	31,113	-
47.070	National Science Foundation Div of Computer and Network Systems		2102233	75,171	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1513944	91,614	- 07.004
47.070 47.070	National Science Foundation Div of Computing & Communication Foundations		1526386 1565414	28,574	27,331
	National Science Foundation Div of Computing & Communication Foundations			(5,357)	-
47.070 47.070	National Science Foundation Div of Computing & Communication Foundations National Science Foundation Div of Computing & Communication Foundations		1629126 1629392	51,984 289,639	-
47.070 47.070	National Science Foundation Div of Computing & Communication Foundations National Science Foundation Div of Computing & Communication Foundations		1629392	209,039 (169)	-
47.070 47.070	National Science Foundation Div of Computing & Communication Foundations		1716388	171,534	-
47.070	National Science Foundation Div of Computing & Communication Foundations National Science Foundation Div of Computing & Communication Foundations		1733798	12,105	-
47.070	National Science Foundation Div of Computing & Communication Foundations National Science Foundation Div of Computing & Communication Foundations		1733796	221,519	-
47.070	National Science Foundation Div of Computing & Communication Foundations National Science Foundation Div of Computing & Communication Foundations		1740761	55,199	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1801846	22,717	_
47.070	National Science Foundation Div of Computing & Communication Foundations		1801855	63,089	_
47.070	National Science Foundation Div of Computing & Communication Foundations		1816577	201,523	_
47.070	National Science Foundation Div of Computing & Communication Foundations		1822987	17,923	_
47.070	National Science Foundation Div of Computing & Communication Foundations		1839252	116,559	52,427
47.070	National Science Foundation Div of Computing & Communication Foundations		1839356	2,368	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1839358	107,122	_
47.070	National Science Foundation Div of Computing & Communication Foundations		1900145	83,401	_
47.070	National Science Foundation Div of Computing & Communication Foundations		1907715	126,665	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1908281	67,274	_
				,=	

Assistance Listi Number	ing Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developmer Funds received directly from					
47.070	National Science Foundation Div of Computing & Communication Foundations		1909291	81,994	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1943201	54,256	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1947546	16,605	-
47.070	National Science Foundation Div of Computing & Communication Foundations		1955587	36,171	-
47.070	National Science Foundation Div of Computing & Communication Foundations		2005884	67,435	-
47.070	National Science Foundation Div of Computing & Communication Foundations		2028944	151,136	-
47.070	National Science Foundation Div of Computing & Communication Foundations		2105872	107,418	-
47.070	National Science Foundation Div of Computing & Communication Foundations		2110252	48,651	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1453582	59,173	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1618336	19,690	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1717965	1,094	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1718450	64,863	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1749501	59,563	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1761969	194,533	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1815674	95,923	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1815697	26,908	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1816891	77,312	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1822754	1,590	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1842531	25,073	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1845122	92,216	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1845670	10,990	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1855501	39,753	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1901360	6,497	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1910356	73,548	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1942980	56,779	-
47.070	National Science Foundation Div of Information and Intelligent Systems		1955764	104,577	12,998
47.070	National Science Foundation Div of Information and Intelligent Systems		2008043	55,006	-
47.070	National Science Foundation Div of Information and Intelligent Systems		2014506	138,279	-
47.070	National Science Foundation Div of Information and Intelligent Systems		2024161	89	-
47.070	National Science Foundation Div of Information and Intelligent Systems		2024588	123,395	8,864
47.070	National Science Foundation Div of Information and Intelligent Systems		2026704	45,752	-
47.070	National Science Foundation Division of Advanced Cyberinfrastructure		1450440	116,860	-
47.070	National Science Foundation Division of Advanced Cyberinfrastructure		1550223	115,265	-
47.070 47.070	National Science Foundation Division of Advanced Cyberinfrastructure		1664137 1829717	(921) 71,596	70 105
	National Science Foundation Division of Advanced Cyberinfrastructure			*	70,185
47.070 47.070	National Science Foundation Division of Advanced Cyberinfrastructure		1835725 1931537	420,111 260,938	146,573
47.070 47.070	National Science Foundation Division of Advanced Cyberinfrastructure		1940168	103,474	-
47.070 47.070	National Science Foundation Division of Advanced Cyberinfrastructure National Science Foundation Division of Advanced Cyberinfrastructure		1945347	63,428	-
47.070 47.070	•		2003747		-
47.070 47.070	National Science Foundation Division of Advanced Cyberinfrastructure National Science Foundation Division of Advanced Cyberinfrastructure		2005747	22,987 58,086	-
47.070	National Science Foundation Division of Advanced Cyberinfrastructure		2003012	90,037	-
47.070	National Science Foundation Division of Advanced Cyberinfrastructure		2018912	191,071	-
47.070	NSF Division of Industrial Innovation and Partnerships		1539961	2,727	-
47.074	National Science Foundation		1751113	68,159	-
47.074	National Science Foundation National Science Foundation Directorate for Biological Sciences		1661029	219,439	-
47.074	National Science Foundation Directorate for Biological Sciences		1944324	34,453	-
77.077	a 530100 1 oundation birodorato for biological obletios		10-102-1	57,750	=

Assistance List Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developmen	nt Cluster				
Funds received directly fro					
47.074	National Science Foundation Directorate for Biological Sciences		1945971	16,573	-
47.074	National Science Foundation Div of Biological Infrastructure		1560116	36	-
47.074	National Science Foundation Div of Biological Infrastructure		1564380	11,510	-
47.074	National Science Foundation Div of Biological Infrastructure		1756219	122,313	-
47.074	National Science Foundation Div of Biological Infrastructure		1756439	195,940	-
47.074	National Science Foundation Div of Biological Infrastructure		1759874	409,616	151,407
47.074	National Science Foundation Div of Biological Infrastructure		1910623	127,769	-
47.074	National Science Foundation Div of Biological Infrastructure		1928379	144,959	-
47.074	National Science Foundation Div of Biological Infrastructure		1935913	45,408	-
47.074	National Science Foundation Div of Biological Infrastructure		1950769	32,843	-
47.074	National Science Foundation Div of Biological Infrastructure		2018939	34,157	3,793
47.074	National Science Foundation Div of Biological Infrastructure		2021932	8,750	-
47.074	National Science Foundation Div of Biological Infrastructure		2022070	372,232	162,160
47.074	National Science Foundation Div of Environmental Biology		1253197	(13,299)	-
47.074	National Science Foundation Div of Environmental Biology		1638872	116,389	-
47.074	National Science Foundation Div of Environmental Biology		1638999	174,656	97,727
47.074	National Science Foundation Div of Environmental Biology		1831319	63,184	-
47.074	National Science Foundation Div of Environmental Biology		1838340	61,518	-
47.074	National Science Foundation Div of Environmental Biology		1839205	47,317	-
47.074	National Science Foundation Div of Environmental Biology		1915909	7,922	-
47.074	National Science Foundation Div of Environmental Biology		1926598	120,012	-
47.074	National Science Foundation Div of Environmental Biology		2016189	59,784	-
47.074	National Science Foundation Div of Environmental Biology		2017439	35,156	-
47.074	National Science Foundation Div of Integrative Organismal Biology		1457009	20,681	-
47.074	National Science Foundation Div of Integrative Organismal Biology		1546781	282,277	-
47.074	National Science Foundation Div of Integrative Organismal Biology		1557836	24,322	-
47.074	National Science Foundation Div of Integrative Organismal Biology		1656542	126,660	-
47.074	National Science Foundation Div of Integrative Organismal Biology		1656784	149,381	-
47.074 47.074	National Science Foundation Div of Integrative Organismal Biology National Science Foundation Div of Integrative Organismal Biology		1656786 1755318	46,282 67,256	-
47.074 47.074	0 0 0,		1755316	•	20.676
47.074 47.074	National Science Foundation Div of Integrative Organismal Biology National Science Foundation Div of Integrative Organismal Biology		1923094	84,790 418,228	38,676
47.074	National Science Foundation Div of Integrative Organismal Biology		1953509	22,894	_
47.074	National Science Foundation Div of Integrative Organismal Biology		2015928	10,572	-
47.074	National Science Foundation Div of Integrative Organismal Biology		2035041	13,605	_
47.074	National Science Foundation Div of Integrative Organismal Biology		2039489	19,620	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1516933	(10,049)	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1613501	297,411	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1616105	126,718	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1715174	201,671	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1715321	140,363	-
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1715375	73,696	-
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1715505	296,875	-
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1715840	6,188	6,188
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1814936	146,626	-,
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1817835	211,244	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		1906060	254,960	121,142
				- ,	•

Assistance Listi	na		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developmen					
Funds received directly fror	n the following agencies				
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		2023348	49	-
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		2029502	265,015	_
47.074	National Science Foundation Div of Molecular & Cellular Biosciences		2046863	20,384	-
47.075	National Science Foundation Dir Social, Behavioral & Economic Sciences		1739909	665,024	-
47.075	National Science Foundation Dir Social, Behavioral & Economic Sciences		1917256	103,323	-
47.075	National Science Foundation Dir Social, Behavioral & Economic Sciences		1921523	120,637	-
47.075	National Science Foundation Dir Social, Behavioral & Economic Sciences		1949379	5,269	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1452674	1,580	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1617185	210,144	33,682
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1626733	17,486	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1632296	22,816	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1655014	5,645	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1729482	103,356	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1818597	45,246	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1823381	110,568	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1843454	45,521	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1845107	59,330	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1847603	157,276	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1848939	61,813	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1849418	191,597	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1918177	468	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1921592	33,072	20,489
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1926528	31,398	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1941662	64,658	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1942841	7,461	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1945008	13,318	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		1946258	45,698	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		2003248	5,185	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		2017816	4,790	-
47.075	National Science Foundation Div of Behavioral & Cognitive Sciences		2021038	123,736	-
47.075	COVID-19 National Science Foundation Div of Behavioral & Cognitive Sciences		2031097	54,230	-
47.075	National Science Foundation Div of Social & Economic Sciences		1424481	(970)	-
47.075	National Science Foundation Div of Social & Economic Sciences		1554837	122,280	-
47.075	National Science Foundation Div of Social & Economic Sciences		1630288	18,166	-
47.075	National Science Foundation Div of Social & Economic Sciences		1728865	38,868	-
47.075	National Science Foundation Div of Social & Economic Sciences		1734294	59,672	-
47.075	National Science Foundation Div of Social & Economic Sciences		1823316	54,506	-
47.075	National Science Foundation Div of Social & Economic Sciences		1823316	32,411	-
47.075	National Science Foundation Div of Social & Economic Sciences		1824332	7,166	-
47.075	National Science Foundation Div of Social & Economic Sciences		1919390	3,811	-
47.075	National Science Foundation Div of Social & Economic Sciences		1941574	21,799	-
47.075	National Science Foundation Div of Social & Economic Sciences		1949037	96,251	-
47.075	National Science Foundation Div of Social & Economic Sciences		2001812	4,418	-
47.075	National Science Foundation Div of Social & Economic Sciences		2018152	10,756	-
47.075 47.075	National Science Foundation Div of Social & Economic Sciences COVID-19 National Science Foundation Div of Social & Economic Sciences		2018704 2029043	13,575 189,004	-
47.075 47.075			2029043 2029857	•	-
47.075	COVID-19 National Science Foundation Div of Social & Economic Sciences		2029007	55,859	-

Assistance List Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
	10.1				
Research and Developme Funds received directly fro					
47.075	COVID-19 National Science Foundation Div of Social & Economic Sciences		2049476	15,425	_
47.075	National Science Foundation Div of Social, Behavioral & Economic Research		1565553	24,767	-
47.075	National Science Foundation SBE Office of Multidisciplinary Activities		1738502	163,565	38,847
47.075	National Science Foundation SBE Office of Multidisciplinary Activities		1757020	32,349	-
47.076	National Science Foundation Directorate for Education & Human Resources		1811119	357,444	94,743
47.076	National Science Foundation Div of Graduate Educ & Res Development		1535399	21,374	-
47.076	National Science Foundation Div of Graduate Educ & Res Development		1735027	62,998	-
47.076	National Science Foundation Div of Graduate Educ & Res Development		1760544	162,950	-
47.076	National Science Foundation Div of Graduate Educ & Res Development		1761158	71,593	-
47.076	National Science Foundation Div of Graduate Educ & Res Development		1840280	1,434,132	-
47.076	National Science Foundation Div of Graduate Educ & Res Development		1922666	203,705	-
47.076	National Science Foundation Div of Graduate Educ & Res Development		2100234	37,867	-
47.076	National Science Foundation Div of Human Resource Development		1817314	492,670	222,990
47.076	National Science Foundation Div of Human Resource Development		1920421	198,610	-
47.076	National Science Foundation Div of Human Resource Development		2032668	4,975	_
47.076	National Science Foundation Div of Undergraduate Education		1557250	197,080	-
47.076	National Science Foundation Div of Undergraduate Education		1712238	95,899	_
47.076	National Science Foundation Div of Undergraduate Education		1821866	79.388	_
47.076	National Science Foundation Div of Undergraduate Education		1914709	118.331	_
47.076	National Science Foundation Div of Undergraduate Education		1915438	48,785	_
47.076	National Science Foundation Div of Undergraduate Education		2000472	110.485	9.610
47.076	NSF Division of Research on Learning in Formal and Informal Settings		1712618	139,200	3,167
47.076	NSF Division of Research on Learning in Formal and Informal Settings		1713537	138,856	-
47.076	NSF Division of Research on Learning in Formal and Informal Settings		1906929	101,901	_
47.076	NSF Division of Research on Learning in Formal and Informal Settings		1943208	159,574	_
47.076	NSF Division of Research on Learning in Formal and Informal Settings		2016580	28,069	9,501
47.078	National Science Foundation Division of Polar Programs		1838401	23,902	-
47.083	NSF Office of Integrative Activities		2040581	245,447	11,144
47.RD	National Science Foundation		DBI-1921733	123,657	
47.RD	National Science Foundation Div of Behavioral & Cognitive Sciences		2038249	170,583	_
47.RD	National Science Foundation Div of Materials Research		2050332	195,271	_
			2000002		
	Total National Science Foundation Direct Awards			44,866,740	3,443,562
Veterans Affairs					
64.RD	Ralph H. Johnson VA Medical Center		award dated 9/4/18	20,439	-
64.RD	VA Salt Lake City Health Care System		IPA dated 4/9/19	7,322	-
64.RD	Veterans Affairs New Jersey Health Care System		36C24519C0224	175,178	-
64.RD	Veterans Affairs New Jersey Health Care System		Agreement dated 9/15/20	131,306	-
	Total Veterans Affairs Direct Awards			334,245	-
Environmental Protection	n Agency				
66.509	Environmental Protection Agency		83926901	115,269	-
	Total Environmental Protection Agency Direct Awards			115,269	

Assistance Li			Additional Award	Federal	Expenditures
Number	r Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developm	nent Cluster				
•	from the following agencies				
r undo received uncomy r	non the following agentices				
Nuclear Regulatory Co	ommission				
77.008	Nuclear Regulatory Commission		31310018M0023	234,248	-
77.008	Nuclear Regulatory Commission		NRC-HQ-84-15-G-0024	17,351	-
	Total Nuclear Regulatory Commission Direct Awards			251,599	-
Department of Energy			DE 5000 015D15011		
81.049	US Department of Energy		DE-FG02-04ER15614	356,063	=
81.049	US Department of Energy		DE-FG02-07ER15896	81,672	-
81.049	US Department of Energy		DE-FG02-07ER46423	72,098	-
81.049	US Department of Energy		DE-FG02-07ER46427 DE-FG02-91ER20042	235,968	-
81.049 81.049	US Department of Energy US Department of Energy		DE-FG02-91ER20042 DE-SC0001258	45,725 303,317	-
81.049	US Department of Energy US Department of Energy		DE-SC0001258 DE-SC0001304	134,191	-
81.049	US Department of Energy		DE-SC0001304 DE-SC0004286	423,337	-
81.049	US Department of Energy		DE-SC0006878	172,214	60,000
81.049	US Department of Energy		DE-SC0008850	64,987	-
81.049	US Department of Energy		DE-SC0011721	95,086	_
81.049	US Department of Energy		DE-SC0011726	1,562,491	_
81.049	US Department of Energy		DE-SC0012481	164,183	_
81.049	US Department of Energy		DE-SC0012483	77,981	=
81.049	US Department of Energy		DE-SC0014051	112,748	-
81.049	US Department of Energy		DE-SC0014209	100,600	-
81.049	US Department of Energy		DE-SC0014562	29,502	-
81.049	US Department of Energy		DE-SC0016044	149,296	-
81.049	US Department of Energy		DE-SC0016379	370,691	107,003
81.049	US Department of Energy		DE-SC0016381	199,062	-
81.049	US Department of Energy		DE-SC0016440	177,503	175,962
81.049	US Department of Energy		DE-SC0016584	702,576	481,665
81.049	US Department of Energy		DE-SC0017270	406,523	-
81.049	US Department of Energy		DE-SC0018020	114,250	-
81.049	US Department of Energy		DE-SC0018192	23,155	-
81.049	US Department of Energy		DE-SC0019115	182,204	-
81.049	US Department of Energy		DE-SC0019179	153,798	-
81.049	US Department of Energy		DE-SC0019283	78,942	407.000
81.049 81.049	US Department of Energy		DE-SC0019338 DE-SC0019340	301,896 160,782	167,288 142,016
81.049	US Department of Energy US Department of Energy		DE-SC0019340 DE-SC0020173	541,605	73,272
81.049	US Department of Energy		DE-SC0020173	228,385	13,212
81.049	US Department of Energy		DE-SC0020187 DE-SC0020233	501,771	246,226
81.049	US Department of Energy		DE-SC0020242	128,826	-
81.049	US Department of Energy		DE-SC0020243	299,230	-
81.049	US Department of Energy		DE-SC0020363	112,099	-
81.049	US Department of Energy		DE-SC0020651	157,005	_
81.049	US Department of Energy		DE-SC0020923	148,046	-
81.049	US Department of Energy		DE-SC0020977	77,272	-
81.049	US Department of Energy		DE-SC0021067	34,407	=

Assistance Listi Number	ng Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developmen	t Cluster —				
Funds received directly from	n the following agencies				
81.049	US Department of Energy		DE-SC0021192	70,326	-
81.049	US Department of Energy		DE-SC0021231	528,110	-
81.049	US Department of Energy		DE-SC0021360	12,696	-
81.057	US Department of Energy		DE-FE0031905	161,274	-
81.086	National Energy Technology Laboratory		DE-EE0008709	244,556	-
81.086	US Department of Energy		DE-EE0007813	331,345	143,148
81.086 81.087	US Department of Energy		DE-EE0008718 DE-EE0007530	145,253 572,636	55,593
81.087	US Department of Energy		DE-EE0007539	140,279	45,540
81.087	US Department of Energy US Department of Energy		DE-EE0007539 DE-EE0008742	74,903	45,540
81.087	US Department of Energy		DE-EE0008742 DE-EE0008755	282,457	66,310
81.087	US Department of Energy		PRELIMINARY AWARD	4,007	00,310
81.089	National Energy Technology Laboratory		DE-FE0031566	56,353	_
81.089	US Department of Energy		DE-FE0031278	87,690	_
81.089	US Department of Energy		DE-FE0031635	276,205	_
81.089	US Department of Energy		DE-FE0031731	752,681	_
81.112	US Department of Energy		DE-NA0003878	223,107	_
81.121	US Department of Energy		DE-NE0000110	33,780	_
81.121	US Department of Energy		DE-NE0008283	(410)	(410)
81.121	US Department of Energy		DE-NE0008574	16,471	16,471
81.121	US Department of Energy		DE-NE0008710	172,477	84,632
81.121	US Department of Energy		DE-NE0008765	237,532	1,480
81.121	US Department of Energy		DE-NE0008766	266,734	74,925
81.121	US Department of Energy		DE-NE0008810	207,903	16,611
81.121	US Department of Energy		DE-NE0008811	61,906	11,651
81.121	US Department of Energy		DE-NE0008881	27,079	11,663
81.121	US Department of Energy		DE-NE0008920	55,701	-
81.121	US Department of Energy		DE-NE0008948	41,134	-
81.121	US Department of Energy		DE-NE0008986	23,907	-
81.121	US Department of Energy		No Award Number	(1,360)	(1,360)
81.135	Advanced Research Projects Agency-Energy		DE-AR0001036	466,610	139,359
81.135	Advanced Research Projects Agency-Energy		DE-AR0001110	885,493	207,888
81.135	Advanced Research Projects Agency-Energy		DE-AR000794	479,018	256,812
81.RD	US Department of Energy		No Award Number	(1,052)	-
	Total Department of Energy Direct Awards			16,218,288	2,583,745
Department of Education					
84.015	US Department of Education		P015B180036	272,719	-
84.015	US Department of Education		P015B180037	305,667	-
84.015	US Department of Education		P015B180070	306,917	13,101
84.229	US Department of Education		P229A180020	175,453	-
84.305	Institute of Education Sciences		R305A160261	265,090	28,720
84.305	Institute of Education Sciences		R305A160295	329,634	141,314
84.305	Institute of Education Sciences		R305A190029	301,871	81,379
84.305	Institute of Education Sciences		R305A190302	149,303	-
84.305	Institute of Education Sciences		R305A200364	380,264	-

Assistance Numb	• • • •	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Develop	pment Cluster —				
	y from the following agencies				
84.305	Institute of Education Sciences		R305B200024	138,730	76
84.305	Institute of Education Sciences		R305N160024	546,041	-
84.305	US Department of Education		R305A180004	314,538	-
84.324	Institute of Education Sciences		R324B160009	3,986	-
84.325	US Department of Education		H325D140084	55,146	-
84.325	US Department of Education		H325K180130	142,116	-
84.365	US Department of Education		T365Z170048	562,348	287,921
84.407	US Department of Education		P407A150080	338,292	117,666
84.411	US Department of Education		U411B190019	905,261	211,030
	Total Department of Education Direct Awards		_	5,493,376	881,207
Department of Health	n and Human Services				
93.059	Health Resources and Services Administration		D87HP32138-01-00	12.788	-
93.059	Health Resources and Services Administration		D88HP37551	122,630	93,559
93.077	National Cancer Institute		R01CA229082	133,213	29,449
93.077	National Cancer Institute		R01CA229306	458,267	-
93.077	National Cancer Institute		R01CA255563	169.766	14,902
93.077	National Heart, Lung, and Blood Institute		R21HL147401	152,441	
93.077	National Institute on Drug Abuse		R21DA046333	117,971	3.010
93.077	National Institute on Drug Abuse		U01DA045537	714,575	357,586
93.086	Administration for Children and Families		HHS-2020-ACF-OPRE-PR-156	46,981	-
93.087	Administration on Children, Youth and Families		90CU0083-01-00	529,354	190,486
93.103	Food and Drug Administration		U01FD006734	37,475	-
93.103	Food and Drug Administration		U18FD006667	44,079	_
93.103	Food and Drug Administration		U18FD007232	98,155	_
93.103	Food and Drug Administration		UC2FD007229	258,190	_
93.110	Health Resources and Services Administration		T73MC24481	787,809	109,740
93.113	National Institute of Environmental Health Sciences		R01ES012991	582,874	-
93.113	National Institute of Environmental Health Sciences		R01ES028829	390,724	127,451
93.113	National Institute of Environmental Health Sciences		R01ES031378	421,812	226,160
93.113	National Institute of Environmental Health Sciences		R03ES029301	22,433	
93.121	Nat Inst of Dental & Craniofacial Res		No Award Number	(65,705)	(65,705)
93.121	National Institute of Dental and Craniofacial Research		F30DE026075	(3,979)	-
93.121	National Institute of Dental and Craniofacial Research		F30DE029676	11,893	_
93.121	National Institute of Dental and Craniofacial Research		F31DE029409	38,479	_
93.121	National Institute of Dental and Craniofacial Research		R00DE027706	178.912	_
93.121	National Institute of Dental and Craniofacial Research		R01DE023731	188,169	_
93.121	National Institute of Dental and Craniofacial Research		R01DE025447	138.169	17,918
93.121	National Institute of Dental and Craniofacial Research		R01DE027639	273,343	-
93.121	National Institute of Dental and Craniofacial Research		R01DE027648	(3,345)	_
93.121	National Institute of Dental and Craniofacial Research		R01DE027857	752,224	101,424
93.121	National Institute of Dental and Craniofacial Research		R01DE028297	421,703	-
93.121	National Institute of Dental and Craniofacial Research		R03DE026192	39,382	_
93.121	National Institute of Dental and Craniofacial Research		R03DE027492	116,185	_
93.121	National Institute of Dental and Craniofacial Research		R03DE028411	174,503	_
93.121	National Institute of Dental and Craniofacial Research		R03DE028632	179,678	33,696
00.121	Tallettal Strate of Donar and Oraniolatical Recoulton		305202002	170,070	00,000

Facinitary Fac	Assistance Listin Number	ig Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
National Institute of Details and Chanolidatal Research 73.0Ept 15.326 48.271 5.248 33.137 Chanolin Chanolidatal Research 73.0Ept 15.326 48.0273 33.137 Public Health Service 73.0Ept 15.326 73.1372 National Human Genome Research Institute 73.1372 National Institute on Deafness and Other Communication Disorders 73.1373 National Institute on Deafness and Other Communication Disorders 73.0Ept 17.0Ept						
93.136 Centures for Diseases Control and Provention R01CE030388 81.98 81.91 93.172 Public Health Service CPRM-Pile1189 361.88 3.119 93.172 National Human Genome Research Institute R01H0008759 355.48 - 93.172 National Human Genome Research Institute R01H0008739 355.48 - 93.173 National Human Genome Research Institute R01H0001818 614.566 - 93.173 National Institute on Deafrees and Other Communication Disorders F31DC017797 40.20 - 93.173 National Institute on Deafrees and Other Communication Disorders F32DC017079 40.00 - 93.173 National Institute on Deafrees and Other Communication Disorders R01DC005831 37.30 42.93 - 93.173 National Institute on Deafrees and Other Communication Disorders R01DC005841 137.394 2.278 93.173 National Institute on Deafrees and Other Communication Disorders R01DC014948 18.397 5.27 93.173 National Institute on Deafrees and Other Communication Disorders R01DC014959 48.414	93.121	National Institute of Dental and Craniofacial Research		R03DE029716	104,299	-
9.137 Public Health Service CPMPH 181109 35,188 31,819 93.172 National Human Genome Research Institute K991-000 355,948 - 93.172 National Human Genome Research Institute R011-0008750 355,948 - 93.173 National Institute on Deafness and Other Communication Disorders F3100017367 30,236 - 93.173 National Institute on Deafness and Other Communication Disorders F3200017076 48,057 - 93.173 National Institute on Deafness and Other Communication Disorders F3200017034 57,061 - 93.173 National Institute on Deafness and Other Communication Disorders F3200017534 57,061 - 93.173 National Institute on Deafness and Other Communication Disorders R010000809 197,394 23,788 93.173 National Institute on Deafness and Other Communication Disorders R010000409 18,397 5,427 93.173 National Institute on Deafness and Other Communication Disorders R0100014989 494,314 287,227 93.173 National Institute on Deafness and Other Communication Disorders R0100014989	93.121	National Institute of Dental and Craniofacial Research		T32DE014320	462,271	55,248
93.172 Natocal Human Genome Research Institute K09HC011367 76,659 93.172 Natocal Human Genome Research Institute R01HG0107186 614,565 93.173 Natocal Human Genome Research Institute F31DC017787 30.236 - 93.173 Natocal Institute on Deafness and Other Communication Disorders F32DC017976 48.057 - 93.173 Natocal Institute on Deafness and Other Communication Disorders F32DC017976 48.057 - 93.173 Natocal Institute on Deafness and Other Communication Disorders F32DC017976 48.057 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC012048 229.027 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC014084 18.97 4.27 93.173 National Institute on Deafness and Other Communication Disorders R01DC014084 18.97 4.27 93.173 National Institute on Deafness and Other Communication Disorders R01DC014924 18.27 27.27 93.173 National Institute on Deafness and Other Communication Disorders R01DC014924 48.27 2	93.136	Centers for Disease Control and Prevention		R01CE003098	87,629	64,043
93.172 National Human Genome Research Institute R01H00007679 355,348 - 93.173 National Institute on Deafrees and Other Communication Disorders F31DC017367 30,236 - 93.173 National Institute on Deafrees and Other Communication Disorders F32DC017976 48,657 - 93.173 National Institute on Deafrees and Other Communication Disorders F32DC0179314 57,661 - 93.173 National Institute on Deafrees and Other Communication Disorders K22DC0178539 220,027 - 93.173 National Institute on Deafrees and Other Communication Disorders K81DC017648 20,1383 - 93.173 National Institute on Deafrees and Other Communication Disorders R01DC017648 20,383 - 93.173 National Institute on Deafrees and Other Communication Disorders R01DC017648 20,383 - 93.173 National Institute on Deafrees and Other Communication Disorders R01DC017648 19,393 5,472 93.173 National Institute on Deafrees and Other Communication Disorders R01DC0165271 226,003 - 93.173 National Institute on Deafrees and Other	93.137	Public Health Service		CPIMP181169	361,888	31,819
93.172 National Human Genome Research Institute 614,656 - 93.173 National Institute on Deafress and Other Communication Disorders F33DC017767 48,057 - 93.173 National Institute on Deafress and Other Communication Disorders F33DC017976 48,057 - 93.173 National Institute on Deafress and Other Communication Disorders R01DC0155599 220,027 - 93.173 National Institute on Deafress and Other Communication Disorders R01DC0150488 13,33 - 93.173 National Institute on Deafress and Other Communication Disorders R01DC014988 13,33 - 93.173 National Institute on Deafress and Other Communication Disorders R01DC014988 13,397 - 427,279 93.173 National Institute on Deafress and Other Communication Disorders R01DC014986 48,4314 267,272 93.173 National Institute on Deafress and Other Communication Disorders R01DC014986 48,4314 267,272 93.173 National Institute on Deafress and Other Communication Disorders R01DC014986 48,4314 267,272 93.173 National Institute on Deafress and	93.172	National Human Genome Research Institute		K99HG011367	76,659	-
93.173 National Institute on Deaffress and Other Communication Disorders F31DC017367 30.236 - 93.173 National Institute on Deaffress and Other Communication Disorders F32DC017376 40.57 - 93.173 National Institute on Deaffress and Other Communication Disorders R20DC0175539 220.027 - 93.173 National Institute on Deaffress and Other Communication Disorders R01DC000881 137.394 223.788 93.173 National Institute on Deaffress and Other Communication Disorders R01DC014294 29.379 - 93.173 National Institute on Deaffress and Other Communication Disorders R01DC014294 18.387 5.427 93.173 National Institute on Deaffress and Other Communication Disorders R01DC014924 292.799 - 93.173 National Institute on Deaffress and Other Communication Disorders R01DC014924 292.799 - 93.173 National Institute on Deaffress and Other Communication Disorders R01DC016037 37.557 - 93.173 National Institute on Deaffress and Other Communication Disorders R01DC016037 37.557 - 93.173 Natio	93.172	National Human Genome Research Institute		R01HG008759	355,948	-
93.173 National Institute on Deafness and Other Communication Disorders	93.172	National Human Genome Research Institute		R01HG010318	614,565	-
93,173 National Institute on Dearhess and Other Communication Disorders £32DC015539 20,072 - 93,173 National Institute on Dearhess and Other Communication Disorders R01DC008581 137,384 23,788 93,173 National Institute on Dearhess and Other Communication Disorders R01DC010498 18,397 427 93,173 National Institute on Dearhess and Other Communication Disorders R01DC014986 18,397 5,427 93,173 National Institute on Dearhess and Other Communication Disorders R01DC014996 484,314 267,227 93,173 National Institute on Dearhess and Other Communication Disorders R01DC016921 220,608 - 93,173 National Institute on Dearhess and Other Communication Disorders R01DC016937 270,606 - 93,173 National Institute on Dearhess and Other Communication Disorders R01DC016937 373,607 - 93,173 National Institute on Dearhess and Other Communication Disorders R01DC016938 356,233 18,475 93,173 National Institute on Dearhess and Other Communication Disorders R01DC017794 410,566 43,784 93,173	93.173	National Institute on Deafness and Other Communication Disorders		F31DC017367	30,236	-
93.173 National Institute on Dearhess and Other Communication Disorders R301008981 137.34 23,788 93.173 National Institute on Dearhess and Other Communication Disorders R01DC0008981 137.34 23,788 93.173 National Institute on Dearhess and Other Communication Disorders R01DC014488 18,387 5,427 93.173 National Institute on Dearhess and Other Communication Disorders R01DC014924 292,799 - 93.173 National Institute on Dearhess and Other Communication Disorders R01DC016921 226,603 - 93.173 National Institute on Dearhess and Other Communication Disorders R01DC016921 226,603 - 93.173 National Institute on Dearhess and Other Communication Disorders R01DC016937 37,507 - 93.173 National Institute on Dearhess and Other Communication Disorders R01DC016937 37,507 - 93.173 National Institute on Dearhess and Other Communication Disorders R01DC017714 410,666 63,285 93.173 National Institute on Dearhess and Other Communication Disorders R01DC017946 149,217 10,452 93.173	93.173	National Institute on Deafness and Other Communication Disorders		F32DC017076	48,057	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC0192048 291,383 3.173 National Institute on Deafness and Other Communication Disorders R01DC0194084 292,789 3.173 National Institute on Deafness and Other Communication Disorders R01DC0140848 18,397 5,427 3.173 National Institute on Deafness and Other Communication Disorders R01DC0140868 444,314 267,227 3.173 National Institute on Deafness and Other Communication Disorders R01DC015271 226,803 4.173 National Institute on Deafness and Other Communication Disorders R01DC015271 226,803 4.174 4.17	93.173	National Institute on Deafness and Other Communication Disorders		F32DC019314	57,061	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC014498 18.337	93.173	National Institute on Deafness and Other Communication Disorders		K23DC015539	220,027	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC014948 18.397 \$4.27 93.173 National Institute on Deafness and Other Communication Disorders R01DC014956 48.4 314 287.27 93.173 National Institute on Deafness and Other Communication Disorders R01DC015921 226.603 48.131 93.173 National Institute on Deafness and Other Communication Disorders R01DC015921 280.096 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC016932 374.507 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC016938 356.253 18.475 93.173 National Institute on Deafness and Other Communication Disorders R01DC017914 410.666 63.295 93.173 National Institute on Deafness and Other Communication Disorders R01DC017946 148.217 10.482 93.173 National Institute on Deafness and Other Communication Disorders R01DC017995 39.157 48.784 93.173 National Institute on Deafness and Other Communication Disorders R01DC017995 39.157 48.784 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC008581	137,394	23,788
93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC012048	291,383	-
33.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC014498	18,397	5,427
93.173 National Institute on Deafness and Other Communication Disorders R01DC015271 226,603 39.173 National Institute on Deafness and Other Communication Disorders R01DC016037 374,507 374,507 39.173 National Institute on Deafness and Other Communication Disorders R01DC016037 374,507 39.173 National Institute on Deafness and Other Communication Disorders R01DC016038 356,253 18,475 39.173 National Institute on Deafness and Other Communication Disorders R01DC0160112 281,990 - 81,000 19,000 1	93.173	National Institute on Deafness and Other Communication Disorders		R01DC014924	292,799	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC016037 374,507 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC016038 356,253 18,475 93.173 National Institute on Deafness and Other Communication Disorders R01DC016112 201,990 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC017711 410,666 63,295 93.173 National Institute on Deafness and Other Communication Disorders R01DC017866 146,217 10,452 93.173 National Institute on Deafness and Other Communication Disorders R01DC017806 146,227 4,762 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016314 64,028 7.21 93.173 <t< td=""><td>93.173</td><td>National Institute on Deafness and Other Communication Disorders</td><td></td><td>R01DC014956</td><td>484,314</td><td>267,227</td></t<>	93.173	National Institute on Deafness and Other Communication Disorders		R01DC014956	484,314	267,227
93.173 National Institute on Deafness and Other Communication Disorders R01DC016037 374,507 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC016012 261,990 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC017711 410,666 63,295 93.173 National Institute on Deafness and Other Communication Disorders R01DC017846 148,217 10,452 93.173 National Institute on Deafness and Other Communication Disorders R01DC017925 399,157 48,784 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 39,483 - 93.173 National Institute on Deafness and Other Communication Disorders R12DC0161090 39,483 - 93.173 National Institute on Deafness and Other Communication Disorders R12DC016134 64,028 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC01697 164,200 137,867 93.173 <	93.173	National Institute on Deafness and Other Communication Disorders		R01DC015271	226,603	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC016038 36,253 18,475 93.173 National Institute on Deafness and Other Communication Disorders R01DC017711 410,666 62,295 93.173 National Institute on Deafness and Other Communication Disorders R01DC017946 118,217 10,452 93.173 National Institute on Deafness and Other Communication Disorders R01DC017965 399,157 43,748 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 173,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 173,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC015521	280,096	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC017711 410,666 63,295 93.173 National Institute on Deafness and Other Communication Disorders R01DC0177846 148,217 10,452 93.173 National Institute on Deafness and Other Communication Disorders R01DC017826 399,157 48,784 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 460,247 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 93,463 - 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC018395 11,306 - 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC016037	374,507	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC017711 410,666 63,285 93.173 National Institute on Deafness and Other Communication Disorders R01DC017925 399,157 48,764 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 460,247 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 93,463 - 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,202 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,202 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,203 175,961 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 155,951 5617 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC016038	356,253	18,475
93.173 National Institute on Deafness and Other Communication Disorders R01DC017846 148,217 10,452 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 460,247 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 93,463 - 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 93,463 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016134 64,028 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC019385 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 32,062 2,062 - 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC016112	281,990	-
93.173 National Institute on Deafness and Other Communication Disorders R01DC017925 399,157 48,784 93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 480,247 - 93.173 COVID-19 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016934 64,028 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC016990 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC0176990 145,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017895 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC018935 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC018936 34,920 12,759 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R01DC017711	410,666	63,295
93.173 National Institute on Deafness and Other Communication Disorders R01DC018009 460,247 - 93.173 COVID-19 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016134 64,028 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.174	93.173	National Institute on Deafness and Other Communication Disorders		R01DC017846	148,217	10,452
93.173 COVID-19 National Institute on Deafness and Other Communication Disorders R01DC018009 93.463 - 93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5617 93.173 National Institute on Deafness and Other Communication Disorders R21DC018385 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.174 National	93.173	National Institute on Deafness and Other Communication Disorders		R01DC017925	399,157	48,784
93.173 National Institute on Deafness and Other Communication Disorders R13DC017921 27,183 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016134 64,028 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC018395 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.174 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare R	93.173	National Institute on Deafness and Other Communication Disorders		R01DC018009	460,247	-
93.173 National Institute on Deafness and Other Communication Disorders R21DC016134 64,028 7,210 93.173 National Institute on Deafness and Other Communication Disorders R21DC0169972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,422 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC018395 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R66DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.174 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.175 National Institute on Deafness and Other Communication Disorders R01BC017458 34,929 12,759 93.184	93.173	COVID-19 National Institute on Deafness and Other Communication Disorders		R01DC018009	93,463	-
93.173 National Institute on Deafness and Other Communication Disorders R21DC016972 164,200 137,867 93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC018395 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R26DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173	93.173	National Institute on Deafness and Other Communication Disorders		R13DC017921	27,183	-
93.173 National Institute on Deafness and Other Communication Disorders R21DC016980 144,442 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.174 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality R01HS024958 476,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality	93.173	National Institute on Deafness and Other Communication Disorders		R21DC016134	64,028	7,210
93.173 National Institute on Deafness and Other Communication Disorders R21DC017530 155,951 5,617 93.173 National Institute on Deafness and Other Communication Disorders R21DC018395 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.184 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915				R21DC016972	164,200	137,867
93.173 National Institute on Deafness and Other Communication Disorders R21DC018395 11,306 - 93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 22,062 - 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.184 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality P30HS024379 161,683 10,124 93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400	93.173	National Institute on Deafness and Other Communication Disorders		R21DC016980	144,442	-
93.173 National Institute on Deafness and Other Communication Disorders R21DC019458 2,062 - 93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.184 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality P30HS024379 161,683 10,124 93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 50,612 - 93.223 Agency for Healthcare Research and Quality UH3HL140144 638,234 321,400		National Institute on Deafness and Other Communication Disorders		R21DC017530		5,617
93.173 National Institute on Deafness and Other Communication Disorders R56DC017458 34,929 12,759 93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.184 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality P30HS024379 161,683 10,124 93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health R0 Mental Health R0 Mental Health	93.173	National Institute on Deafness and Other Communication Disorders		R21DC018395	11,306	-
93.173 National Institute on Deafness and Other Communication Disorders U01DC018920 253,762 79,881 93.184 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality P30HS024379 161,683 10,124 93.226 Agency for Healthcare Research and Quality R01HS024963 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.234 Administration for Community Living 90TBSG00045 132,176 - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -	93.173	National Institute on Deafness and Other Communication Disorders		R21DC019458	22,062	-
93.184 Centers for Disease Control and Prevention NU27DD000015 304,142 38,382 93.226 Agency for Healthcare Research and Quality P30HS024379 161,683 10,124 93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -	93.173	National Institute on Deafness and Other Communication Disorders		R56DC017458	34,929	12,759
93.226 Agency for Healthcare Research and Quality P30HS024379 161,683 10,124 93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.231 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.2324 Administration for Community Living 90TBSG0006 (946) - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -	93.173	National Institute on Deafness and Other Communication Disorders		U01DC018920	253,762	79,881
93.226 Agency for Healthcare Research and Quality R01HS024263 4,860 - 93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -	93.184	Centers for Disease Control and Prevention		NU27DD000015	304,142	38,382
93.226 Agency for Healthcare Research and Quality R01HS024958 478,098 1,688 93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -		Agency for Healthcare Research and Quality				10,124
93.226 Agency for Healthcare Research and Quality R01HS027200 500,612 - 93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.234 Administration for Community Living 90TBSG0045 132,176 - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -	93.226	Agency for Healthcare Research and Quality		R01HS024263	4,860	-
93.226 Agency for Healthcare Research and Quality R18HS025915 389,472 33,479 93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -		,				1,688
93.233 National Heart, Lung, and Blood Institute UH3HL140144 638,234 321,400 93.234 Administration for Community Living 90TBSG0006 (946) - 93.234 Administration for Community Living 90TBSG0045 132,176 - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -		Agency for Healthcare Research and Quality		R01HS027200	500,612	-
93.234 Administration for Community Living 90TBSG0006 (946) - 93.234 Administration for Community Living 90TBSG0045 132,176 - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -		• •				•
93.234 Administration for Community Living 90TBSG0045 132,176 - 93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -						321,400
93.242 National Institute of Mental Health K08MH112892 244,761 - 93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -		, , ,			, ,	-
93.242 National Institute of Mental Health PRELIMINARY AWARD 4 -	93.234	Administration for Community Living		90TBSG0045		-
						-
93.242 National Institute of Mental Health R01MH100144 60,686 8,827					·	-
	93.242	National Institute of Mental Health		R01MH100144	60,686	8,827

Assistance Li Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme					
runas received directly in	rom the following agencies				
93.242	National Institute of Mental Health		R01MH103361	54,180	-
93.242	National Institute of Mental Health		R01MH117600	69,200	-
93.242	National Institute of Mental Health		R01MH119670	452,432	-
93.242	National Institute of Mental Health		R01MH126116	28,756	-
93.242	National Institute of Mental Health		R21MH117482	61,930	-
93.242	National Institute of Mental Health		R21MH117552	112,511	50,360
93.242	National Institute of Mental Health		R21MH119090	177,891	34,368
93.242	National Institute of Mental Health		R21MH119531	61,628	-
93.242	National Institute of Mental Health		R21MH121744	204,453	-
93.242	National Institute of Mental Health		R21MH122674	7	-
93.242	National Institute of Mental Health		R56MH116670	431,525	-
93.242	National Institute of Mental Health		R61MH125759	244,810	-
93.243	Substance Abuse & Mental Health Services Administration		H79TI082551	144,669	-
93.247	Health Resources and Services Administration		T94HP31875	370,480	-
93.262	Centers for Disease Control and Prevention		U01OH012056	226,651	-
93.262	National Institute for Occupational Safety and Health		R21OH011271	60,074	4,039
93.262	National Institute for Occupational Safety and Health		T03OH008847	59,833	-
93.273	National Institute on Alcohol Abuse and Alcoholism		K23AA025111	130,346	-
93.273	National Institute on Alcohol Abuse and Alcoholism		R00AA024810	100,727	-
93.273	National Institute on Alcohol Abuse and Alcoholism		R01AA026664	181,056	-
93.273	National Institute on Alcohol Abuse and Alcoholism		R01AA026850	335,627	94,525
93.273	National Institute on Alcohol Abuse and Alcoholism		R01AA028225	69,515	-
93.279	National Institute on Drug Abuse		F30DA050423	43,138	-
93.279	National Institute on Drug Abuse		K01DA048174	175,741	-
93.279	National Institute on Drug Abuse		K01DA050778	28,225	-
93.279	National Institute on Drug Abuse		R01DA023908	52,809	-
93.279	National Institute on Drug Abuse		R01DA040395	165,650	41,563
93.279	National Institute on Drug Abuse		R01DA042080	264,085	-
93.279	COVID-19 National Institute on Drug Abuse		R01DA042080	194,138	-
93.279	National Institute on Drug Abuse		R01DA053028	23,527	-
93.279	National Institute on Drug Abuse		R21DA044447	117,394	15,640
93.279	National Institute on Drug Abuse		R21DA045236	99,387	68,929
93.279	National Institute on Drug Abuse		R21DA046447	160,538	69,764
93.279	National Institute on Drug Abuse		R21DA052444	28,850	-
93.279	National Institute on Drug Abuse		R21DA053708	4,044	-
93.279	National Institute on Drug Abuse		R34DA043079	204,039	-
93.279	National Institute on Drug Abuse		R34DA046913	190,436	71,373
93.279	National Institute on Drug Abuse		U01DA045530	244,422	-
93.279	National Institute on Drug Abuse		UH3DA044822	574,937	97,427
93.279	COVID-19 National Institute on Drug Abuse		UH3DA044822	16,751	-
93.279	National Institute on Drug Abuse		UH3DA050174	1,076,157	88,165
93.279	National Institute on Drug Abuse		UM1DA049417	11,417,812	3,865,386
93.286	National Institute of Biomedical Imaging and Bioengineering		R01EB012135	142,004	-
93.286	National Institute of Biomedical Imaging and Bioengineering		R01EB018363	390,419	-
93.286	National Institute of Biomedical Imaging and Bioengineering		R01EB021926	91,244	233
93.286	National Institute of Biomedical Imaging and Bioengineering		R01EB022134	(217)	-
93.286	National Institute of Biomedical Imaging and Bioengineering		R01EB022591	153,821	-

	Assistance Listin	-		Additional Award	Federal	Expenditures
	Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Possor	ch and Developmen	t Cluster				
	•	n the following agencies				
i unuo i	coolved allocaly from	The lond wing agonolog				
	93.286	National Institute of Biomedical Imaging and Bioengineering		R03EB030286	44,624	=
	93.286	National Institute of Biomedical Imaging and Bioengineering		R21EB026657	89,868	-
	93.307	National Institute on Minority Health and Health Disparities		F31MD014052	29,307	-
	93.307	National Institute on Minority Health and Health Disparities		R01MD011307	243,525	28,930
	93.307	National Institute on Minority Health and Health Disparities		R21MD012800	109,912	-
	93.310	National Cancer Institute		R21CA212308	(1,762)	-
	93.310	National Center for Advancing Translational Sciences		R03TR003686	5,241	-
	93.310	COVID-19 National Center for Advancing Translational Sciences		U18TR003807	190,003	23,642
	93.310	National Center for Advancing Translational Sciences		UG3TR002884	489,397	149,391
	93.310	COVID-19 National Center for Advancing Translational Sciences		UL1TR002733	355,702	50,661
	93.310	National Human Genome Research Institute		R21HG010108	136,930	-
	93.310	National Institute of Biomedical Imaging and Bioengineering		DP2EB028110	478,814	-
	93.310	National Institute of Neurological Disorders and Stroke		UG3NS115599	833,958	491,478
	93.310	COVID-19 National Institute on Deafness and Other Communication Disorders		R01DC016112	95,557	-
	93.318	Centers for Disease Control and Prevention		NU2GGH001752	291,827	129,373
	93.321	National Institute of Child Health and Human Development		F30HD104379	4,801	-
	93.350	National Center for Advancing Translational Sciences		KL2TR002734	364,956	-
	93.350	National Center for Advancing Translational Sciences		R21TR0003191	100,946	40,076
	93.350	National Center for Advancing Translational Sciences		TL1TR002735	257,558	-
	93.350	National Center for Advancing Translational Sciences		UL1TR002733	4,620,788	600,719
	93.350 93.351	COVID-19 National Center for Advancing Translational Sciences		UL1TR002733 K01OD021419	493,832 131,001	-
		Office of the Director, National Institutes of Health				-
	93.351 93.351	Office of the Director, National Institutes of Health Office of the Director, National Institutes of Health		S10OD025096 S10OD028705	19,300 676,594	-
	93.351	Office of the Director, National Institutes of Health		T35OD010977	60,508	-
	93.351	National Cancer Institute		R33CA225380	246,227	63,406
	93.353	National Cancer Institute		U24CA252977	338,913	05,400
	93.359	COVID-19 Health Resources and Services Administration		T1PHP39099	72,706	_
	93.359	Health Resources and Services Administration		UK1HP31699	691.628	_
	93.361	National Institute of Nursing Research		F31NR018363	30,291	_
	93.361	National Institute of Nursing Research		F31NR018586	35,939	_
	93.361	National Institute of Nursing Research		K23NR017902	164,040	-
	93.361	National Institute of Nursing Research		R01NR018699	379,016	10,143
	93.361	National Institute of Nursing Research		R01NR019008	211,701	-
	93.361	National Institute of Nursing Research		R15NR017092	110,390	31,443
	93.361	National Institute of Nursing Research		T32NR014225	114,685	· -
	93.393	National Cancer Institute		F99CA245813	24,335	-
	93.393	National Cancer Institute		F99CA253745	17,148	-
	93.393	National Cancer Institute		P01CA100730	197,785	15,397
	93.393	National Cancer Institute		P01CA229143	2,439,802	838,268
	93.393	National Cancer Institute		R00CA207736	269,116	59,970
	93.393	National Cancer Institute		R01CA067007	308,931	-
	93.393	National Cancer Institute		R01CA166590	268,907	-
	93.393	National Cancer Institute		R01CA169363	28,664	-
	93.393	National Cancer Institute		R01CA172576	122,096	-
	93.393	National Cancer Institute		R01CA186251	375,971	-
	93.393	National Cancer Institute		R01CA186720	65,389	=

93.393 National Cancer Institute R01CA204891 625,724 417,32 93.393 National Cancer Institute R01CA211611 233,862 99,38 93.393 National Cancer Institute R01CA213290 64,026 - 93.393 National Cancer Institute R01CA215151 281,028 - 93.393 National Cancer Institute R01CA217861 113,171 17,50 93.393 National Cancer Institute R01CA227273 249,550 23,00	nditures recipients
93.393 National Cancer Institute R01CA193244 68.304	
93.93 National Cancer Institute R01CA196243 269.341 159.15 93.93 National Cancer Institute R01CA201611 233.862 99.31 93.933 National Cancer Institute R01CA211611 233.862 99.31 93.933 National Cancer Institute R01CA213501 261.028 93.939 National Cancer Institute R01CA217861 113,171 17.55 93.939 National Cancer Institute R01CA217873 249.550 23.00 93.939 National Cancer Institute R01CA217813 235.649 11.91 93.939 National Cancer Institute R01CA247813 55.633 1.93 93.939 National Cancer Institute R03CA212808 41.0 - 93.939 National Cancer Institute R03CA22545 8.599 - 93.939 National Cancer Institute R03CA225498 33.201 - 93.939 National Cancer Institute R03CA254999 44.209 - 93.939 National Cancer Institute R03CA259399	
93.93 National Cancer Institute R01CA196243 269.341 159.15 93.93 National Cancer Institute R01CA201611 233.862 99.31 93.933 National Cancer Institute R01CA211611 233.862 99.31 93.933 National Cancer Institute R01CA213501 261.028 93.939 National Cancer Institute R01CA217861 113,171 17.55 93.939 National Cancer Institute R01CA217873 249.550 23.00 93.939 National Cancer Institute R01CA217813 235.649 11.91 93.939 National Cancer Institute R01CA247813 55.633 1.93 93.939 National Cancer Institute R03CA212808 41.0 - 93.939 National Cancer Institute R03CA22545 8.599 - 93.939 National Cancer Institute R03CA225498 33.201 - 93.939 National Cancer Institute R03CA254999 44.209 - 93.939 National Cancer Institute R03CA259399	
93.933 National Cancer Institute ROI CA204891 625,724 417,33 93.933 National Cancer Institute ROI CA211811 233,882 99,33 93.933 National Cancer Institute ROI CA217861 113,171 17,55 93.938 National Cancer Institute ROI CA217861 113,171 17,55 93.939 National Cancer Institute ROI CA22773 249,550 25,00 93.9393 National Cancer Institute ROI CA227713 249,550 25,00 93.9393 National Cancer Institute ROI CA247739 56,633 - 93.9393 National Cancer Institute ROI CA247739 56,633 - 93.9393 National Cancer Institute ROI CA247739 56,633 - 93.9393 National Cancer Institute ROI CA247939 56,633 - 93.9393 National Cancer Institute ROI CA248739 56,633 - 93.9393 National Cancer Institute ROI CA248739 56,633 - 93.9394 National Cancer Institute ROI CA2487	-
93.333 National Cancer Institute ROI CA2113290 64,026	159,158
93.333 National Cancer Institute R01CA213200 64,026	417,327
93.393 National Cancer Institute R01CA215151 281 0.28 - 93.393 National Cancer Institute R01CA217831 113,171 17,58 93.393 National Cancer Institute R01CA227273 249,550 23,00 93.393 National Cancer Institute R01CA227213 235,649 11,90 93.393 National Cancer Institute R01CA248739 56,633 - 93.393 National Cancer Institute R03CA212808 4.10 - 93.393 National Cancer Institute R03CA225999 44,209 - 93.393 National Cancer Institute R03CA254999 44,209 - 93.393 National Cancer Institute R03CA254999 44,209 - 93.393 National Cancer Institute R03CA254999 6,981 - 93.393 National Cancer Institute R03CA25498 33,201 - 93.393 National Cancer Institute R21CA21986 89,070 - 93.394 National Cancer Institute R21CA21988 20,450	99,359
93.393 National Cancer Institute R01CA217861 113,171 17,55 93.393 National Cancer Institute R01CA227723 249,550 23,05 93.393 National Cancer Institute R01CA248739 56,633 - 93.393 National Cancer Institute R03CA212808 410 - 93.393 National Cancer Institute R03CA223545 8,569 - 93.393 National Cancer Institute R03CA225459 4,209 - 93.393 National Cancer Institute R03CA25989 4,209 - 93.393 National Cancer Institute R03CA259399 4,209 - 93.393 National Cancer Institute R03CA259399 6,981 - 93.393 National Cancer Institute R03CA259399 6,981 - 93.393 National Cancer Institute R03CA259399 6,981 - 93.393 National Cancer Institute R21CA219864 20,450 - 93.394 National Cancer Institute R01CA232319 55,660 277,76 </td <td>-</td>	-
93.393 National Cancer Institute R01CA227273 249.550 23.00 93.393 National Cancer Institute R01CA24739 56.633 19 93.393 National Cancer Institute R03CA212808 410 - 93.393 National Cancer Institute R03CA212808 410 - 93.393 National Cancer Institute R03CA225456 8.669 - 93.393 National Cancer Institute R03CA254999 44.209 - 93.393 National Cancer Institute R03CA25498 33.201 - 93.393 National Cancer Institute R03CA25498 33.201 - 93.393 National Cancer Institute R03CA254989 6,81 - 93.393 National Cancer Institute R21CA209566 89.070 - 93.393 National Cancer Institute R21CA209566 89.070 - 93.393 National Cancer Institute R21CA209560 489.716 220.21 93.394 National Cancer Institute R01CA223719 56.650 277.7	-
93.393 National Cancer Institute R01CA237213 235.649 11,90 93.393 National Cancer Institute R01CA248739 56,633 93.393 National Cancer Institute R03CA212808 410 93.393 National Cancer Institute R03CA22545999 44,209 93.393 National Cancer Institute R03CA254988 33,201 93.393 National Cancer Institute R03CA258389 6,981 93.393 National Cancer Institute R21CA299866 89,070 93.393 National Cancer Institute R21CA219884 20,450 93.394 National Cancer Institute R31CA228219 526,450 277,77 93.394 National Cancer Institute R03CA235073 55,768	17,581
93.393 National Cancer Institute R01CA248739 56,633 - 93.393 National Cancer Institute R03CA212808 410 - 93.393 National Cancer Institute R03CA225345 8,599 - 93.393 National Cancer Institute R03CA245999 44,209 - 93.393 National Cancer Institute R03CA259389 6,981 - 93.393 National Cancer Institute R03CA259389 6,981 - 93.393 National Cancer Institute R21CA209566 89,070 - 93.393 National Cancer Institute R21CA21884 20,450 - 93.393 National Cancer Institute R37CA226682 489,716 220,21 93.394 National Cancer Institute R01CA223219 526,450 277,71 93.394 National Cancer Institute R03CA236073 55,768 4,4 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R03CA245771 62,893	23,039
93.393 National Cancer Institute R03CA212808 410 - 93.393 National Cancer Institute R03CA223545 8,569 - 93.393 National Cancer Institute R03CA245999 44,209 - 93.393 National Cancer Institute R03CA252488 33,201 - 93.393 National Cancer Institute R03CA259389 6,981 - 93.393 National Cancer Institute R21CA209866 80,070 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R37CA226682 489,716 220,25 93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,7 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute U01CA207946 649,472 <td< td=""><td>11,900</td></td<>	11,900
93.393 National Cancer Institute R03CA225455 8,569 - 93.393 National Cancer Institute R03CA25999 44,209 - 93.393 National Cancer Institute R03CA259498 33,201 - 93.393 National Cancer Institute R03CA259399 6,981 - 93.393 National Cancer Institute R21CA209566 89,070 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R37CA226662 489,716 220,23 93.394 National Cancer Institute R01CA223219 526,450 277,75 93.394 National Cancer Institute R01CA223219 526,450 277,75 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R3CA266922 36,529 21,80 93.394 National Cancer Institute U1CA207946 649,472	-
93.393 National Cancer Institute R03CA245999 44,209 - 93.393 National Cancer Institute R03CA252498 33,201 - 93.393 National Cancer Institute R03CA259389 6,981 - 93.393 National Cancer Institute R21CA209666 89,070 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.394 National Cancer Institute R01CA22319 56,450 277,78 93.394 National Cancer Institute R03CA230073 55,768 4,44 93.394 National Cancer Institute R03CA25101 34,461 - 93.394 National Cancer Institute R03CA25711 62,893 - 93.394 National Cancer Institute U1CA207946 649,472 - 93.394 National Cancer Institute U1H3CA202971 305,158 -	-
93.393 National Cancer Institute R03CA252498 33,201 - 93.393 National Cancer Institute R03CA259389 6,981 - 93.393 National Cancer Institute R21CA209566 89,070 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R37CA226682 489,716 220,21 93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,78 93.394 National Cancer Institute R03CA230673 55,768 4,44 93.394 National Cancer Institute R03CA230673 55,768 4,44 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,86 93.394 National Cancer Institute U54CA260582 87,7480 - 93.394 National Cancer Institute UH3CA220971 30,518 </td <td>-</td>	-
93.393 National Cancer Institute R03CA259389 6,981 - 93.393 National Cancer Institute R21CA209566 89,070 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R37CA226682 489,716 220,21 93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,73 93.394 National Cancer Institute R03CA230673 55,768 4,74 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R01CA209745 649,472 28 93.394 National Cancer Institute U01CA207946 649,472 28 93.394 National Cancer Institute UH3CA202971 305,158 - 93.395 National Cancer Institute UH3CA202974 305,158 <td>-</td>	-
93.393 National Cancer Institute R21CA209566 89,070 - 93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R37CA226882 489,716 220,253 93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,73 93.394 National Cancer Institute R03CA235013 55,768 4,44 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R3CA206922 36,529 21,88 93.394 National Cancer Institute U54CA260582 87,7480 - 93.394 National Cancer Institute U54CA260582 87,7480 - 93.394 National Cancer Institute U54CA260582 87,7480 - 93.395 National Cancer Institute U54CA260582 37,780 </td <td>-</td>	-
93.393 National Cancer Institute R21CA219884 20,450 - 93.393 National Cancer Institute R37CA226682 489,716 220,23 93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,73 93.394 National Cancer Institute R03CA230673 55,768 4,44 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 National Cancer Institute UH3CA202971 35,158 - 93.394 National Cancer Institute UH3CA220582 877,480 - 93.394 National Cancer Institute UH3CA220582 376,288 - 93.395 National Cancer Institute UH3CA29749 729,394	-
93.393 National Cancer Institute R37CA226682 489,716 220.26 93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,77 93.394 National Cancer Institute R03CA230673 55,768 4,44 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,86 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA204374 336,088 - 93.395 National Cancer Institute UH3CA2043749 729,934 139,90 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute <	-
93.393 National Cancer Institute U01CA188250 115,110 - 93.394 National Cancer Institute R01CA223219 526,450 277,78 93.394 National Cancer Institute R03CA230673 55,768 4,44 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,80 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 National Cancer Institute U143CA206582 877,480 - 93.394 National Cancer Institute U143CA202971 305,158 - 93.394 National Cancer Institute U143CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,934 139,96 93.395 National Cancer Institute P01CA125066 1,108,329 513,4° 93.395 National Cancer Institute R01CA136934 316,821 - 93.395 National Cancer Institute	-
93.394 National Cancer Institute R01CA223219 526,450 277,75 93.394 National Cancer Institute R03CA230673 55,768 4,48 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,86 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 36,821 - 93.395 National Cancer Institute R01CA138744 3115,440	220,290
93.394 National Cancer Institute R03CA230673 55,768 4,46 93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,80 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,934 139,90 93.395 National Cancer Institute P01CA125066 1,108,329 513,47 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA136934 316,821 - 93.395 National Cancer Institute R01CA136934 316,821 - 93.395 National Cancer Institute R	-
93.394 National Cancer Institute R03CA235101 34,461 - 93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,86 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 COVID-19 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.394 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute P01CA125066 1,108,329 513,44 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute	
93.394 National Cancer Institute R03CA245771 62,893 - 93.394 National Cancer Institute R33CA206922 36,529 21,80 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 COVID-19 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute R01CA125066 1,108,329 513,44 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 -	4,483
93.394 National Cancer Institute R33CA206922 36,529 21,88 93.394 National Cancer Institute U01CA207946 649,472 - 93.394 COVID-19 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute P01CA125066 1,108,329 513,47 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 -	-
93.394 National Cancer Institute U01CA207946 649,472 - 93.394 COVID-19 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,334 139,99 93.395 National Cancer Institute P01CA125066 1,108,329 513,4 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	21 001
93.394 COVID-19 National Cancer Institute U54CA260582 877,480 - 93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.395 National Cancer Institute UM1CA239749 729,33 139,98 93.395 National Cancer Institute P01CA125066 1,108,329 513,4 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	21,001
93.394 National Cancer Institute UH3CA202971 305,158 - 93.394 National Cancer Institute UH3CA216432 336,088 - 93.394 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute P01CA125066 1,108,329 513,4 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	-
93.394 National Cancer Institute UH3CA216432 336,088 - 93.394 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute P01CA125066 1,108,329 513,4 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	-
93.394 National Cancer Institute UM1CA239749 729,934 139,94 93.395 National Cancer Institute P01CA125066 1,108,329 513,4 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	-
93.395 National Cancer Institute P01CA125066 1,108,329 513,4 93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	130 0/5
93.395 National Cancer Institute R01CA136934 36,821 - 93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	
93.395 National Cancer Institute R01CA138744 115,440 - 93.395 National Cancer Institute R01CA187176 (874) -	-
93.395 National Cancer Institute R01CA187176 (874) -	_
	_
TO A TABLE IN THE PROPERTY OF	_
93.395 National Cancer Institute R01CA188464 32,857 -	_
	2,783
93.395 National Cancer Institute R01CA192928 141,194 -	_,
93.395 National Cancer Institute R01CA197844 254,744 -	-
93.395 National Cancer Institute R01CA197870 134,983 -	-
	23,774
	271,703
93.395 National Cancer Institute R01CA211014 405,671 -	-
93.395 National Cancer Institute R01CA211175 477,511 4,83	4,830
93.395 National Cancer Institute R01CA211720 388,806 -	-
93.395 National Cancer Institute R01CA212241 450,115 -	-
93.395 National Cancer Institute R01CA214046 580,806 -	-
93.395 National Cancer Institute R01CA215802 546,578 -	-

Assistance Li Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developm	ent Cluster —				
•	rom the following agencies				
,	3 3				
93.395	National Cancer Institute		R01CA216290	461,940	47,723
93.395	National Cancer Institute		R01CA223165	383,420	-
93.395	National Cancer Institute		R01CA226906	308,361	-
93.395	National Cancer Institute		R01CA229254	402,444	-
93.395	National Cancer Institute		R01CA234124	441,864	-
93.395	National Cancer Institute		R01CA235673	83,946	-
93.395	National Cancer Institute		R01CA238946	561,277	10,126
93.395	National Cancer Institute		R01CA240374	239,938	26,394
93.395	National Cancer Institute		R01CA240493	282,586	-
93.395	National Cancer Institute		R01CA240612	545,876	-
93.395	National Cancer Institute		R01CA246553	154,278	-
93.395	National Cancer Institute		R01CA248027	50,615	-
93.395	National Cancer Institute		R01CA248741	139,201	-
93.395	National Cancer Institute		R01CA249198	71,323	-
93.395	National Cancer Institute		R01CA252469	27,019	-
93.395	National Cancer Institute		R01CA255334	266,239	-
93.395	National Cancer Institute		R03CA226806	15,536	-
93.395	National Cancer Institute		R03CA227206	49,202	-
93.395	National Cancer Institute		R21CA216697	40,074	-
93.395	National Cancer Institute		R21CA216763	52,331	-
93.395	National Cancer Institute		R21CA226317	14,818	1,632
93.395	National Cancer Institute		R21CA226477	210,140	-
93.395	National Cancer Institute		R21CA237505	199,661	114,526
93.395	National Cancer Institute		R21CA241242	86,156	-
93.395	National Cancer Institute		R21CA245590	206,826	-
93.395	National Cancer Institute		R21CA259985	9,255	-
93.395	National Cancer Institute		R35CA197734	834,047	-
93.395	National Cancer Institute		R37CA233770	483,563	47,859
93.395	National Cancer Institute		R50CA211524	143,298	-
93.395	National Cancer Institute		U10CA180850	(31,670)	-
93.395	National Cancer Institute		U24CA246758	477,780	-
93.395	National Cancer Institute National Cancer Institute		UG1CA233331	1,071,529	142 402
93.395			UG1CA233338	452,595	143,493
93.395 93.396	National Cancer Institute National Cancer Institute		UM1CA186712 P01CA100730	1,430,546 1,609,249	992,053
93.396	National Cancer Institute National Cancer Institute		P01CA100730 P01CA186866	823,050	543,588 530,494
93.396	National Cancer Institute National Cancer Institute		PRELIMINARY AWARD	147,700	550,494
93.396	National Cancer Institute National Cancer Institute		R01CA068458	(6,086)	-
93.396	National Cancer Institute National Cancer Institute		R01CA006436 R01CA109527	77,057	-
93.396	National Cancer Institute National Cancer Institute		R01CA185055	74,822	40,256
93.396	National Cancer Institute National Cancer Institute		R01CA186729	12,660	40,230
93.396	National Cancer Institute		R01CA188419	33,791	-
93.396	National Cancer Institute National Cancer Institute		R01CA190740	23,538	6,990
93.396	National Cancer Institute		R01CA193167	119,076	-
93.396	National Cancer Institute		R01CA198117	425,158	-
93.396	National Cancer Institute		R01CA203584	246,939	-
93.396	National Cancer Institute		R01CA208063	405,771	-
				,	

· · · · · · · · · · · · · · · · · · ·	Assistance List Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Punds received directly from the following agencies	Decearsh and Davidenme	nt Chiatas				
93.396 Natomal Cancer Institute R01CA208353 393.298 1 93.396 Natomal Cancer Institute R01CA214865 298.854 11.55 93.396 Natomal Cancer Institute R01CA213889 178.502 5 93.396 Natomal Cancer Institute R01CA223204 390.868 - 93.396 Natomal Cancer Institute R01CA227847 396.432 20.488 93.396 Natomal Cancer Institute R01CA227874 30.4307 20.573 93.396 Natomal Cancer Institute R01CA2281857 39.422 20.488 93.396 Natomal Cancer Institute R01CA231857 33.642 - 93.396 Natomal Cancer Institute R01CA240726 37.6510 - 93.396 Natomal Cancer Institute R01CA241783 307.544 - 93.396 Natomal Cancer Institute R01CA241783 307.544 - 93.396 Natomal Cancer Institute R21CA250877 20.372 22.233 93.396 Natomal Cancer Institute R21CA250869 80.023 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
93.386 National Cancor Institute R01CA214885 298.84 11.851 93.386 National Cancor Institute R01CA22204 398.886 2.0 93.386 National Cancor Institute R01CA22204 398.886 2.0 93.386 National Cancor Institute R01CA227874 396.432 2.0.887 93.386 National Cancor Institute R01CA227874 39.432 2.0.875 93.386 National Cancor Institute R01CA227874 39.432 20.875 93.386 National Cancor Institute R01CA247876 33.861 33.761 93.386 National Cancor Institute R01CA247766 37.6510 - 93.386 National Cancor Institute R01CA247766 37.6510 - 93.386 National Cancor Institute R21CA228077 20.0372 22.233 93.386 National Cancor Institute R21CA228077 20.0372 22.233 93.386 National Cancor Institute R21CA228077 20.0372 22.233 93.386 National Cancor Institute R31CA247	r drids received directly ire	on the following agencies				
93.386 National Cancer Institute R010A2153880 178.502 - 93.386 National Cancer Institute R010A2273074 386.482 2.0.486 93.386 National Cancer Institute R010A227874 306.432 20.486 93.386 National Cancer Institute R010A228083 418.481 83.761 93.386 National Cancer Institute R010A2208083 418.481 83.761 93.386 National Cancer Institute R010A240302 319.329 - 93.386 National Cancer Institute R010A24072B 376.510 - 93.386 National Cancer Institute R010A24072B 376.510 - 93.386 National Cancer Institute R010A22072T 200.372 22.238 93.386 National Cancer Institute R210A226407B 80.023 - 93.386 National Cancer Institute R30AC45640B 80.023 - 93.386 National Cancer Institute R30C41970B 97.889 - 93.387 National Cancer Institute R30C419770B	93.396	National Cancer Institute		R01CA208353	393,298	_
93.396 National Cancer Institute R01CA/22304 390,886	93.396	National Cancer Institute		R01CA214865	299,854	11,851
93.396 National Cancer Institute R01CA227874 396.432 20.485 93.396 National Cancer Institute R01CA227874 396.432 20.657 93.396 National Cancer Institute R01CA227874 396.432 20.657 93.396 National Cancer Institute R01CA227874 396.432 20.657 93.396 National Cancer Institute R01CA231857 33.65 942 20.3396 National Cancer Institute R01CA240322 319.3329 20.3398 National Cancer Institute R01CA240322 319.3329 20.3398 National Cancer Institute R01CA240322 319.3329 20.3398 National Cancer Institute R01CA240726 376.510 20.3398 National Cancer Institute R01CA240726 376.510 20.3398 National Cancer Institute R01CA25753 30.7544 20.3398 National Cancer Institute R01CA25753 30.7549 80.033 20.3398 National Cancer Institute R01CA25753 80.0398 National Cancer Institute R01CA25759 80.0398 National Cancer Institute R0	93.396	National Cancer Institute		R01CA215389	178,502	-
93.986 National Cancer institute 93.396 National Cancer institute 93.397 National Cancer institute 93.398 National Cancer institute	93.396	National Cancer Institute		R01CA223204	390,886	-
93.966 National Cancer institute ROI CA228083 418.481 83.761 93.396 National Cancer institute ROI CA201057 33.929 - 93.396 National Cancer institute ROI CA201052 31.929 - 93.396 National Cancer institute ROI CA261753 307.644 - 93.396 National Cancer institute ROI CA261753 307.644 - 93.396 National Cancer institute R21 CA228027 20.377 22.293 93.396 National Cancer institute R21 CA228089 80.023 - 93.396 National Cancer institute R3 CA258499 80.023 - 93.396 National Cancer institute R3 CA258499 80.023 - 93.397 National Cancer institute R3 CA258499 114,229 - 93.397 National Cancer institute P3 CA2106058 17.787 - 93.398 National Cancer institute P3 CA250605 17.887 - 93.398 National Cancer institute F3 CA223666 2.383 <td>93.396</td> <td>National Cancer Institute</td> <td></td> <td>R01CA227847</td> <td>396,432</td> <td>20,485</td>	93.396	National Cancer Institute		R01CA227847	396,432	20,485
93.396 National Cancer Institute R01CA231857 336.942 - 93.396 National Cancer Institute R01CA240726 376.510 - 93.396 National Cancer Institute R01CA240726 376.510 - 93.396 National Cancer Institute R01CA25073 30.7547 22.239 93.396 National Cancer Institute R21CA25018 197.453 22.239 93.396 National Cancer Institute R21CA25018 197.453 - 93.396 National Cancer Institute R21CA25018 197.453 - 93.396 National Cancer Institute R35CA197706 97.589 - 93.397 National Cancer Institute R35CA197706 97.589 - 93.397 National Cancer Institute P30CA016088 5.670.428 119.564 93.398 National Cancer Institute P30CA016088 5.670.428 119.564 93.398 National Cancer Institute F30CA225070 56.482 - 93.398 National Cancer Institute F30CA225070	93.396	National Cancer Institute		R01CA227874	304,307	20,657
93.396 National Cancer Institute R01CA240302 319.29 93.396 National Cancer Institute R01CA240765 376.510	93.396	National Cancer Institute		R01CA228083	418,481	83,761
93.396 National Cancer Institute R01CA240726 376,510	93.396	National Cancer Institute		R01CA231857	336,942	-
93.36 National Cancer Institute R01CA251753 307,544 - 93.396 National Cancer Institute R21CA229027 20,372 22,293 93.396 National Cancer Institute R21CA250118 197,453 - 93.396 National Cancer Institute R21CA25019706 976,869 - 93.396 National Cancer Institute R50CA243898 114,229 - 93.397 National Cancer Institute P30CA016058 5,670,428 119,964 93.397 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA227006 (5,926) - 93.398 National Cancer Institute F30CA225007 65,462 - 93.398 National Cancer Institute F31CA210566 (27,988) - 93.398 National Cancer Institute F31CA2264151 24,426 - 93.398 National Cancer Institute K01CA215546 202,30					,	-
93.396 National Cancer Institute R21CA229027 20.372 22.293 93.396 National Cancer Institute R21CA250118 197.453 - 93.396 National Cancer Institute R21CA256409 80.023 - 93.396 National Cancer Institute R35CA197706 975,859 - 93.397 National Cancer Institute R50CA243998 114,229 - 93.397 National Cancer Institute P30CA016058 5,670.428 119,564 93.398 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute F30CA216068 17,879 - 93.398 National Cancer Institute F30CA25070 65,482 - 93.398 National Cancer Institute F30CA236063 23,383 - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute K01CA21541 12,426		National Cancer Institute		R01CA240726	376,510	-
93.396 National Cancer Institute R21CA250118 197,453 - 93.396 National Cancer Institute R35CA197706 975,859 - 93.396 National Cancer Institute R35CA197706 975,859 - 93.397 National Cancer Institute P30CA016058 5,670,428 119,864 93.397 COVID-19 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA21547 (13,094) - 93.398 National Cancer Institute K01CA215467 152,					,	-
93.396 National Cancer Institute R21CA256409 80.023						22,293
93.396 National Cancer Institute R35CA197706 97.859 - 93.397 National Cancer Institute R50CA243898 114,229 - 93.397 National Cancer Institute P30CA016058 5,70,428 119,964 93.397 COVID-19 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute F30CA17006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F31CA236063 23,833 - 93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute K01CA215547 (10,994) - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K01CA218457 152,400						-
93.396 National Cancer Institute R50CA243888 114,229 - 93.397 National Cancer Institute P30CA016058 5,670,428 119,964 93.397 CVID-19 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,462 - 93.398 National Cancer Institute F30CA236063 23,833 - 93.398 National Cancer Institute F31CA236566 (27,988) - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA236418 24,426 - 93.398 National Cancer Institute K01CA26418154 24,426 - 93.398 National Cancer Institute K01CA276599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA215546 202,3					•	-
93.397 National Cancer Institute P30CA016058 5,670,428 119,964 93.397 COVID-19 National Cancer Institute F30CA016068 177,887 - 93.398 National Cancer Institute F30CA17006 (5,926) - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F30CA236063 23,383 - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA181647 (13,094) - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA216341 123,478					,	-
93.397 COVID-19 National Cancer Institute P30CA016058 177,887 - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F30CA236063 23,833 - 93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K07CA218457 152,400 - 93.398 National Cancer Institute K07CA218566 202,300 - 93.398 National Cancer Institute K08CA226352 284,875						-
93.398 National Cancer Institute F30CA196082 (16,879) - 93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,842 - 93.398 National Cancer Institute F30CA236063 23,833 - 93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA226418 20,886 - 93.398 National Cancer Institute K01CA181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA216347 123,478 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA245208 124,975						119,964
93.398 National Cancer Institute F30CA217006 (5,926) - 93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F30CA236063 23,833 - 93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute K01CA2181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA242309 156,385					,	-
93.398 National Cancer Institute F30CA225070 56,482 - 93.398 National Cancer Institute F30CA236063 23,833 - 93.398 National Cancer Institute F31CA216556 (27,988) - 93.398 National Cancer Institute F31CA226418 20,886 - 93.398 National Cancer Institute K01CA181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA24508 124,975 - 93.398 National Cancer Institute K08CA24508 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 <					, , ,	-
93.398 National Cancer Institute F30CA236063 23,833 - 93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K08CA245321 123,478 - 93.398 National Cancer Institute K08CA24508 124,975 - 93.398 National Cancer Institute K08CA24508 124,975 - 93.398 National Cancer Institute K12CA218459						-
93.398 National Cancer Institute F31CA210556 (27,988) - 93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K07CA197221 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA13455 20,26 <						-
93.398 National Cancer Institute F31CA236418 20,886 - 93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA218457 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K12CA218466 206,264 - 93.398 National Cancer Institute K22CA218466 206,264						-
93.398 National Cancer Institute F31CA254151 24,426 - 93.398 National Cancer Institute K01CA181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K2CA218459 22,326 - 93.398 National Cancer Institute K2CA218466 206,264 <						-
93.398 National Cancer Institute K01CA181547 (13,094) - 93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218466 206,264						-
93.398 National Cancer Institute K01CA207599 136,051 - 93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA26352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 <						-
93.398 National Cancer Institute K01CA218457 152,400 - 93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -					, ,	-
93.398 National Cancer Institute K07CA197221 129,722 - 93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA33250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -						-
93.398 National Cancer Institute K07CA215546 202,300 - 93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA333250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218466 206,264 -						-
93.398 National Cancer Institute K07CA216321 123,478 - 93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA24508 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -						-
93.398 National Cancer Institute K08CA226352 284,875 - 93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -						-
93.398 National Cancer Institute K08CA241309 156,385 - 93.398 National Cancer Institute K08CA24508 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -					•	-
93.398 National Cancer Institute K08CA245208 124,975 - 93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -					,	_
93.398 National Cancer Institute K12CA133250 837,039 - 93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -						_
93.398 National Cancer Institute K22CA218459 22,326 - 93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -						_
93.398 National Cancer Institute K22CA218466 206,264 - 93.398 National Cancer Institute K22CA218472 84,056 -					•	_
93.398 National Cancer Institute K22CA218472 84,056 -						_
					•	_
						_
93.398 National Cancer Institute K22CA241290 122,159 -					,	_
93.398 National Cancer Institute K23CA208010 169,463 -					•	=
93.398 National Cancer Institute K99CA246083 67,296 -		National Cancer Institute			•	_
93.398 National Cancer Institute T32CA009338 39,711 -						-
93.398 National Cancer Institute T32CA090223 241,297 -		National Cancer Institute		T32CA090223	241,297	-
93.398 National Cancer Institute T32CA229114 140,078 -	93.398	National Cancer Institute		T32CA229114	140,078	-
93.398 National Cancer Institute T32CA247815 153,517 -	93.398	National Cancer Institute		T32CA247815	153,517	-
93.433 Administration for Community Living 90DPTB0001 390,783 18,490	93.433	Administration for Community Living		90DPTB0001	390,783	18,490

	Assistance Listi Number	ing Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Researc	h and Developmer	nt Cluster —				
Funds re	eceived directly from	m the following agencies				
	93.433	Administration for Community Living		90RTHF0002	892,980	13,723
	93.433	Administration for Community Living		90SI5020	492,946	-
	93.464	Administration for Community Living		1901OHATSG	251,153	-
	93.464	Administration for Community Living		2001OHATSG-03	250,085	-
	93.632	Administration for Community Living		90DDUC0038	559,511	20,094
	93.732	Health Resources and Services Administration		T25HP37606	309,998	-
	93.732	Health Resources and Services Administration		T98HP33410	467,409	-
	93.837	National Heart, Lung, and Blood Institute		F30HL137325	54,636	-
	93.837	National Heart, Lung, and Blood Institute		F30HL137331	54,290	-
	93.837	National Heart, Lung, and Blood Institute		F30HL142179	64,304	-
	93.837	National Heart, Lung, and Blood Institute		F30HL145955	31,797	-
	93.837	National Heart, Lung, and Blood Institute		F32HL144120	70,125	-
	93.837	National Heart, Lung, and Blood Institute		K08HL135437	174,809	-
	93.837	National Heart, Lung, and Blood Institute		K08HL148701	140,352	-
	93.837	National Heart, Lung, and Blood Institute		K22HL131869	229,585	-
	93.837	National Heart, Lung, and Blood Institute		K22HL135051	207,156	-
	93.837	National Heart, Lung, and Blood Institute		K99HL146969	97,448	-
	93.837	National Heart, Lung, and Blood Institute		R00HL116234	(15,568)	-
	93.837	National Heart, Lung, and Blood Institute		R00HL122505	10,836	-
	93.837	National Heart, Lung, and Blood Institute		R00HL127299	65,365	-
	93.837	National Heart, Lung, and Blood Institute		R00HL132123	283,404	-
	93.837	National Heart, Lung, and Blood Institute		R01HL049244	432,551	-
	93.837	National Heart, Lung, and Blood Institute		R01HL063043	499,885	-
	93.837	National Heart, Lung, and Blood Institute		R01HL074045	(312)	-
	93.837	National Heart, Lung, and Blood Institute		R01HL094450	386,783	88,857
	93.837	National Heart, Lung, and Blood Institute		R01HL096962	356,192	198,829
	93.837	National Heart, Lung, and Blood Institute		R01HL113057	13,427	-
	93.837	National Heart, Lung, and Blood Institute		R01HL113084	253,027	-
	93.837	National Heart, Lung, and Blood Institute		R01HL114940	452,368	5,968
	93.837	National Heart, Lung, and Blood Institute		R01HL115580	610,022	71,193
	93.837	National Heart, Lung, and Blood Institute		R01HL116546	887,350	-
	93.837	National Heart, Lung, and Blood Institute		R01HL119648	19,552	18,723
	93.837	National Heart, Lung, and Blood Institute		R01HL121796	56,033	-
	93.837	National Heart, Lung, and Blood Institute		R01HL124096	234,600	-
	93.837	National Heart, Lung, and Blood Institute		R01HL124122	3,084	3,084
	93.837	National Heart, Lung, and Blood Institute		R01HL124122	(765)	-
	93.837	National Heart, Lung, and Blood Institute		R01HL127442	761,398	-
	93.837	National Heart, Lung, and Blood Institute		R01HL128857	1,309,775	292,176
	93.837	National Heart, Lung, and Blood Institute		R01HL129785	59,218	54,829
	93.837	National Heart, Lung, and Blood Institute		R01HL131405	130,631	-
	93.837	National Heart, Lung, and Blood Institute		R01HL131941	521,105	-
	93.837	National Heart, Lung, and Blood Institute		R01HL132213	219,439	-
	93.837	National Heart, Lung, and Blood Institute		R01HL132520	374,479	-
	93.837	National Heart, Lung, and Blood Institute		R01HL132525	434,534	-
	93.837	National Heart, Lung, and Blood Institute		R01HL133050	247,717	-
	93.837	National Heart, Lung, and Blood Institute		R01HL133665	25,295	-
	93.837	National Heart, Lung, and Blood Institute		R01HL134824	601,975	207,743

Assistance Li Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme	ent Cluster — rom the following agencies				
·					
93.837	National Heart, Lung, and Blood Institute		R01HL135096	347,435	-
93.837	National Heart, Lung, and Blood Institute		R01HL135109	710,394	107,048
93.837	National Heart, Lung, and Blood Institute		R01HL135489	608,080	-
93.837	National Heart, Lung, and Blood Institute		R01HL135622	438,431	-
93.837	National Heart, Lung, and Blood Institute		R01HL135648	631,941	-
93.837	National Heart, Lung, and Blood Institute		R01HL136232	542,082	-
93.837	National Heart, Lung, and Blood Institute		R01HL136951	322,428	-
93.837	National Heart, Lung, and Blood Institute		R01HL137015	272,086	-
93.837	National Heart, Lung, and Blood Institute		R01HL138198	262,595	-
93.837	National Heart, Lung, and Blood Institute		R01HL138570	510,433	83,564
93.837	National Heart, Lung, and Blood Institute		R01HL138579	615,362	-
93.837	National Heart, Lung, and Blood Institute		R01HL138738	333,589	-
93.837	National Heart, Lung, and Blood Institute		R01HL139006	589,512	-
93.837	National Heart, Lung, and Blood Institute		R01HL139348	529,360	-
93.837	National Heart, Lung, and Blood Institute		R01HL141941	471,456	-
93.837	National Heart, Lung, and Blood Institute		R01HL142588	777,124	187,092
93.837	National Heart, Lung, and Blood Institute		R01HL143469	63,007	11,808
93.837	National Heart, Lung, and Blood Institute		R01HL148581	23,043	-
93.837	National Heart, Lung, and Blood Institute		R01HL149423	158,444	34,442
93.837	National Heart, Lung, and Blood Institute		R01HL153876	241,803	-
93.837	National Heart, Lung, and Blood Institute		R01HL154001	272,528	-
93.837	National Heart, Lung, and Blood Institute		R01HL156526	90,674	5,319
93.837	National Heart, Lung, and Blood Institute		R01HL156652	72,300	-
93.837	National Heart, Lung, and Blood Institute		R21HL139208	(10,713)	(10,713)
93.837	National Heart, Lung, and Blood Institute		R21HL139208	(5,999)	-
93.837	National Heart, Lung, and Blood Institute		R21HL140012	12,313	-
93.837	National Heart, Lung, and Blood Institute		R35HL135754	1,017,648	-
93.837	National Heart, Lung, and Blood Institute		T32HL134616	227,108	-
93.837	National Heart, Lung, and Blood Institute		T32HL149637	94,103	-
93.837	National Heart, Lung, and Blood Institute		UH3HL140131	94,286	41,723
93.837	National Institutes of Health		R01HL148736	313,701	-
93.838	National Heart, Lung, and Blood Institute		P01HL114453	2,176,674	1,541,440
93.838	National Heart, Lung, and Blood Institute		R01HL076278	181,381	-
93.838	National Heart, Lung, and Blood Institute		R01HL096376	404,779	-
93.838	National Heart, Lung, and Blood Institute		R01HL097376	(2,425)	-
93.838	National Heart, Lung, and Blood Institute		R01HL098174	249,931	-
93.838	National Heart, Lung, and Blood Institute		R01HL124325	148,917	-
93.838	National Heart, Lung, and Blood Institute		R01HL127651	(20,793)	-
93.838	National Heart, Lung, and Blood Institute		R01HL131665	350,569	-
93.838	National Heart, Lung, and Blood Institute		R01HL132355	408,719	6,057
93.838	National Heart, Lung, and Blood Institute		R01HL134673	354,208	-
93.838	National Heart, Lung, and Blood Institute		R01HL136294	589,744	-
93.838	National Heart, Lung, and Blood Institute		R01HL137090	493,807	-
93.838	National Heart, Lung, and Blood Institute		R01HL137224	500,261	-
93.838	National Heart, Lung, and Blood Institute		R01HL139881	638,797	104,445
93.838	National Heart, Lung, and Blood Institute		R01HL141195	481,497	14,711
93.838	National Heart, Lung, and Blood Institute		R01HL141217	449,761	-

Assistance Lis Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme	nt Cluster —				
Funds received directly fro					
93.838	National Heart, Lung, and Blood Institute		R01HL142767	32.724	-
93.838	National Heart, Lung, and Blood Institute		R01HL143000	362,760	10,105
93.838	National Heart, Lung, and Blood Institute		R01HL151513	249,652	-
93.838	National Heart, Lung, and Blood Institute		R56HL142767	110,239	13,884
93.838	National Heart, Lung, and Blood Institute		UH3HL123502	595,969	-
93.839	National Heart, Lung, and Blood Institute		K23HL141447	83,556	-
93.839	National Heart, Lung, and Blood Institute		R01HL126945	166,681	75,971
93.839	National Heart, Lung, and Blood Institute		R01HL131720	438,622	76,205
93.839	National Heart, Lung, and Blood Institute		R01HL134544	312,130	75,488
93.839	National Heart, Lung, and Blood Institute		R01HL136652	314,838	-
93.839	National Heart, Lung, and Blood Institute		R01HL137799	507,447	11,232
93.839	National Heart, Lung, and Blood Institute		R01HL138116	498,555	202,455
93.839	National Heart, Lung, and Blood Institute		R01HL151195	182,919	-
93.839	National Heart, Lung, and Blood Institute		R01HL153723	186,780	44,197
93.839	National Heart, Lung, and Blood Institute		UG1HL109322	93,204	47,179
93.840	National Heart, Lung, and Blood Institute		R01HL146781	386,464	39,769
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		F31AR073638	37,109	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		K23AR068450	172,560	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR059103	174,690	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR061385	343,621	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR067766	282,066	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR070486	54,864	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR070752	103,321	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR072574	335,945	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R01AR075062	256,840	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R21AR071115	(4,752)	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R21AR075318	203,323	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R21AR076611	121,308	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R21AR077809	99,779	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R33AR073049	132,357	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R56AR073805	191,062	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		R61AR076786	58,924	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Diseases		UH2AR076729	183,777	(5,591)
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		DP1DK126199	566,103	112,282
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		K01DK116916	120,978	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		K08DK111920	194,125	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		K08DK123411	142,730	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		K23DK117041	203,261	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK101323	46,120	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK105033	124,676	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK106394	330,895	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK108969	613,881	497,276
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK109345	337,372	144,576
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK112930	436,565	10,193
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK113943	159,389	42,510
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK114320	157,343	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK117102	460,175	96,382

Assistance L Number		Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developm Funds received directly f	nent Cluster — from the following agencies				
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK120108	465,802	150,588
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK123475	499,146	40,609
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK125809	224,229	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK126008	64,598	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK127444	124,767	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		R01DK128238	9,050	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		U01DK108327	667,776	79,712
93.847	National Institute of Diabetes and Digestive and Kidney Diseases		U01DK127388	181,972	-
93.847	National Institutes of Health		R21DK110489	1,510	-
93.853	National Institute of Neurological Disorders and Stroke		F31NS100303	(1,491)	-
93.853	National Institute of Neurological Disorders and Stroke		F31NS115523	34,056	-
93.853	National Institute of Neurological Disorders and Stroke		F31NS117124	25,274	-
93.853	National Institute of Neurological Disorders and Stroke		F32NS119371	39,848	-
93.853	National Institute of Neurological Disorders and Stroke		F99NS118743	23,293	-
93.853	National Institute of Neurological Disorders and Stroke		P30NS104177	514,763	-
93.853	National Institute of Neurological Disorders and Stroke		R00NS089938	944	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS038526	187	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS074882	267,463	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS091302	20,533	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS093073	204,750	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS094566	64,665	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS098780	387,797	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS100522	464,572	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS104332	369,957	1,206
93.853	National Institute of Neurological Disorders and Stroke		R01NS105385	566,628	35,800
93.853	National Institute of Neurological Disorders and Stroke		R01NS109585	344,998	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS110681	291,101	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS112805	123,640	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS112935	436,595	-
93.853	National Institute of Neurological Disorders and Stroke		R01NS116059	414,808	-
93.853 93.853	National Institute of Neurological Disorders and Stroke		R01NS118037 R01NS118200	51,530 107,956	-
93.853	National Institute of Neurological Disorders and Stroke National Institute of Neurological Disorders and Stroke		R03NS116303	40,922	-
93.853	National Institute of Neurological Disorders and Stroke		R03NS116334	53,483	-
93.853	National Institute of Neurological Disorders and Stroke		R21NS084899	20,290	9,568
93.853	National Institute of Neurological Disorders and Stroke		R21NS109787	199,625	9,500
93.853	National Institute of Neurological Disorders and Stroke		R21NS113097	236,130	
93.853	National Institute of Neurological Disorders and Stroke		R21NS117852	30,978	
93.853	National Institute of Neurological Disorders and Stroke		R21NS123797	3,336	_
93.853	National Institute of Neurological Disorders and Stroke		R25NS120282	11,153	_
93.853	National Institute of Neurological Disorders and Stroke		R35NS111582	1,064,724	-
93.853	National Institute of Neurological Disorders and Stroke		T32NS105864	146,868	-
93.853	National Institute of Neurological Disorders and Stroke		U01NS112101	421,564	19,771
93.853	National Institute of Neurological Disorders and Stroke		U24NS107205	308,539	38,377
93.855	Nat Inst of Allergy &Infectious Diseases		R03AI139271	(317)	-
93.855	National Institute of Allergy and Infectious Diseases		K01AI146270	113,710	-
93.855	National Institute of Allergy and Infectious Diseases		K22AI127072	2,132	_
-	5,		•	,	

Assistance Li Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developm					
Funds received directly to	rom the following agencies				
93.855	National Institute of Allergy and Infectious Diseases		K22AI146141	47,816	-
93.855	National Institute of Allergy and Infectious Diseases		R00AI125136	218,715	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI077283	92,073	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI084898	385,454	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI090060	329,482	87,749
93.855	National Institute of Allergy and Infectious Diseases		R01AI112381	190,033	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI116119	117,609	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI116770	287,652	95,043
93.855	National Institute of Allergy and Infectious Diseases		R01Al116975	87,056	5,105
93.855	National Institute of Allergy and Infectious Diseases		R01AI118852	132,487	-
93.855	National Institute of Allergy and Infectious Diseases		R01Al121124	224,101	-
93.855	National Institute of Allergy and Infectious Diseases		R01Al121212	506,404	-
93.855	National Institute of Allergy and Infectious Diseases		R01Al121405	354,724	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI123661	397,856	272,701
93.855	National Institute of Allergy and Infectious Diseases		R01AI124121	531,313	-
93.855	COVID-19 National Institute of Allergy and Infectious Diseases		R01AI124121	322,038	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI125560	391,190	13,320
93.855	National Institute of Allergy and Infectious Diseases		R01AI126742	331,410	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI127863	430,776	228,102
93.855	National Institute of Allergy and Infectious Diseases		R01AI130110	240,340	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI134895	639,595	218,297
93.855	National Institute of Allergy and Infectious Diseases		R01AI134972	343,870	16,151
93.855	National Institute of Allergy and Infectious Diseases		R01AI139913	446,922	2,841
93.855	National Institute of Allergy and Infectious Diseases		R01AI140541	718,310	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI140741	462,250	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI143288	572,672	141,412
93.855	National Institute of Allergy and Infectious Diseases		R01AI143809	193,695	10,065
93.855	National Institute of Allergy and Infectious Diseases		R01AI145144	552,134	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI146252	472,207	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI148561	87,820	10,722
93.855	National Institute of Allergy and Infectious Diseases		R01AI148788	420,175	85,883
93.855	National Institute of Allergy and Infectious Diseases		R01AI150490	39,921	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI151065	170,954	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI152044	241,755	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI152435	520,710	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI153216	531,172	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI154456	254,357	-
93.855	National Institute of Allergy and Infectious Diseases		R01AI157205	77,815	-
93.855	National Institute of Allergy and Infectious Diseases		R03AI144253	32,734	-
93.855	National Institute of Allergy and Infectious Diseases		R03AI149371	79,034	=
93.855	National Institute of Allergy and Infectious Diseases		R03AI151769	43,275	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI128418	(1,804)	=
93.855	National Institute of Allergy and Infectious Diseases		R21AI130485	176,334	39,952
93.855	National Institute of Allergy and Infectious Diseases		R21AI137714	100,283	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI138555	41,223	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI138775	109,389	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI139600	97,108	-

Assistance Lis	ting		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
	· , .	• .		•	•
Research and Developme	ent Cluster —				
Funds received directly fro	om the following agencies				
93.855	National Institute of Allergy and Infectious Diseases		R21AI142256	58,873	_
93.855	National Institute of Allergy and Infectious Diseases		R21AI142794	96,837	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI146690	142,034	=
93.855	National Institute of Allergy and Infectious Diseases		R21AI146736	147,372	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI148986	132,698	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI151230	90,244	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI151736	578	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI151867	150,088	-
93.855	National Institute of Allergy and Infectious Diseases		R21AI156304	52,256	=
93.855	National Institute of Allergy and Infectious Diseases		R21AI156379	88,826	=
93.855	National Institute of Allergy and Infectious Diseases		R21AI156411	26,245	=
93.855	National Institute of Allergy and Infectious Diseases		R21AI156441	429	=
93.855	National Institute of Allergy and Infectious Diseases		R21AI156732	25,066	-
93.855	National Institute of Allergy and Infectious Diseases		R21Al41037	171,808	-
93.855	National Institute of Allergy and Infectious Diseases		R33AI116180	231,288	-
93.855	National Institute of Allergy and Infectious Diseases		T32AI106704	286,672	-
93.855	National Institute of Allergy and Infectious Diseases		U01AI125859	312,785	-
93.856	National Institute of Allergy and Infectious Diseases		R21AI123805	(4,417)	-
93.859	National Institute of Allergy and Infectious Diseases		R01AI150448	166,245	-
93.859	National Institute of Allergy and Infectious Diseases		R01AI150473	113,070	-
93.859	National Institute of Allergy and Infectious Diseases		R01AI150493	437,857	68,844
93.859	National Institute of Allergy and Infectious Diseases		R01AI150496	288,423	-
93.859	National Institute of General Medical Sciences		F31GM134573	33,710	-
93.859	National Institute of General Medical Sciences		K08GM126315	4,083	-
93.859	National Institute of General Medical Sciences		K08GM137078	128,285	-
93.859	National Institute of General Medical Sciences		P41GM128577	1,440,370	278,391
93.859	National Institute of General Medical Sciences		R00GM124460	343,392	-
93.859	National Institute of General Medical Sciences		R00GM126064	290,985	-
93.859	National Institute of General Medical Sciences		R00GM126810	258,011	-
93.859	National Institute of General Medical Sciences		R01GM047823	196,399	-
93.859	National Institute of General Medical Sciences		R01GM065056	(131)	-
93.859	National Institute of General Medical Sciences		R01GM065183	190,320	38,015
93.859	National Institute of General Medical Sciences		R01GM066041	93,397	-
93.859	National Institute of General Medical Sciences		R01GM067153	393,516	=
93.859	National Institute of General Medical Sciences		R01GM072528	369,922	-
93.859	National Institute of General Medical Sciences		R01GM084065	217,876	-
93.859	National Institute of General Medical Sciences		R01GM084177	(1,248)	-
93.859	National Institute of General Medical Sciences		R01GM087543	117,215	11,310
93.859	National Institute of General Medical Sciences		R01GM093285	(664)	407.400
93.859	National Institute of General Medical Sciences		R01GM094357	603,011	187,400
93.859	National Institute of General Medical Sciences		R01GM095566	188,941	-
93.859	National Institute of General Medical Sciences		R01GM100951	429,124	2 207
93.859 93.859	National Institute of General Medical Sciences National Institute of General Medical Sciences		R01GM104483 R01GM104483	3,897	3,897
				(1,565)	-
93.859 93.859	National Institute of General Medical Sciences National Institute of General Medical Sciences		R01GM105695 R01GM108762	34,243	-
93.859	National Institute of General Medical Sciences National Institute of General Medical Sciences		R01GM108762 R01GM108928	(6,705) (19,427)	-
80.008	Hational Institute of General Medical Sciences		170 1GW1100920	(18,427)	-

	nce Listing Imber Federal Agency Sponsor	Additional Award Federal Pass-Through Sponsor Identification Expenditures	Expenditures to Subrecipients
Decearsh and Dec	elopment Cluster —		
	ectly from the following agencies		
	say nom are renorming agonolos		
93.859	National Institute of General Medical Sciences	R01GM109988 157,714	-
93.859	National Institute of General Medical Sciences	R01GM110406 379,157	-
93.859	National Institute of General Medical Sciences	R01GM111995 154,304	-
93.859	National Institute of General Medical Sciences	R01GM114582 81,562	-
93.859	National Institute of General Medical Sciences	R01GM114666 468,367	-
93.859	National Institute of General Medical Sciences	R01GM115389 179,097	-
93.859	National Institute of General Medical Sciences	R01GM117964 (21)	-
93.859	National Institute of General Medical Sciences	R01GM118746 57,207	-
93.859	National Institute of General Medical Sciences	R01GM120209 281,274	-
93.859	National Institute of General Medical Sciences	R01GM120496 284,414	-
93.859	National Institute of General Medical Sciences	R01GM120582 160,352	20,020
93.859	National Institute of General Medical Sciences	R01GM120923 331,047	181,099
93.859	National Institute of General Medical Sciences	R01GM121966 138,966	-
93.859	National Institute of General Medical Sciences	R01GM122078 445,873	168,986
93.859	National Institute of General Medical Sciences	R01GM122432 311,481	-
93.859	National Institute of General Medical Sciences	R01GM122436 4,215	-
93.859	National Institute of General Medical Sciences	R01GM122884 350,400	-
93.859	National Institute of General Medical Sciences	R01GM123743 116,003	15,678
93.859	National Institute of General Medical Sciences	R01GM124320 275,129	-
93.859	National Institute of General Medical Sciences	R01GM124436 610,311	299,697
93.859	National Institute of General Medical Sciences	R01GM127526 262,212	-
93.859	National Institute of General Medical Sciences	R01GM128440 365,031	-
93.859	National Institute of General Medical Sciences	R01GM129764 292,411	-
93.859	National Institute of General Medical Sciences	R01GM130135 205,200	115,321
93.859	National Institute of General Medical Sciences	R01GM131399 308,174	153,339
93.859	National Institute of General Medical Sciences	R01GM131626 386,014	-
93.859	National Institute of General Medical Sciences	R01GM132651 179,025	-
93.859	National Institute of General Medical Sciences	R01GM133032 454,993	-
93.859	National Institute of General Medical Sciences	R01GM135234 325,364	-
93.859	National Institute of General Medical Sciences	R01GM137135 123,116	-
93.859	National Institute of General Medical Sciences	R01GM137203 174,720	-
93.859	National Institute of General Medical Sciences	R01GM138997 270,340	-
93.859	National Institute of General Medical Sciences	R01GM140281 138,351	31,577
93.859	National Institute of General Medical Sciences	R01GM141394 20,068	-
93.859	National Institute of General Medical Sciences	R21GM126543 178,664	-
93.859	National Institute of General Medical Sciences	R21GM140382 40,993	-
93.859	National Institute of General Medical Sciences	R25GM089571 188,358	-
93.859	National Institute of General Medical Sciences	R35GM118332 164,934	-
93.859	National Institute of General Medical Sciences	R35GM119679 348,529	-
93.859	National Institute of General Medical Sciences	R35GM119812 273,206	-
93.859	National Institute of General Medical Sciences	R35GM122459 443,205	-
93.859	National Institute of General Medical Sciences	R35GM128852 239,536	-
93.859	National Institute of General Medical Sciences	R35GM131760 453,096	-
93.859	National Institute of General Medical Sciences	R35GM133510 604,153	-
93.859	National Institute of General Medical Sciences	R35GM136400 203,224	=
93.859	National Institute of General Medical Sciences	R35GM138373 345,021	-
93.859	National Institute of General Medical Sciences	R35GM139545 135,595	-

Assistance List	ina		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
				·	•
Research and Developmer					
Funds received directly from	m the following agencies				
93.859	National Institute of General Medical Sciences		R35GM141880	27,053	
93.859	National Institute of General Medical Sciences		T32GM068412	145,535	-
93.859	National Institute of General Medical Sciences		T32GM006412	933,742	-
93.859	National Institute of General Medical Sciences		T32GM075767	287,896	-
93.859	National Institute of General Medical Sciences		T32GM060232	152,857	-
93.865	National Institute of Child Health and Human Development		K01HD077063	(127)	-
93.865	National Institute of Child Health and Human Development		P01HD080679	1,359,500	560,844
93.865	National Institute of Child Health and Human Development		P2CHD058484	518,544	500,044
93.865	COVID-19 National Institute of Child Health and Human Development		P2CHD058484	119,959	_
93.865	National Institute of Child Health and Human Development		R01HD037078	1,995,986	1,578,703
93.865	National Institute of Child Health and Human Development		R01HD060586	448,860	16,355
93.865	National Institute of Child Health and Human Development		R01HD078545	23,515	10,333
93.865	National Institute of Child Health and Human Development		R01HD076345	303,672	35,420
93.865	National Institute of Child Health and Human Development		R01HD084637	173,624	47,236
93.865	National Institute of Child Health and Human Development		R01HD086227	270,742	39,148
93.865	National Institute of Child Health and Human Development		R01HD088545	(7,137)	33,140
93.865	National Institute of Child Health and Human Development		R01HD091274	249,234	39,167
93.865	National Institute of Child Health and Human Development		R01HD094081	(10,665)	39,107
93.865	National Institute of Child Health and Human Development		R01HD095881	378,129	-
93.865	National Institute of Child Health and Human Development		R01HD100455	458,439	116,738
93.865	National Institute of Child Health and Human Development		R03HD096182	41,813	110,730
93.865	National Institute of Child Health and Human Development		R03HD090162 R03HD098420	57,061	12,529
93.865	National Institute of Child Health and Human Development		R03HD100603	76,490	12,329
93.865	National Institute of Child Health and Human Development		R03HD100003	27,519	-
93.865	National Institute of Child Health and Human Development		R03HD101083	64,871	31,619
93.865	National Institute of Child Health and Human Development		R03HD107063	37,351	6,867
93.865	National Institute of Child Health and Human Development		R21HD095150	82,006	0,007
93.865	National Institute of Child Health and Human Development		R21HD095179	98,281	-
93.865	National Institute of Child Health and Human Development		R21HD102897	122,814	-
93.865	National Institute of Child Health and Human Developmen		UG1HD027915	216,198	-
93.865	National Institute of Child Fleatth		R21HD099380	200,983	_
93.866	National Institute on Aging		K01AG056673	105,208	_
93.866	National Institute on Aging		K01AG056848	112,726	_
93.866	National Institute on Aging		K23AG061284	125,066	_
93.866	National Institute on Aging		K76AG054864	132,062	-
93.866	National Institute on Aging		R00AG054736	240,658	
93.866	National Institute on Aging		R00AG054760	456,567	_
93.866	National Institute on Aging		R01AG041176	630,236	-
93.866	National Institute on Aging		R01AG050725	348,122	52,093
93.866	National Institute on Aging		R01AG050801	349,981	115,221
93.866	National Institute on Aging		R01AG051902	298,157	6,329
93.866	National Institute on Aging		R01AG051902	273,954	-
93.866	National Institute on Aging		R01AG055059	819,615	190,022
93.866	National Institute on Aging		R01AG055059	555,407	52,944
93.866	National Institute on Aging		R01AG056504	489,705	232,986
93.866	National Institute on Aging		R01AG056919	10,893	10,893
93.866	National Institute on Aging		R01AG056919	(8,701)	-
30.000	Hadonal molitate on Aging		1017000919	(0,701)	-

Ass	sistance Listing Number	Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and D	Development C	luster —				
Funds received	directly from the	ne following agencies				
93.8	866	National Institute on Aginc		R01AG057032	767,465	-
93.8	866	National Institute on Aging		R01AG057046	756,276	203,606
93.8	866	National Institute on Aginç		R01AG057841	409,293	-
93.8	866	National Institute on Aginç		R01AG058822	367,660	249,754
93.8	866	National Institute on Aginç		R01AG059711	283,255	18,461
93.8	866	National Institute on Aging		R01AG059861	597,374	22,238
93.8		National Institute on Aging		R01AG059981	451,365	27,160
93.8	866	National Institute on Aging		R01AG060542	1,060,306	100,824
93.8		National Institute on Aging		R01AG060944	30,037	19,255
93.8		National Institute on Aginç		R01AG062896	81,993	-
93.8		National Institute on Aginç		R01AG065830	447,116	-
93.8		National Institute on Aginç		R01AG068882	10,506	-
93.8		National Institute on Aginç		R01AG069138	313,090	-
93.8		National Institute on Aging		R03AG054904	(1,081)	-
93.8		National Institute on Aging		R03AG060177	43,114	-
93.8		National Institute on Aging		R03AG063276	96,015	-
93.8		National Institute on Aging		R03AG064374	147,580	-
93.8		National Institute on Aging		R03AG064379	99,579	-
93.8		National Institute on Aging		R03AG067061	66,808	-
93.8		National Institute on Aging		R03AG067387	44,683	-
93.8		National Institute on Aging		R21AG056921	160,252	9,828
93.8		National Institute on Aging		R21AG058109	43,789	-
93.8		National Institute on Aging		R21AG060028	75,498	-
93.8		National Institute on Aging		R21AG061496	97,957	-
93.8		National Institute on Aging		R21AG062144	163,607	48,561
93.8		National Institute on Aging		R21AG064899	302,157	-
93.8		National Institute on Aging		R21AG066059	164,139	-
93.8		National Institute on Aging		R21AG067755	285,789	-
93.8		National Institute on Aging		R21AG071133	37,768	-
93.8		National Institute on Aging		R56AG041250	190,080	-
93.8		National Institute on Aging		R56AG055795	110,928	-
93.8		National Institute on Aging		R56AG066782	343,638	63,260
93.8		National Institute on Aging		RF1AG028271	372,606	96,053
93.8		National Institute on Aging		RF1AG054018	742,015	86,405
93.8 93.8		National Institute on Aginç National Institute on Aginç		U01AG054444 U01AG068822	221,034 101,838	42,678
						-
93.8 93.8		National Eye Institute National Eye Institute		K08EY029362 K23EY025273	208,665 517	-
93.6		National Eye Institute National Eye Institute		R01EY020834	106,053	6,264
93.8		National Eye Institute		R01EY022030	439,135	-
93.6		National Eye Institute National Eye Institute		R01EY022030 R01EY022124	342,119	6,056
93.6		National Eye Institute National Eye Institute		R01EY024590	97,681	55,131
93.8		National Eye Institute		R01EY025358	238,242	-
93.8		National Eye Institute		R01EY025648	395,568	-
93.6		National Eye Institute National Eye Institute		R01EY025658	138,844	-
93.8		National Eye Institute		R01EY026910	341,416	_
93.8		National Eye Institute		R01EY027003	398,611	-
93.0	001	radional Lyo monate		110111021000	330,011	-

Assistance Listin	g		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Development					
Funds received directly from	the following agencies				
93.867	National Eye Institute		R01EY027399	454,943	_
93.867	National Eye Institute		R01EY028350	477,851	_
93.867	National Eye Institute		R01EY029159	503,683	28,809
93.867	National Eye Institute		R01EY029777	383,622	
93.867	National Eye Institute		R01EY029809	35,604	10,312
93.867	National Eye Institute		R01EY030621	395,753	-
93.867	National Eye Institute		R01EY031098	325,765	181,560
93.867	National Eye Institute		R01EY032141	97,533	-
93.867	National Eye Institute		R21EY026749	(31)	-
93.867	National Eye Institute		R34EY030582	4,554	-
93.867	National Eye Institute		5T35EY007151-22	52,069	-
93.867	National Eye Institute		UG1EY023206	255,183	-
93.867	National Eye Institute		UG1EY023208	112,716	-
93.867	National Eye Institute		UG1EY023210	430,925	-
93.876	Food and Drug Administration		U01FD007130	137,293	-
93.879	National Library of Medicine		F31LM013056	(2,609)	-
93.879	COVID-19 National Library of Medicine		R21LM013678	7,430	-
93.884	Health Resources and Services Administration		T0BHP30007	353,700	-
93.978	Centers for Disease Control and Prevention		U01PS005170	504,581	42,484
93.989	John E Fogarty International Center		D43TW008650	174,586	21,930
93.989	John E Fogarty International Center		R21TW011131	49,950	-
93.RD	Centers for Disease Control and Prevention		21IPA2111834	2,850	-
93.RD	Centers for Disease Control and Prevention		75D30118C02912	(618)	-
93.RD	Centers for Disease Control and Prevention		75D30118C02920	11,077	-
93.RD	Centers for Disease Control and Prevention		75D30119P05688	146,832	-
93.RD	Centers for Disease Control and Prevention		75D30120C08630	254,464	-
93.RD	Centers for Disease Control and Prevention		75D30120P09974	42,629	-
93.RD	Food and Drug Administration		75F40119P10227	206,296	-
93.RD	National Heart, Lung, and Blood Institute		75N92021D00003	412,434	-
93.RD	National Heart, Lung, and Blood Institute		HHSN268201600002C	395,660	-
	Total Department of Health and Human Services Direct Awards			213,148,579	26,790,597
U.S. Agency for Internation	nal Development				
98.001	Agency for International Developmen		72038621CA00002	118,231	-
98.001	Agency for Intl Dev			(43,540)	-
	5 ,				
	Total National Academy of Sciences Direct Awards			74,691	-
Subtotal of Research and	Development Cluster funds received directly from federal agencies			\$ 353,561,171	\$ 53,982,759

THE OHIO STATE UNIVERSITY

10.215

National Institute of Food and Agriculture

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

Assistance	e Listing		Additional Award	Federal	Expenditures
Num	ber Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Develo Pass-through from oth	•				
Fass-tillough hom on	iel sources.				
Department of Agric	ulture				
10.001	Foundation for Food and Agriculture Research	USDA Agricultural Research Service	59-8042-8-003	\$ 12,678	\$ -
10.001	Natural Resources Conservation Service	USDA Agricultural Research Service	59-5080-0-002	6,809	-
10.001	Natural Resources Conservation Service	USDA Agricultural Research Service	5950800003	53,323	-
10.001	Natural Resources Conservation Service	USDA Agricultural Research Service	59-5080-0-004	37,029	-
10.001	Natural Resources Conservation Service	USDA Agricultural Research Service	59-5080-0-005	37,663	-
10.001	Natural Resources Conservation Service	USDA Agricultural Research Service	59-5080-8-002	1,414	-
10.001	SmithBucklin	USDA Agricultural Research Service	59-6070-1-004	12,578	-
10.001	United Soybean Board	USDA Agricultural Research Service	59-6070-0-012	14,603	-
10.001	USDA Agricultural Research Service	Arkansas Children's Hospital	034679-Bai	1,956	-
10.072	Natural Resources Conservation Service	The Nature Conservancy	2019-D	21,517	-
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	2017-05	29,283	-
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	Agreement dated 11/02/2018	42,062	-
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	Agreement dated 11/2/2018	1,814	-
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	Agreement dated 11/26/2019	92,529	-
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	AGR-SCG-19-02	18,738	-
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	AGR-SCG-19-04	65,816	_
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	AGR-SCG-19-05	44,170	_
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	Award dated 10/19/2020	18,226	_
10.170	Agricultural Marketing Service	Ohio Department Of Agriculture	Award dated 10/29/2020	33,436	2,224
10.170	Agricultural Marketing Service	Pennsylvania State Univ	6053-OSU-PDA-7029	14,004	-
10.170	US Department of Agriculture	Ohio Department Of Agriculture	Agreement dated 10/29/2018	57,116	_
10.170	US Department of Agriculture	Ohio Department Of Agriculture	Award dated 10-12-18	9,045	_
10.200	National Institute of Food and Agriculture	lowa State Univ	016253A	20,515	_
10.200	National Institute of Food and Agriculture	Iowa State Univ	019585A	11,795	_
10.200	National Institute of Food and Agriculture	Iowa State Univ	416-41-71C	22,365	_
10.200	National Institute of Food and Agriculture	Michigan State Univ	514071	17,677	_
10.200	National Institute of Food and Agriculture	Michigan State Univ	PO Number 513440	51,154	_
10.200	National Institute of Food and Agriculture	Univ of Maine at Orono	UMS1239	7,042	_
10.203	National Institute of Food and Agriculture	University of Illinois	CN-00049762	26,732	_
10.212	US Department of Agriculture	3Bar Biologics	2017-33610-27301	(4,782)	_
10.212	US Department of Agriculture	Larad Vaccines	2018-33610-28579	4,936	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H005722913	48,362	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H005722946	7,829	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H005722959	3,801	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H006607411	2,380	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H006607426	3,006	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H006607433	4,379	_
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007179304	31,289	17,214
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007179322	790	
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007179339	11,854	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007179346	12,460	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007179371	4,248	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007813914	50,108	-
10.210		5 5		33,130	

H007813931

Univ of Minnesota

15,974

THE OHIO STATE UNIVERSITY

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2021

Assistance Listi	ng		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
December and Developmen	at Cluster				
Research and Developmen Pass-through from other so					
rass-unough nom other so	nuices.				
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H008334007	10,302	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H008334012	4,082	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H008334016	2,055	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H008917104	39,189	-
10.216	National Institute of Food and Agriculture	Central State University	8497-001	57,144	-
10.216	National Institute of Food and Agriculture	Central State University	8499-001	125,807	-
10.217	National Institute of Food and Agriculture	Purdue Univ	F0003792902024	3,314	-
10.303	National Institute of Food & Agriculture	Univ of Minnesota	P007565953	424	-
10.304	National Institute of Food and Agriculture	Michigan State Univ	RC106556D	54,537	-
10.309	National Institute of Food and Agriculture	Michigan State Univ	RC110566OSU	98,093	-
10.309	National Institute of Food and Agriculture	North Carolina State Univ	2016-1498-02	219,270	-
10.309	National Institute of Food and Agriculture	North Carolina State Univ	2017-0398-17	40,115	-
10.309	National Institute of Food and Agriculture	Oregon State Univ	C0565B-B	100,534	-
10.309	National Institute of Food and Agriculture	Univ of Florida	SUB00002012	91,449	-
10.309	National Institute of Food and Agriculture	Univ of Florida	SUB00002384	23,386	-
10.309	National Institute of Food and Agriculture	Univ of Florida	UFDSP00011007	8,518	-
10.309	National Institute of Food and Agriculture	Univ of Florida	UFDSP00011703	2,013	-
10.309	National Institute of Food and Agriculture	Univ of Minnesota	H007913503	69,281	-
10.309	National Institute of Food and Agriculture	USDA Agricultural Research Service	5950826005	19,206	-
10.309	National Institute of Food and Agriculture	Washington State Univ	133336-G003927	15,120	-
10.310	National Institute of Food and Agriculture	Cornell University	90623-20130	35,573	-
10.310	National Institute of Food and Agriculture	Cornell University	91311-20343	83,530	-
10.310	National Institute of Food and Agriculture	Michigan State Univ	RC111153A	46,642	-
10.310	National Institute of Food and Agriculture	Michigan State Univ	RC111302C	27,328	-
10.310	National Institute of Food and Agriculture	North Carolina State Univ	2019-1507-25	19,738	-
10.310	National Institute of Food and Agriculture	Oregon State Univ	C0513A-A	52,176	-
10.310	National Institute of Food and Agriculture	Pennsylvania State Univ	S000185-USDA	87,455	-
10.310	National Institute of Food and Agriculture	Pennsylvania State Univ	S001278-USDA	6,758	-
10.310	National Institute of Food and Agriculture	Purdue Univ	F0012630502008	15,852	-
10.310	National Institute of Food and Agriculture	Purdue Univ	F9002288202048	48,878	-
10.310	National Institute of Food and Agriculture	Purdue Univ	F9002711902008	180,303	-
10.310	National Institute of Food and Agriculture	Univ of Delaware	42952	150	-
10.310	National Institute of Food and Agriculture	Univ of Delaware	48757	54,190	-
10.310	National Institute of Food and Agriculture	Univ of Delaware	54784	24,421	-
10.310	National Institute of Food and Agriculture	Univ of Florida	UFDSP00012026	35,473	-
10.310	National Institute of Food and Agriculture	Univ of Georgia	SUB00001456	14,726	-
10.310	National Institute of Food and Agriculture	Univ of Wisconsin	000000887	19,047	-
10.310	National Institute of Food and Agriculture	University Of Vermont	32375SUB52506	2,054	-
10.310	National Institute of Food and Agriculture	Western Illinois University	2019-69012-29851-04	83,417	-
10.328	National Institute of Food and Agriculture	Iowa State Univ	4163031B	4,614	-
10.329	National Institute of Food and Agriculture	Iowa State Univ	021689A	66,672	-
10.329	National Institute of Food and Agriculture	Michigan State Univ	RC108974K	19,983	-
10.330	National Institute of Food and Agriculture	Univ of Maryland	55063-Z5040201	(833)	-
10.500	National Institute of Food and Agriculture	eXtension	NTAE-2019-2025	15,166	-
10.902	Natural Resources Conservation Service	The Nature Conservancy	2019-D	14,345	-

12.300

Office of Naval Research

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

Assistance List Number	ting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme Pass-through from other se					
10.931	Natural Resources Conservation Service	The Nature Conservancy	2019-D	21,517	-
10.RD	USDA Food and Nutrition Service	Univ of Kentucky	3200002185-19-250	13,358	-
	Total Department of Agriculture Pass-Through Awards	S		2,956,095	19,438
Department of Commerc	e				
11.012	National Oceanic & Atmospheric Administration	Great Lakes Observing System	IOOS/OTT-OSU-YR2	(110)	-
11.417	National Oceanic & Atmospheric Administration	Purdue Univ	F0008309702054	13,871	-
11.417	National Oceanic & Atmospheric Administration	Univ of Minnesota	D007941105	2,679	-
11.419	National Oceanic & Atmospheric Administration	OH Dept of Natural Resources	DNRFHCZ16B Task 306-22	5,676	5,676
11.419	National Oceanic & Atmospheric Administration	OH Dept of Natural Resources	DNRFHCZ18B 306-02	4,708	-
11.419	National Oceanic & Atmospheric Administration	OH Dept of Natural Resources	DNRFHCZ20A 306-04	33,603	27,692
11.419	National Oceanic & Atmospheric Administration	OH Dept of Natural Resources	DNRFHCZ20A-603-02	63,996	-
11.420	National Oceanic & Atmospheric Administration	OH Dept of Natural Resources	N18B 315-11	31,563	-
11.431	National Oceanic & Atmospheric Administration	Univ Corp for Atmospheric Res	SUBAWD002253	106,129	-
11.431	National Oceanic & Atmospheric Administration	Univ Corp for Atmospheric Res	SUBAWD002295	43,522	-
11.431	US Department of Commerce	National Oceanic & Atmospheric Administration	NA17OAR4310136	(1,198)	-
11.432	National Oceanic & Atmospheric Administration	Univ of Michigan	3004715115	101,231	-
11.432	National Oceanic & Atmospheric Administration	Univ of Michigan	SUBK00011011	(5,495)	-
11.432	National Oceanic & Atmospheric Administration	Univ of Michigan	SUBK00011192	6,385	-
11.432	National Oceanic & Atmospheric Administration	Univ of Michigan	SUBK00011366	35,276	-
11.432	National Oceanic & Atmospheric Administration	Univ of Michigan	SUBK00011368	55,894	-
11.432	National Oceanic & Atmospheric Administration	Univ of Michigan	SUBK00012811	4,583	-
11.478	National Oceanic & Atmospheric Administration	Bowling Green State University	10010367-OSU	8,415	-
11.611	National Institute of Standards and Technology	Center for Innovative Food Technology	Agreement Effective 08/11/2020	25,689	-
11.611	National Institute of Standards and Technology	Ohio Development Services Agency	MEPG20200247	21,533	-
11.RD	US Department of Commerce	Parallax Advanced Research	PO# 11188-006	4,643	-
	Total Department of Commerce Pass-Through Awards	s		562,593	33,368
Department of Defense					
12.RD	US Department of Defense	Northwell Health	500717OSUMC	1,506	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RQ15-OSU-21-3_AFRL2	25,311	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX15-OSU-20-1-AFRL2	11,371	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX21-OSU-20-2-AFRL2	2,582	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX2-OSU-20-6-AFRL2	33,231	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX36-OSU-20-3-AFRL2	3,478	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX9-OSU-20-5-AFRL2	47,969	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX-OSU-16-7-OC-AFRL2	44,050	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RY13-OSU-20-3-AFRL2	5,103	-
12.300	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RY6-OSU-19-2-AFRL2	30,142	-
12.300	Naval Surface Warfare Center	Univ of Texas at Austin	UTA20-001114	100,238	-
12.300	NSWC Crane	Univ of Tennessee	N00164-20-2008-OSU	23,975	-
12.300	Office of Naval Research	Florida State Univ	R02036	121,185	-

Purdue Univ

13000541-012

52,731

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2021

12.800

Air Force Office of Scientific Research

Assistance Listin	ng		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
December of December of	A Olympia				
Research and Developmen Pass-through from other so					
Pass-inrough from other so	urces.				
12.300	Office of Naval Research	State University of New York Polytechnic Institute	Sub. #1153402-2-84477	21.462	_
12.300	Office of Naval Research	Univ of Pennsylvania	572037	349,718	-
12.300	Office of Naval Research	Univ of Tennessee	A19-0099-S003	242,259	-
12.300	Office of Naval Research	University of California, Santa Barbara	Subaward #KK1906	9,993	_
12.300	Office of Naval Research	University of Texas at Dallas	1705415	55,561	_
12.300	Office of Naval Research	Virginia Polytechnic Inst	Subaward No. 450677-19074	356,634	-
12.351	Defense Threat Reduction Agency	Collaborations Pharmaceuticals, Inc.	HDTRA11910020	294,911	23,018
12.351	Defense Threat Reduction Agency	Univ of Michigan	SUBK00013198	8,891	-
12.351	US Department of Defense	Univ of North Carolina	5108444	(5,229)	-
12.420	Army Medical Res Acquisition Activity	Johns Hopkins Univ	No Award Number	19,318	-
12.420	Army Medical Research Acquisition Activity	Cedars-Sinai Medical Center	0001633906	149,190	-
12.420	Army Medical Research Acquisition Activity	Children's Hospital Medical Center of Cincinnati	303249	34,816	-
12.420	Army Medical Research Acquisition Activity	Dartmouth College	GC10120-00-03	64,457	-
12.420	Army Medical Research Acquisition Activity	Stanford Univ	62348485-156530	18,792	-
12.420	Army Medical Research Acquisition Activity	Univ of Michigan	SUBK00010585	5,053	-
12.420	Army Medical Research Acquisition Activity	Univ of Pennsylvania	576708	67,121	-
12.420	Army Medical Research Acquisition Activity	Univ of Utah	10048708-02	491,297	-
12.420	Army Medical Research Acquisition Activity	Univ of Utah	10050259-01	824,839	-
12.420	Army Medical Research Acquisition Activity	Wake Forest Univ	WFUHS 441073 CF-03	7,283	-
12.420	Army Medical Research and Materiel Command	Rutgers Univ	Subaward # 1441	58,200	-
12.420	US Department of Defense	Ohio University	UT20339	6,053	-
12.420	US Department of Defense	Univ of North Carolina	5114788	38,293	-
12.420	US Department of Defense	Univ of Texas at Arlington	26040167061	24,951	-
12.431	Army Research Office	GeneSiC Semiconductor Inc.	Subcontract signed 10/31/18	28,353	-
12.431	Army Research Office	State University of New York Polytechnic Institute	Subaward No. 07-17	33,866	-
12.431	Army Research Office	Univ of Chicago	FP054294-D	17,362	-
12.431	Army Research Office	Univ of South Carolina	19-3863	16,302	-
12.431	United States Army	Georgia Inst of Tech	RH541-G5	63,448	-
12.617	US Department of Defense	Univ of Michigan	SUBK00011357	138,598	-
12.630	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RX14-OSU-19-1-AFRL2	26,335	-
12.630	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RY24-OSU-18-9-AFRL	24,345	-
12.630	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RY25-OSU-18-3-AFRL2	17,627	-
12.630	Air Force Research Laboratory	Defense Associated Graduate Student Innovators	RY9-OSU-18-2-AFRL	2,358	-
12.630	Office of Naval Research	American Lightweight Materials Manufacturing Innovation Institute	003C-10	(35,541)	-
12.630	Office of Naval Research	American Lightweight Materials Manufacturing Innovation Institute	B001-01	46,190	-
12.630	Office of Naval Research	American Lightweight Materials Manufacturing Innovation Institute	Subaward A023-01	59,330	-
12.750	Uniformed Services University of the Health Sciences	Henry M Jackson Fdn	4904	6,282	-
12.750	Uniformed Services University of the Health Sciences	Henry M Jackson Fdn for the Advn Mil Med	5494	43,708	-
12.750	Uniformed Services University of the Health Sciences	Henry M Jackson Fdn for the Advn Mil Med	5516	4,443	-
12.750	Uniformed Services University of the Health Sciences	Henry M Jackson Fdn for the Advn Mil Med	Subaward 5148	252,404	-
12.800	Air Force Office of Scientific Research	Florida A&M Univ	Subaward No. C-5066	24,757	-
12.800	Air Force Office of Scientific Research	Florida International University	Subaward No. 800011034-03	152,352	-
12.800	Air Force Office of Scientific Research	Florida State Univ	FSU Subaward No. R01747	(55,295)	-
12.800	Air Force Office of Scientific Research	Indiana Univ	8422	84,629	-

Subaward #30731-05215-S01

Syracuse University

52,527

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance List	ting		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developmen					
Pass-through from other so	ources:				
12.800	Air Force Office of Scientific Research	Univ of North Texas	GF70077-1	22,402	-
12.800	Air Force Office of Scientific Research	Univ of Washington	UWSC11423	231,663	-
12.800	Air Force Office of Scientific Research	University of California, Santa Barbara	Subaward #KK1911	623,310	-
12.800	Air Force Office of Scientific Research	University of Central Florida	24086226-03	348,553	-
12.800	Air Force Research Laboratory	Mile Two LLC	6778-S001	56,661	-
12.800	United States Air Force	National Center for Defense Manufacturing and Machining	Agreement dated May 10, 2019	399,710	189,903
12.800	United States Air Force	National Center for Defense Manufacturing and Machining	PO 20210057	141,237	-
12.800	United States Air Force	National Center for Defense Manufacturing and Machining	Purchase Order: 20210103	20,471	-
12.910	Defense Advanced Research Projects Agency	The Research Institute at Nationwide Children's Hospital	710063-0921-00	8,799	-
12.RD	Air Force Office of Scientific Research	Innoveering, LLC.	Agmt. dated 3/11/19	109,967	-
12.RD	Air Force Office of Scientific Research	Srico, Inc	Subcontract No. 20042OSUB	17,699	-
12.RD	Air Force Office of Scientific Research	Ubihere	Agreement Dated 4/6/2021	15,156	-
12.RD	Air Force Office of Scientific Research	Univ of Tennessee	Subaward #A-19-0503-S001	121,395	-
12.RD	Air Force Research Laboratory	Applied Impulse Incorporated	Agmt. signed 1/19/2021	16,411	-
12.RD	Air Force Research Laboratory	ARCTOS Technology Solutions, LLC	142411-16F2639-20-53-C5	5,988	-
12.RD	Air Force Research Laboratory	ARCTOS Technology Solutions, LLC	155231-185296-20-10-C1	4,368	-
12.RD	Air Force Research Laboratory	ARCTOS Technology Solutions, LLC	Sub#142411-0000003-19-02-C10	56,985	-
12.RD	Air Force Research Laboratory	ARCTOS Technology Solutions, LLC	Sub. 142411-16F2639-19-48-C5	1,636	-
12.RD	Air Force Research Laboratory	Asymmetric Technologies, LLC	Agreement dated 01/13/2021	13,797	-
12.RD	Air Force Research Laboratory	Battelle Memorial Inst	PO# US001-0000760708	43,262	-
12.RD	Air Force Research Laboratory	Battelle Memorial Inst	Subcontract No. 800978	24,138	-
12.RD	Air Force Research Laboratory	Battelle Memorial Inst	US001-0000739246	5,666	-
12.RD	Air Force Research Laboratory	Battle Sight Technologies LLC	Subagreement dated 1/14/21	21,832	-
12.RD	Air Force Research Laboratory	Bloodstone Division	Agreement dated 05/11/2021	427	-
12.RD	Air Force Research Laboratory	CAL Analytics, LLC	CAL-AP-OSU-001	23.363	_
12.RD	Air Force Research Laboratory	Centauri, Inc	1923.01.12.91	84.562	_
12.RD	Air Force Research Laboratory	Centauri, Inc	Subcontract Number: 10826.001.120-01	17.686	_
12.RD	Air Force Research Laboratory	Defense Engineering Corporation	P.O. No. 10371	45,321	_
12.RD	Air Force Research Laboratory	EDAptive Computing, Inc	SETS03-OSU-2017	7.272	_
12.RD	Air Force Research Laboratory	Electric Power Systems	Agreement dated 03/29/2021	15,106	-
12.RD	Air Force Research Laboratory	Elysian Labs	No Award Number	34.067	-
12.RD	Air Force Research Laboratory	GeneSiC Semiconductor Inc.	Agreement Dated 04/02/2020	144,173	_
12.RD	Air Force Research Laboratory	Infinity Labs LLC	Subcontract #OSU-20-001	31,183	_
12.RD	Air Force Research Laboratory	Infinity Labs LLC	Subcontract #OSU-20-001	53,334	-
12.RD	Air Force Research Laboratory	Infinity Labs LLC	Subcontract #OSU-20-003	5,443	
12.RD	Air Force Research Laboratory	Innovative Scientific Solutions Inc	Subcontract No./PO SB20254	39,834	
12.RD	Air Force Research Laboratory	Kitware. Inc	Subcontract # K003177-00-S01	28.970	_
12.RD	Air Force Research Laboratory	Metron, Inc.	6G50-OSU	47,507	
12.RD	Air Force Research Laboratory	Metron, Inc.	6H12-OSU	(389)	
12.RD	Air Force Research Laboratory	Metron, Inc.	6H65-OSU	48,635	-
12.RD	Air Force Research Laboratory	Nimbis Services. Inc.	Nimbis-F-1068-OSU	(3,144)	_
12.RD 12.RD	Air Force Research Laboratory	Nimbis Services, Inc.	NIMBIS-F-1605-OSU	(3, 144)	-
12.RD	Air Force Research Laboratory	Nimbis Services, Inc.	Nimbis-F-1894-OSU	29,738	-
12.RD	Air Force Research Laboratory	Northrop Grumman Corp	7500166772	706.895	-
12.RD 12.RD	Air Force Research Laboratory	Parallax Advanced Research Corporation	Basic Ordering Agreem:1076-OSU	81,724	-
IZ.ND	All 1 Olde Nescaldi Laboratury	i alaliax Auvaliceu Nescaluli Culpulatiuli	Dasic Ordening Agreem. 1070-030	01,124	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listi	ing		Additional Award	Federal	Expenditure
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipie
and Davelenmen	at Cluster				
and Developmer ough from other so					
ough from other so	ources.				
12.RD	Air Force Research Laboratory	Peraton	PO18-05518	(2,063)	
12.RD	Air Force Research Laboratory	Polaris Semiconductor	Agmt. signed 12/14/2020	21,614	
12.RD	Air Force Research Laboratory	PreTalen	PO: Omega-OSU	40,052	
12.RD	Air Force Research Laboratory	Radiance Technologies, Inc.	21S-0492	21,074	
12.RD	Air Force Research Laboratory	Riverside Research Institute	PO 00173	(1,544)	
12.RD	Air Force Research Laboratory	SciFi Innovations, LLC	Agreement Dated 04/20/2020	(4,371)	
12.RD	Air Force Research Laboratory	SciFi Innovations, LLC	Agreement Dated 10/30/2020	157,637	
12.RD	Air Force Research Laboratory	SenselCs Ltd.	Agreement Date 04/22/2020	71,756	
12.RD	Air Force Research Laboratory	SK Infrared	Agreement Dated 10/29/2020	123,369	
12.RD	Air Force Research Laboratory	SolAero Technologies, Corp.	Subaward PO #S000009670	30,546	
12.RD	Air Force Research Laboratory	Tangram Flex, Inc.	122 01 OSU	26,211	
12.RD	Air Force Research Laboratory	TeraProbes Inc	Agreement Dated 08/24/2020	27,001	
12.RD	Air Force Research Laboratory	Terves Inc.	Agmt. signed 1/4/2021	28.068	
12.RD	Air Force Research Laboratory	Trelleborg Group	PO TTI-8893	199.972	
12.RD	Air Force Research Laboratory	Ubihere	Agreement signed 1/09/2020	7,847	
12.RD	Air Force Research Laboratory	UES Inc	S-136-030-002	1.491	
12.RD	Air Force Research Laboratory	UES Inc	Sub. No: S-162-17-MR001	(3,659)	
12.RD	Air Force Research Laboratory	UES Inc	Subcontract # S-111-04C-001	(8)	
12.RD	Air Force Research Laboratory	UES Inc	Subcontract No. S-111-075-001	88,036	
12.RD	Air Force Research Laboratory	Univ of Cincinnati	PO # L20-4500114283	157,524	
12.RD	Air Force Research Laboratory	Univ of Dayton	Subcontract No. RSCI9040	149,358	
12.RD	Air Force Research Laboratory	Univ of Florida	SUB00002439	248,309	
12.RD	Air Force Research Laboratory	Univ of Florida	Subcontract No. SUB00001879	41,483	
12.RD	Air Force Research Laboratory	Wright State Univ	670956-1	309,045	
12.RD	Air Force Research Laboratory	Wright State Univ	Subaward No. 670956-1	166,567	
12.RD	Air Force Research Laboratory	Wyle Laboratories	APSC02189/A10522-0013-S006	255,986	
12.RD	Air Force Research Laboratory	Wyle Laboratories	PO APSC02183	233,300	
12.RD	Air Force Research Laboratory	Wyle Laboratories	PO LX09000006	127,719	
12.RD	Army Contracting Command	Environmental Tectonics Corporation	W911W6-17-C-0011	(41,042)	
12.RD	Army Contracting Command	MRIGlobal	769-111118-2	908.346	
12.RD	Army Contracting Command Army Contracting Command	MRIGlobal	792-111118-3	1,039,559	5
12.RD	Army Contracting Command	Potomac Research LLC	W31P4Q-20-C-0003	149,801	J
12.RD	Army Contracting Command	SK Infrared	W909MY-20-C-0002	23,822	
12.RD	Army Medical Research Acquisition Activity	Moffitt (H Lee) Cancer Center and Research Institute	MCC #19117/W81XWH-16-1-0385	23,822	
12.RD	Army Medical Research Acquisition Activity	Switchbox Inc.	Agreement dated April 6, 2021	86,117	
12.RD 12.RD	Army Medical Research and Materiel Command	Switchbox Inc.	STTR sub USAMRAA 7.7.2020	220,147	
12.RD 12.RD	•	BeeHex	W911QY19C0019	5.184	
	Army Natick Research, Development and Engineering Center			-,	
12.RD	Army Research Development and Engineering Command	Univ of Southern California	129757814 PO# T7156	46,238	
12.RD	Army Research, Development and Engineering Command	Terves Inc.	140D6319C0040	90,422	
12.RD	Defense Advanced Research Projects Agency	Am Sustainable Rubber Company		41,306	
12.RD	Defense Advanced Research Projects Agency	Battelle Memorial Inst	PO #US001-0000749093	11,541	
12.RD	Defense Advanced Research Projects Agency	EnergyEne	140D6319C0034	25,142	
12.RD 12.RD	Defense Advanced Research Projects Agency	Profusa, Inc.	Agmt. signed 5/21/19	(5,348)	
12 RH	Defense Advanced Research Projects Agency	SRI International	40163	25.700	

Assistance List	ting		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developme	nt Cluster —				
Pass-through from other s	ources:				
12.RD	Defense Health Agency	Unveil, LLC	W81XWH-18-C-0151	42,048	-
12.RD	Defense Threat Reduction Agency	AwareAbility, LLC	HDTRA121P0004	33,496	-
12.RD	Naval Air Systems Command	Corrdesa LLC	Subcontract dated 03/09/2020	150,481	-
12.RD	Naval Air Warfare Center Aircraft Division	Battelle Memorial Inst	Subcontract No. 738452	32,109	-
12.RD	Naval Air Warfare Center Aircraft Division	Combustion Research and Flow Technology, Inc.	18-C-0595/C743	51,508	-
12.RD	Naval Air Warfare Center Aircraft Division	Hepburn and Sons LLC	N68335-18-C-0709-OSU	59,839	-
12.RD	Naval Air Warfare Center Aircraft Division	Technical Data Analysis, Inc.	2078-002-03	40,037	-
12.RD	Office of Naval Research	Advanced Technology International	2020-356	113,701	25,000
12.RD	Office of Naval Research	Akadio, Inc	Subcontract No. 1001-2019	(2,152)	-
12.RD	Office of Naval Research	Etegent Technologies, Ltd.	ETE.20.NAV.STTR.MSG.01	42,900	-
12.RD	United States Air Force	3D Aerial Solutions, LLC	FA875119CA032	(22,151)	-
12.RD	United States Air Force	Azimuth Corporation	238-5404-OSU / PO 238012079	67,653	-
12.RD	United States Air Force	GhostWave	PO No. 1003	18,209	_
12.RD	United States Air Force	IntelliGenesis, LLC	S022UN0012	14,863	_
12.RD	United States Air Force	Massachusetts Inst Tech - Lincoln Lab	7000488854	57,729	_
12.RD	United States Air Force	Metron, Inc.	6H33-OSU	30.083	_
12.RD	United States Air Force	Parallax Advanced Research Corporation	11186-011	129,678	110,000
12.RD	United States Air Force	United Aircraft Technologies, Inc	12/18/2020	35,648	-
12.RD	United States Army	Battelle Memorial Inst	US001-0000735023	7,555	_
12.RD	United States Army	Concepts to Systems Inc.	C18-05	90,545	_
12.RD	United States Army	MV2, LLC	11/15/2019	41,181	_
12.RD	United States Army	SK Infrared	Agreement dated 01/23/2020	95,996	_
12.RD	United States Army	Triton Systems, Inc.	TSI-2557-18-108453	135,932	_
12.RD	United States Army	Triton Systems, Inc.	TSI-2703-20-20203163	24,939	_
12.RD	United States Navy	Innoveering, LLC.	5208-01	36,015	_
12.RD	United States Navy	Intelligent Automation, Inc	Subcontract No. 2519-1	(1,537)	_
12.RD	United States Navy	MV2, LLC	12/04/2019	3,931	_
12.RD	United States Special Operations Command	Technology Service Corporation	PO 206001	37,402	_
12.RD	US Department of Defense	Arizona State Univ	ASUB00000588	129,954	_
12.RD	US Department of Defense	BWX Technologies, Inc	RMRX068700	62.654	_
12.RD	US Department of Defense	Global Res & Dev Inc	PO# 1900031G	208.344	_
12.RD	US Department of Defense	Lanterman Group	Agreement Dated 12/17/2020	72,160	-
	Total Department of Defense Pass-Through Awards			15,315,175	403,227
Department of Herrian	and Heben Davidsonners				
Department of Housing a 14.900	US Department of Housing and Urban Development	Columbia University	1(GG015202-01)	86,733	
14.900 14.RD		•	· · ·	•	-
14.RD	US Department of Housing and Urban Development	Abt Associates Inc	SUBK 50425 / DU204SA-14-C-01	14,677	-
	Total Department of Housing and Urban Development Pa	ass-Through Awards		101,410	-
Department of the Interio	or				
15.615	US Fish and Wildlife Service	OH Division of Wildlife	Agreement dated 07/08/2020	23,696	-
15.634	US Fish and Wildlife Service	OH Division of Wildlife	Agreement datd 06/19/2020	10,042	-
15.634	US Fish and Wildlife Service	OH Division of Wildlife	Agreement dated 02/12/2018	62,344	-

Part	Assistance Lis	ting		Additional Award	Federal	Expenditures
Pass through from other sources	Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Pass through from other sources						
15.614	•					
15.534 US Pilla and Wildlife Service	Pass-through from other's	sources:				
15.054 U.S. Fish and Wildlife Service Clicelond Metragan's Agreement dised DISC1119 173.036 1.0	15.634	US Fish and Wildlife Service	OH Division of Wildlife	Agreement Dated 05/28/2020	924,062	-
15.882 US Finis and Wildliff Service Cleveland Metroparks Agreement dated 11/10/200 1.064 1.064 1.064 1.064 1.065	15.634	US Fish and Wildlife Service	OH Division of Wildlife	Agreement dated 06/14/2018	15,900	-
15.005 US Genogael Survey University of Illinois 07808-7-1714 8.356 3.1765 1.565 1.565 US Genogael Survey University of Illinois 07808-7-1824 3.1765 3.276	15.634	US Fish and Wildlife Service	OH Division of Wildlife	Agreement dated 08/21/19	173,936	-
15.805	15.662	US Fish and Wildlife Service	Cleveland Metroparks	Agreement dated 11/10/2020	1,064	-
15.805	15.805	US Geological Survey	University of Illinois	078687-15714	8,356	-
15.925 National Park Service Ohio Historical Solacely G-93091 6368 6 6 6 6 6 6 6 6 6	15.805	US Geological Survey	University of Illinois	078687-17894	31,785	-
Page	15.925		Ohio Historical Society	Agreement dated 03/15/2018	12,235	-
	15.945	US Department of the Interior	Colorado State Univ	G-93601	936	-
Pagatiment of Justice	15.RD	Bureau of Land Management	USDA Forest Service	16-JV-11221637-045	3,313	-
16.300 Office of Justice Programs		Total Department of the Interior Pass-Through Awards			1,267,669	
16.300 Office of Justice Programs						
16.575 US Department of Justice Olio Office of Alborney General 2021-VOCA-134146994 1.354,405 2.6		Office of Justice Programs	Salvation Army	2018 VT RY K025 OSLI	28.010	
Total Department of Justice Pass-Through Awards		•	•		·	-
Pages		•	•			-
Popartment of State					· 	
19.011 US Department of State		Total Department of Justice Pass-Through Awards			1,500,421	-
19.019	Department of State					
19.040 US Department of State Univ of Nebraska 45-2402-1031-307 71,159 13,000 19.900 US Department of State American Councils for International Education SKZ10017GRZ18 (2,665) - 7 15,386 13,000 15,3	19.011	US Department of State	Institute of International Education	3000201082	3,610	-
19.900	19.019	US Department of State	Univ of Georgia	SUB00002268	43,245	-
Department of Transportation	19.040	US Department of State	Univ of Nebraska	45-2402-1031-307	71,159	13,000
Department of Transportation	19.900	US Department of State	American Councils for International Education	SKZ10017GR218	(2,626)	-
20.RD Federal Highway Administration OH Dept of Transportation 34877 52,928 - 20.200 Federal Highway Administration Oklahoma State University 1-578560-Ohio State 9,110 - 20.200 Federal Highway Administration South Dakota School of Mines & Technology SDSMT-OSU 20-02 17,007 27 20.200 US Department of Transportation National Academy of Sciences HR 20-05/51-14 2,171 - 20.701 US Department of Transportation Carnegie-Mellon Univ 1080376-379207 224,229 - 20.RD Federal Aviation Administration National Academy of Sciences ACRP A06-07 90,946 78,175 20.RD Federal Aviation Administration Univ of Maryland 80897-29413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-29640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc		Total Department of State Pass-Through Awards			115,388	13,000
20.RD Federal Highway Administration OH Dept of Transportation 34877 52,928 - 20.200 Federal Highway Administration Oklahoma State University 1-578560-Ohio State 9,110 - 20.200 Federal Highway Administration South Dakota School of Mines & Technology SDSMT-OSU 20-02 17,007 27 20.200 US Department of Transportation National Academy of Sciences HR 20-05/51-14 2,171 - 20.701 US Department of Transportation Carnegie-Mellon Univ 1080376-379207 224,229 - 20.RD Federal Aviation Administration National Academy of Sciences ACRP A06-07 90,946 78,175 20.RD Federal Aviation Administration Univ of Maryland 80897-29413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-29640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc	Department of Transpor	tation				
20.200 Federal Highway Administration South Dakota School of Mines & Technology SDSMT-OSU 20-02 17,007 27 20.200 US Department of Transportation National Academy of Sciences HR 20-05/51-14 2,171 - 20.701 US Department of Transportation Carnegie-Mellon Univ 1080376-379207 224,229 - 20.RD Federal Aviation Administration National Academy of Sciences ACRP A06-07 90,946 78,175 20.RD Federal Aviation Administration Univ of Maryland 80897-29413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-29640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administrati			OH Dept of Transportation	34877	52,928	_
US Department of Transportation National Academy of Sciences HR 20-05/51-14 2,171 - 20.701 US Department of Transportation Carnegie-Mellon Univ 1080376-379207 224,229 - 20.RD Federal Aviation Administration National Academy of Sciences ACRP A06-07 90,946 78,175 20.RD Federal Aviation Administration Univ of Maryland 80897-Z9413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-Z9640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21117 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 -	20.200	Federal Highway Administration	Oklahoma State University	1-578560-Ohio State	9,110	-
20.701 US Department of Transportation Carnegie-Mellon Univ 1080376-379207 224,229 - 20.RD Federal Aviation Administration National Academy of Sciences ACRP A06-07 90,946 78,175 20.RD Federal Aviation Administration Univ of Maryland 80897-29413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-29640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 6933,J919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21101 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #2175 106,785 - 20.RD National Highway	20.200	Federal Highway Administration	South Dakota School of Mines & Technology	SDSMT-OSU 20-02	17,007	27
20.RD Federal Aviation Administration National Academy of Sciences ACRP A06-07 90,946 78,175 20.RD Federal Aviation Administration Univ of Maryland 80897-Z9413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-Z9640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21107 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 (567) -	20.200	US Department of Transportation	National Academy of Sciences	HR 20-05/51-14	2,171	-
20.RD Federal Aviation Administration Univ of Maryland 80897-Z9413201 35,199 - 20.RD Federal Aviation Administration Univ of Maryland 92608-Z9640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21107 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19	20.701	US Department of Transportation	Carnegie-Mellon Univ	1080376-379207	224,229	-
20.RD Federal Aviation Administration Univ of Maryland 92608-Z9640201 85,657 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 17786; 693JJ919F000063 79,021 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 (567) -	20.RD	Federal Aviation Administration	National Academy of Sciences	ACRP A06-07	90,946	78,175
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21107 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	Federal Aviation Administration	Univ of Maryland	80897-Z9413201	35,199	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO #21115 47,614 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21107 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	Federal Aviation Administration	Univ of Maryland	92608-Z9640201	85,657	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO 21101 178,553 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO21117 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	17786; 693JJ919F000063	79,021	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000084 - PO21117 129,180 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	20F000084 - PO #21115	47,614	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 20F000085 - PO 21275 106,785 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	20F000084 - PO 21101	178,553	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc 693JJ919F000063 435,311 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	20F000084 - PO21117	129,180	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. dated 6/5/19 4,681 - 20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	20F000085 - PO 21275	106,785	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agmt. signed 8/21/19 (567) -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	693JJ919F000063	435,311	-
	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	Agmt. dated 6/5/19	4,681	-
20.RD National Highway Traffic Safety Administration Transportation Res Ctr Inc Agreement dated 6/24/2020 208,760 -	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	Agmt. signed 8/21/19	(567)	-
	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	Agreement dated 6/24/2020	208,760	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Assistance Listin Number	g Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research	and Development	Cluster —				
	ugh from other sou					
	00.00	Notice all links are Traffic Cofets Administration	Towns at the Dec Oh les	DTNI 100440D000001	54.404	
	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	DTNH2213D00296L	54,184	-
	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	PO 16496	16,024	-
	20.RD 20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	PO 20785 PO 21116	138,063 96,555	-
	20.RD 20.RD	National Highway Traffic Safety Administration National Highway Traffic Safety Administration	Transportation Res Ctr Inc	PO 21116 PO 21628	286,782	-
	20.RD 20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc Transportation Res Ctr Inc	PO# 16368	420	-
	20.RD	National Highway Traffic Safety Administration	Transportation Res Ctr Inc	Subcontract No. 0001	88,576	-
	20.ND	National riighway Tranic Salety Administration	Transportation Res Cti Inc	Subcontract No. 000 I	66,376	-
		Total Department of Transportation Pass-Through Awards			2,387,189	78,202
Departme	nt of Treasury					
	21.019	COVID-19 Dept of Treasury	Cols Recreation and Parks	Agreement dated 7/24/2020	83,058	-
	21.019	COVID-19 Dept of Treasury	OH Dept of Administrative Services	Agreement dated 03/17/2021	32,618	-
	21.019	COVID-19 Dept of Treasury	OH Dept of Health	Contract 45502	268,875	94,192
	21.019	COVID-19 Dept of Treasury	OH Dept of Health	SOW dated 06/12/2020	448,766	16,758
	21.019	COVID-19 Dept of Treasury	OH Environ Protection Agency	OSU-FDCARES20	1,345,238	413,975
		Total Department of Treasury Pass-Through Awards			2,178,555	524,925
General S	ervices Administ	ration				
General G	39.RD	General Services Administration	Perduco Group Inc.	Subcontract No. 10060.2019.019	188,691	-
		Total General Services Administration Pass-Through Awards			188,691	
		-				
National A		Space Administration				
	43.001	National Aeronautics and Space Administration	Iowa State Univ	023570A	27,185	-
	43.001	National Aeronautics and Space Administration	Jet Propulsion Lab	1613807	76,863	-
	43.001	National Aeronautics and Space Administration	Jet Propulsion Lab	1653653	18,052	-
	43.001	National Aeronautics and Space Administration	Jet Propulsion Lab	RSA No. 1662653	3,409	-
	43.001	National Aeronautics and Space Administration	Jet Propulsion Lab	Subcontract No. 1612834	32,885	-
	43.001	National Aeronautics and Space Administration	Planetary Science Institute	1724-OSU	114,365	-
	43.001	National Agronautics and Space Administration	Stevens Institute of Technology	2103094-01	63,024	-
	43.001	National Aeronautics and Space Administration	Univ of New Hampshire	18-002	59,521	-
	43.001	National Agrangation and Space Administration	Univ of Washington	UWSC10585 1633215	65,068	-
	43.001 43.001	National Aeronautics and Space Administration Headquarters	Jet Propulsion Lab	1642038	120,453 10,993	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Jet Propulsion Lab Jet Propulsion Lab	1655919	223,696	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Jet Propulsion Lab Jet Propulsion Lab	1658378	5,497	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Jet Propulsion Lab Jet Propulsion Lab	RSA No. 1620447	5,497 9,718	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Jet Propulsion Lab	Subcontract No. 1651100	109,591	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Smithsonian Astrophysical Observatory	AR0-21006X	30,287	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Smithsonian Astrophysical Observatory Smithsonian Astrophysical Observatory	GO0-21006X GO0-21077X	12,200	-
	43.001	National Aeronautics and Space Administration Headquarters National Aeronautics and Space Administration Headquarters	Smithsonian Astrophysical Observatory Smithsonian Astrophysical Observatory	GO8-19003X	27,346	-
	43.001	National Aeronautics and Space Administration Readquarters National Aeronautics and Space Administration Headquarters	Smithsonian Astrophysical Observatory Smithsonian Astrophysical Observatory	GO9-20084X	14,727	-
	43.001	National Aeronautics and Space Administration Headquarters	Univ of Chicago	AWD101560 (SUB00000390)	47,469	-
		•		*		

Assistance Lis	-		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developme	ent Cluster —				
Pass-through from other s					
43.001	National Aeronautics and Space Administration Headquarters	Univ of Chicago	AWD101921 (SUB00000466)	17,400	-
43.001	National Aeronautics and Space Administration Headquarters	Univ of North Carolina	579580-19-01	12,695	-
43.001	National Aeronautics and Space Administration Headquarters	Univ of Texas at Austin	UTA19-000194	3,348	-
43.001	National Aeronautics and Space Administration Headquarters	University of California at San Diego	702501 (frmrly 107690251)	72,460	-
43.001	National Aeronautics and Space Administration Headquarters	University of Hawaii	MA 1529	145,073	-
43.002	National Aeronautics and Space Administration Headquarters	University of Illinois	Subaward No. 097265-17593	47,222	-
43.007	National Aeronautics and Space Administration	University of Illinois	099371-17915	125,268	-
43.009	National Aeronautics and Space Administration	Univ of Michigan	3004441341	53,149	-
43.RD	National Aeronautics and Space Administration	Astrobotic Technology, Inc.	Subcontract Agrmt dtd 10/10/19	3,088	-
43.RD	National Aeronautics and Space Administration	Georgia Inst of Tech	Subcontract No. D9015-S1	311,196	-
43.RD	National Aeronautics and Space Administration	Paragon TEC	Eff 3/01/2021	3,414	-
43.RD	National Aeronautics and Space Administration	SK Infrared	Agmt. signed 9/19/19	149,458	-
43.RD	National Aeronautics and Space Administration	Univ of Michigan	3002485425	194,021	-
43.RD	National Aeronautics and Space Administration	Univ of Michigan	SUBK00012168	128,899	-
43.RD	National Aeronautics and Space Administration Headquarters	Astrobotic Technology, Inc.	Agreement Dated 08/18/2020	100,423	-
43.RD	National Aeronautics and Space Administration Headquarters	BWX Technologies, Inc	PO# 5100008956	90,420	-
43.RD	National Aeronautics and Space Administration Headquarters	HX5, LLC	OSU20D03 OSU-0090	102,424	-
43.RD	National Aeronautics and Space Administration Headquarters	HX5, LLC	OSU20D03 OSU-0179	120,752	-
43.RD	National Aeronautics and Space Administration Headquarters	HX5, LLC	OSU20D03 OSU-0230	42,636	-
43.RD	National Aeronautics and Space Administration Headquarters	HX5, LLC	OSU20D03 OSU-0235	94,754	-
43.RD	National Aeronautics and Space Administration Headquarters	Hyper Tech Res Inc	PO # 200114H	17,871	-
43.RD	National Aeronautics and Space Administration Headquarters	Hyper Tech Res Inc	PO1800080H	(30,865)	-
43.RD	National Aeronautics and Space Administration Headquarters	N&R Engineering and Management Services Corporation	Subcontract No. 80NSSC20C0441	33,348	-
43.RD	National Aeronautics and Space Administration Headquarters	SK Infrared	80NSSC19C0142	54,892	-
43.RD	National Aeronautics and Space Administration Headquarters	Solid Material Solutions, LLC	PO #221	9,341	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	HST-GO-14697.001-A	4,072	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	HST-GO-14708.001-A	11,546	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	HST-GO-15126.006-A	8,863	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	HST-GO-15269.004-A	8,985	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	HST-GO-15312.001-A	29,455	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	HST-HF2-51422.001-A	98,639	-
43.RD	National Aeronautics and Space Administration Headquarters	Space Telescope Sci Inst	PRELIMINARY AWARD	31,397	-
	Total National Aeronautics and Space Administration Pass-T	hrough Awards		3,167,993	-
National Endowment for	the Humanities				
45.129	National Endowment For The Humanities	OH Humanities Council	QU20-066	5,000	-
45.161	National Endowment For The Humanities	University of Oregon	238910A	496	-
	Total National Endowment for the Humanities Pass-Through	Awards		5,496	-
National Science Found	ation				
47.041	National Science Foundation Div of Electrical, Communications a	and Carnegie-Mellon Univ	1123419-425123	64,714	_
47.041	National Science Foundation Div of Electrical, Communications a	S .	800009055-01UG	36,270	-
47.041	National Science Foundation Div of Electrical, Communications a	•	2020-2503-01	5,315	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance L	isting		Additional Award	Federal	Expenditures
Numbe	r Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
	10.				
Research and Developn Pass-through from other					
ass-through from other	sources.				
47.041	National Science Foundation Div of Engineering Education and Ce	en Campbell University	Subaward No. 88093-01	15,701	_
47.041	National Science Foundation Div of Engineering Education and Ce	•	0812348 / 260116E	7.751	_
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transpo	,	SUB0000352	42,617	-
47.041	COVID-19 NSF Div of Chemical, Bioengineering, Environmental, a		M2002838	9,021	-
47.041	NSF Div of Chemical, Bioengineering, Environmental, and Transpo		SUB00001935	71,241	_
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation	Univ of Florida	UFDSP00011627	22.540	_
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation	Univ of Michigan	SUBK00013115	16.924	_
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation	Univ of New Hampshire	L0009	35,834	_
47.041	NSF Division of Civil, Mechanical and Manufacturing Innovation	Virginia Polytechnic Inst	479597-19074	1.467	_
47.041	NSF Division of Industrial Innovation and Partnerships	AwareAbility, LLC	Agmt. dated 8/25/2020	35,000	_
47.041	NSF Division of Industrial Innovation and Partnerships	AwareAbility, LLC	Agreement dated 5/28/2019	13,257	
47.041	COVID-19 NSF Division of Industrial Innovation and Partnerships	Dynamic Entropy Technology LLC	2032325	109,445	_
47.041	NSF Division of Industrial Innovation and Partnerships	Polaris Semiconductor	Agreement dated 8/22/19	34.281	-
47.041	National Science Foundation	Washington Univ	WU-19-426	11.881	-
47.049 47.049	National Science Foundation National Science Foundation Directorate Mathematical & Physical	S .	0000000296	28,185	-
47.049 47.049	•		BL-4824906-OSU	·	-
	National Science Foundation Div of Chemistry	Indiana Univ		(1,095)	-
47.049	National Science Foundation Div of Chemistry	University of California at San Diego	109972733	145,030	-
47.049	National Science Foundation Div of Materials Research	Case Western Reserve Univ	Subaward No. RES512787	5,436	-
47.049	National Science Foundation Div of Materials Research	Univ of Virginia	GA11202.PO#2296796	9,801	-
47.049	National Science Foundation Div of Physics	Cornell University	79433-20681	155,936	-
47.049	National Science Foundation Div of Physics	Indiana Univ	8057-OSU	67,366	-
47.049	National Science Foundation Div of Physics	Princeton Univ	SUB0000180	29,790	-
47.050	National Science Foundation	Yale Univ	GR111056 (CON-80002620)	1,314	-
47.050	National Science Foundation Directorate for Geosciences	Univ of Minnesota	A007467501	319,608	-
47.050	National Science Foundation Directorate for Geosciences	Univ of North Carolina	577910-18-04	31,895	-
47.050	National Science Foundation Directorate for Geosciences	Univ of Texas at Arlington	1261006430-61	2,400	-
47.050	National Science Foundation Div of Earth Sciences	Univ of Southern California	131486671	24,386	-
47.050	National Science Foundation Div of Ocean Sciences	Bowling Green State University	10010192-OSU03	45,135	-
47.050	National Science Foundation Div of Ocean Sciences	Columbia University	61 (GG009393)	7,282	-
47.050	National Science Foundation Div of Ocean Sciences	Univ of Michigan	3004293394	(1,998)	-
47.050	National Science Foundation Div of Ocean Sciences	Univ of Texas at Arlington	12610057761	4,680	-
47.050	National Science Foundation Division of Polar Programs	Univ of Kentucky	3200002642-20-206	104,929	-
47.070	National Science Foundation	Iowa State Univ	022698A	29,065	-
47.070	National Science Foundation	University of California - Santa Cruz	A21-0568-S001	5,769	-
47.070	National Science Foundation Directorate for Computer & Info Scien	nc Georgia Inst of Tech	Subaward No. RJ338-G1	67,336	-
47.070	National Science Foundation Directorate for Computer & Info Scien	nc Univ of California-Davis	A18-1014-S001	33,285	-
47.070	National Science Foundation Div of Computer and Network System	ns New York University	F8637-01	9,315	-
47.070	National Science Foundation Div of Computer and Network System	ns Univ of Texas at Austin	Subaward #UTA18-001575	92,280	-
47.070	National Science Foundation Div of Computer and Network System	ns Univ of Texas at El Paso	226101015A	1,235	-
47.070	National Science Foundation Div of Computing & Communication F	Fc Cornell University	72954-10868	30,859	-
47.070	National Science Foundation Div of Human Resource Developmen	•	226100998C	134,886	_
47.070	National Science Foundation Div of Information and Intelligent Sys		574077	216,355	-
47.070	National Science Foundation Div of Information and Intelligent Sys	•	GA11337.PO #2172525	24,376	_
47.070	National Science Foundation Div of Information and Intelligent Sys	3	KR 703903	40.984	_
47.070	National Science Foundation Div of Information and Intelligent Sys	•	17842	41,858	

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance List	ting		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developme	nt Cluster —				
Pass-through from other s					
47.070	National Science Foundation Division of Advanced Cyberinfrastru	ctı Univ of Texas at Austin	UTA19-001210	669.521	_
47.070	National Science Foundation Division of Advanced Cyberinfrastru		083842-16111	122,427	7,401
47.070	National Science Foundation Division of Advanced Cyberinfrastru	•	479590-19074	51,309	-
47.070	National Science Foundation Office of Cyberinfrastructure	Ohio University	UT21727	60,654	-
47.070	National Science Foundation Office of Cyberinfrastructure	Univ of Texas at Austin	UTA17-001232	116.626	_
47.070	National Science Foundation Office of Cyberinfrastructure	Washington Univ	WU-17-373	109,375	_
47.070	NSF Division of Industrial Innovation and Partnerships	Wright State Univ	Subaward No. 669871-1	12.033	_
47.074	National Science Foundation	Univ of Wyoming	1004496-OSU	98,030	-
47.074	National Science Foundation Directorate for Biological Sciences	Univ of Tennessee	A16-0172-S001	16,112	_
47.074	National Science Foundation Div of Biological Infrastructure	Northern Arizona University	1003017-05	4.642	_
47.074	National Science Foundation Div of Biological Infrastructure	Purdue Univ	10001564-007	4,245	_
47.074	National Science Foundation Div of Integrative Organismal Biolog		3TC341	72,655	_
47.074	National Science Foundation Div of Molecular & Cellular Bioscien	,	24303-O	(136)	
47.075	National Science Foundation	Univ of Chicago	AWD101236 (SUB00000297)	33,305	
47.075	National Science Foundation Dir Social, Behavioral & Economic S	ů .	FP043343-02-D	1,007	
47.075	National Science Foundation Div of Behavioral & Cognitive Science	~	Agreement No.OSU-1	3,464	_
47.075 47.075	National Science Foundation Div of Behavioral & Cognitive Science		25-6238-0905-005	4,316	-
47.075 47.075	National Science Foundation Div of Social & Economic Sciences	Arizona State Univ	16-803	·	-
47.075 47.075	National Science Foundation Div of Social & Economic Sciences National Science Foundation Div of Social & Economic Sciences	Nat Bur Econ Res	36390.00.00.00.7700	(1,127) 25,438	-
				·	-
47.075	COVID-19 National Science Foundation Div of Social & Economic	•	60057021	24,067	-
47.075	National Science Foundation Div of Social & Economic Sciences	Univ of Missouri	00069676-1	49,357	-
47.075	National Science Foundation Div of Social & Economic Sciences	Vanderbilt Univ	UNIV61100	13,003	-
47.076	National Science Foundation Directorate for Education & Human I	Ç	7031NSF1907	50,258	-
47.076	National Science Foundation Directorate for Education & Human I	•	Agreement effective 2/1/18	(20,718)	-
47.076	National Science Foundation Directorate for Education & Human I	•	Agreement dated 12/21/2018	23,997	-
47.076	National Science Foundation Div of Human Resource Developme	•	Agreement dated 5/12/2020	47,101	-
47.076	National Science Foundation Div of Human Resource Developme		IN4870703OSU	9,673	-
47.076	National Science Foundation Div of Human Resource Developme		FAR0025335	10,967	-
47.076	NSF Division of Research on Learning in Formal and Informal Set	•	2GF040	18,925	-
47.076	NSF Division of Research on Learning in Formal and Informal Set	· · · · · · · · · · · · · · · · · · ·	21-1507-6197-Ohio	4,027	-
47.RD	National Science Foundation	United States-Israel Binational Science Foundation	2018341	(1,986)	-
	Total National Science Foundation Pass-Through Awards			3,873,509	7,401
Department of Veterans	Affairs				
64.RD	Veterans Affairs	TechWerks	PRELIMINARY AWARD	12,259	-
	Total Department of Veterans Affairs Pass-Through Awards			12,259	-
Environmental Protection	n Agency				
66.001	Environmental Protection Agency	OH Environ Protection Agency	Agreement dated 06/22/2017	24,186	_
66.469	Environmental Protection Agency	Great Lakes Comsn	Award letter dated 12-4-17	(3)	_
66.469	Environmental Protection Agency	Huron River Watershed Council	Award agreement dated 5/31/18	2,847	2,712
66.469	Environmental Protection Agency	The Nature Conservancy	OSU-A106313-12/22-01	25.882	2,712
	3 ,	•		-,	-
66.469	Environmental Protection Agency	The University of Akron	2020-04	24,706	-

	Assistance List	_		Additional Award	Federal	Expenditures
	Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Resea	rch and Developmer	nt Cluster —				
Pass-tl	nrough from other so	purces:				
	66.509	Environmental Protection Agency	Meharry Medical College	170207PJ027-01	29,111	-
	66.808	Environmental Protection Agency	Solid Waste Authority Of Central Ohio	3D616	7,536	-
	66.RD	Environmental Protection Agency	Res Triangle Inst	5-312-021717-66000L	32,495	-
		Total Environmental Protection Agency Pass-Through A	wards		146,760	2,712
Donari	ment of Energy					
Depair	81.RD	US Department of Energy	Fermi National Accelerator Laboratory	656748	37,600	_
	81.RD	US Department of Energy	Fermi National Accelerator Laboratory	666765	8,070	
	81.RD	US Department of Energy	Lawrence Berkeley National Laboratory	7096915	147,237	107,088
	81.RD	US Department of Energy	Lawrence Berkeley National Laboratory	7505010	38,977	-
	81.049	DOE National Institute for Climatic Change Research	Hyper Tech Res Inc	PO #1900087H	(8,631)	_
	81.049	US Department of Energy	Cornell University	86840-11134	151,739	_
	81.049	US Department of Energy	Euclid Beamlabs, LLC	DE-SC0020693	52,976	_
	81.049	US Department of Energy	GeneSiC Semiconductor Inc.	Subaward signed dated 3/28/21	18,194	-
	81.049	US Department of Energy	GeneSiC Semiconductor Inc.	Subcontract signed 10/10/18	10,012	_
	81.049	US Department of Energy	Global Res & Dev Inc	PO #1600019G	5,143	-
	81.049	US Department of Energy	Hyper Tech Res Inc	PO # 200120H	58,970	-
	81.049	US Department of Energy	Hyper Tech Res Inc	PO# 1800151H	(21,451)	_
	81.049	US Department of Energy	Illinois State University	A21-0036-S003	7,350	-
	81.049	US Department of Energy	Louisiana State University	PO-000006515	251,246	_
	81.049	US Department of Energy	Michigan State Univ	RC107839-OSU	115,674	_
	81.049	US Department of Energy	Nexceris	Agreement Dated 07/20/2020	63,437	_
	81.049	US Department of Energy	Northwestern University	60057508 OSU	72,805	_
	81.049	US Department of Energy	Skuld LLC	Subagmt. signed 7/2/19	382	_
	81.049	US Department of Energy	Tech4Imaging LLC	Agreement signed 10/1/19	150,131	_
	81.049	US Department of Energy	Terves Inc.	PO T7366	39.987	-
	81.049	US Department of Energy	Univ of Florida	Subaward #UFDSP00012245	73,721	_
	81.049	US Department of Energy	Univ of Michigan	3001346248	23	-
	81.049	US Department of Energy	Univ of Michigan	SUBK00011106	89,241	_
	81.049	US Department of Energy	Univ of North Texas	GF70041-1	23,088	_
	81.049	US Department of Energy	Univ of Wisconsin	000000290	83,312	-
	81.049	US Department of Energy	University of California at San Diego	94967918	44,822	_
	81.049	US Department of Energy	XUV Lasers	Subcontract signed 10/20/2020	195,597	-
	81.049	US Department of Energy	XUV Lasers	Subcontract signed 9/11/19	2,789	-
	81.086	US Department of Energy	Arconic Corporation	DE-EE0007741	9,567	-
	81.086	US Department of Energy	Ford Motor Company	Subaward No AGC-RQ19-126R04	148,478	-
	81.086	US Department of Energy	General Motors Corp	PO 4300918868	41,725	-
	81.086	US Department of Energy	GeneSiC Semiconductor Inc.	Subaward dated 1/7/2020	(21,123)	-
	81.086	US Department of Energy	Lumileds	Agreement Dated 06/03/2020	48,934	-
	81.086	US Department of Energy	Nexceris	Agrmt dated 2-26-2019	151,997	-
	81.086	US Department of Energy	North Carolina State Univ	Subaward #2014-0654-77	12,629	-
	81.086	US Department of Energy	North Carolina State Univ	Subaward #2014-0654-80	115,250	-
	81.086	US Department of Energy	Stone Mountain Technologies Inc	5064-13781	108,412	-
	81.086	US Department of Energy	Toshiba Corporation	Subaward Agmt. dated 2/12/20	171,506	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance List	ting		Additional Award	Federal	Expenditu
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecip
and Developmer	nt Cluster				
ugh from other so					
agir iroin other se	ouroes.				
81.086	US Department of Energy	US Automotive Material Partnership	17-2999-AMP	4,064	
81.087	US Department of Energy	Ntre Tech LLC	PRELIMINARY AWARD	77,567	
81.087	US Department of Energy	PPG Industries	Award signed 3/7/2017	27,998	
81.087	US Department of Energy	Sustainable Manufacturing Innovation Alliance	SA-17-08	27,507	
81.087	US Department of Energy	Sustainable Manufacturing Innovation Alliance	SA-19-06	185,303	
81.087	US Department of Energy	Sustainable Manufacturing Innovation Alliance	SA-19-07	(4,955)	
81.089	National Energy Technology Laboratory	Univ of Texas at Austin	UTA14-001158	136,741	
81.089	US Department of Energy	DNV GL USA Inc	10125461	180,786	
81.089	US Department of Energy	Tech4Imaging LLC	Agreement dated 10/17/2019	95.626	
81.113	US Department of Energy	Georgia Inst of Tech	AWD-000372-G5	670,087	
81.121	US Department of Energy	Arizona State Univ	ASUB00000450	54,015	
81.121	US Department of Energy	Renssalaer Polytechnic Inst	A19-0054-S001	121,705	
81.121	US Department of Energy	Univ of Massachusetts - Lowell	S51900000036928	33,953	
81.121	US Department of Energy	Univ of Tennessee	A20-0497-S001	93,317	
81.124	US Department of Energy	University of Illinois	069787-14294 (2012-06395-01)	46,922	
81.135		Duke Univ	Subcontract Number: 323-0307	53.731	
	Advanced Research Projects Agency-Energy		2018-2925-01	141,628	
81.135	US Department of Energy	North Carolina State Univ	S000280-EARPA	·	
81.135	US Department of Energy	Pennsylvania State Univ		25,091	
81.135	US Department of Energy	State University of New York Polytechnic Institute	Subaward 96-20	138,389	
81.135	US Department of Energy	Univ of Maryland	Subaward No. 80151-Z7064202	220,163	
81.RD	US Department of Energy	Alliance for Sustainable Energy, LLC	Subaward No. AHL-9-92359-01	25,155	
81.RD	US Department of Energy	Alliance for Sustainable Energy, LLC	Subcontract SUB-2020-10197	63,417	
81.RD	US Department of Energy	Alliance for Sustainable Energy, LLC	ZGJ-9-92283-01	694,020	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Contract No. 0196968	7,911	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Master Cont 00145659 Rel 1	170,582	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Release No. 26 Under Blanket Master Contrac	19,130	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	rls #16 under master 145659	116,464	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls 17 under 145659	128,862	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	RIs 20 under 145659	35,377	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls 21 under master 145659	120,054	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls 22 under master 145659	118,331	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls 23 under Master 145659	22,759	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls 24 under 145659	65,963	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls 25 under 145659	99,118	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls no. 1 under master 173354	12,778	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls. 13 under contract 145659	19,603	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls. 2 under 173354	15,473	
81.RD	US Department of Energy	Battelle Energy Alliance, LLC	Rls. 3 under 173354	79,139	
81.RD	US Department of Energy	Brookhaven Sci Assoc, LLC	382254	4,152	
81.RD	US Department of Energy	Brookhaven Sci Assoc, LLC	No. 244420	320,813	
81.RD	US Department of Energy	General Motors Corp	PO 4301053869	93,335	
81.RD	US Department of Energy	Idaho National Laboratory	Release No. 27 under 145659	13,475	
81.RD	US Department of Energy	Idaho National Laboratory	Rls 19 under 145659	82,178	
81.RD	US Department of Energy	Innovative Scientific Solutions Inc	SB20248	32,898	
81.RD	US Department of Energy	Lawrence Berkeley National Laboratory	7478994	332,908	

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance E	Listing		Additional Award	Federal	Expenditures
Numbe	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
	. 21				
search and Developr					
ss-through from othe	r sources:				
81.RD	US Department of Energy	Lawrence Berkeley National Laboratory	7560193	76,087	58,35
81.RD	US Department of Energy	Lawrence Berkeley National Laboratory	Subcontract No. 7506408	19,096	-
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	B628514	191,967	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	B628760	14,647	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	B638306	32,421	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	B643967	70,763	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	B646593	3,804	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	No. B620400	(1,320)	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	Subcontract B639625	120,612	_
81.RD	US Department of Energy	Lawrence Livermore National Laboratory	Subcontract No. B637259	263,347	_
81.RD	US Department of Energy	Los Alamos National Laboratory	463011	133,704	_
81.RD	US Department of Energy	Los Alamos National Laboratory	471415	101,760	_
81.RD	US Department of Energy	Nat Renewable Energy Lab	SUB-2021-10499	39,003	_
81.RD	US Department of Energy	Oak Ridge Associated Universities	PO 606733	255,577	_
81.RD	US Department of Energy	Oak Ridge Associated Universities	PO 607090	5,107	_
81.RD	US Department of Energy	Oak Ridge National Laboratory	Subcontract # 4000180638	149,614	
81.RD	US Department of Energy	Oak Ridge National Laboratory	Subcontract No. 4000185565	16,040	
81.RD	US Department of Energy	PACCAR Inc	Agreement dated 1/19/2021	85,559	
81.RD	US Department of Energy	PACCAR Inc	Agreement dated 17-7-2020	63,614	-
81.RD	US Department of Energy	Pacific Northwest National Laboratory	Contract 499938	22.147	-
81.RD	US Department of Energy	Sandia Corp	PO # 2116489	75,370	-
81.RD	US Department of Energy	Sandia Corp	PO # 21144960	125,230	-
81.RD	US Department of Energy	Sandia Corp	PO #2144900 PO #2113271	125,230	-
81.RD	. 63	•	PO 1988691	-,-	-
81.RD	US Department of Energy	Sandia Corp Sandia Corp	PO 1988691 PO 1990234	26,163 7,924	-
81.RD	US Department of Energy	Sandia Corp Sandia Corp	PO 1990234 PO 2100628	49,263	-
	US Department of Energy	·			-
81.RD	US Department of Energy	Sandia Corp	PO 2147718	142,042	-
81.RD	US Department of Energy	Sandia Corp	PO 2210332	42,416	-
81.RD	US Department of Energy	Sandia Corp	PO 2263642	13,437	-
81.RD	US Department of Energy	Sandia Corp	PO# 1916216	192,262	-
81.RD	US Department of Energy	Sandia Corp	PO# 1992253	74,727	-
81.RD	US Department of Energy	Sandia Corp	PO# 1995865	151,637	-
81.RD	US Department of Energy	Sandia Corp	PO: 2209085	25,481	-
81.RD	US Department of Energy	Sandia Corp	PO1945200	46,487	-
81.RD	US Department of Energy	UChicago Argonne, LLC	8F-30022	70,052	-
81.RD	US Department of Energy	UChicago Argonne, LLC	9F-60123	9,899	-
81.RD	US Department of Energy	UChicago Argonne, LLC	Contract 0F-60157	35,345	-
81.RD	US Department of Energy	UChicago Argonne, LLC	NO. 0F-60038	147,147	-
81.RD	US Department of Energy	UChicago Argonne, LLC	NO. 7F-30201	95,933	-
81.RD	US Department of Energy	UT-Battelle LLC	4000159557	114,019	-
81.RD	US Department of Energy	UT-Battelle LLC	4000160875	2,208	-
81.RD	US Department of Energy	UT-Battelle LLC	4000167182	54,228	-
81.RD	US Department of Energy	UT-Battelle LLC	4000175281	228,829	-

Assistance L	inting		Additional Award	Federal	Expenditures
Number	_	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Kumbu	r custal Agency openion	i uss-riii ougii opolisoi	identification	Experiences	to oubicolpicitis
Research and Developn	nent Cluster —				
Pass-through from other	sources:				
Department of Educati 84.002		Kent State Univ	413918-OSU	(4.405)	
84.002 84.002	US Department of Education US Department of Education	Kent State Univ	413918-OSU 413923-OSU	(1,105) 302,511	-
84.002	US Department of Education	Indiana Univ	Agreement dated 12/16/2016	46,847	-
84.048	US Department of Education	OH Dept of Educ	Agreement dated 7/1/2020	102,275	-
84.048	US Department of Education	Portland Community College	P0103618	5,170	-
84.116	US Department of Education	Georgia State University Research Foundation	SP00012139-07	4,009	-
84.184	US Department of Education	Logan-Hocking School District	Agreement Dated 05/19/2020	22,149	-
84.305	Institute of Education Sciences	Purdue Univ	19100069-012	22,149	-
84.323	US Department of Education	OH Dept of Educ	Agreement Dated 10/27/20	65,406	-
84.323	US Department of Education	OH Dept of Educ	Agreement Dated 10/21/20 Agreement Dated 11/24/19	20,886	-
84.325	US Department of Education	East Carolina Univ	AWD-20-0512-S003	163.652	-
84.366	US Department of Education	OH Dept of Educ	No Award Number	(540)	-
84.371	US Department of Education	Charles County Public Schools	Agreement Dated 12/17/18	172,658	-
84.371	US Department of Education	OH Dept of Educ	Agreement Dated 11/10/20	75,467	_
84.371	US Department of Education	OH Dept of Educ	Agreement Dated 5/22/18	231.141	-
84.372	US Department of Education	Ohio Department of Higher Education	EDU20210008	133,079	-
84.424	US Department of Education	Ohio Department of Higher Education	EDU20210008	129.834	_
84.425D	COVID-19 US Department of Education	Ohio Department of Higher Education	EDU20210008	61.671	_
84.425C	COVID-19 03 Department of Education COVID-19 Dept of Treasury	Educational Service Center of Central Ohio	Agreement date 10/28/2020	80,077	-
04.4230	OOVID-10 Dept of Treasury	Educational octyles octiles of octileal office	Agreement date 10/20/2020	00,011	_
	Total Department of Education Pass-Through Awards			1,637,462	-
Department of Health a	and Human Samilaca				
93.048	US Department of Health & Human Services	LifeCare Alliance	ACL2020	38,970	_
93.070	Centers for Disease Control and Prevention	Franklin County Public Health	PRELIMINARY AWARD	2,565	_
93.077	National Cancer Institute	Roswell Park Cancer Institute	320-01	1,612	_
93.077	National Cancer Institute	Univ of Pennsylvania	580522	25,988	
93.077	National Cancer Institute	Univ of Texas Health Sci Ctr-Houston	0013927D	14,871	_
93.077	National Institute on Drug Abuse	Case Western Reserve Univ	RES514768 / RES515595	57,803	_
93.077	National Institute on Drug Abuse	University Of Vermont	AWD00000115SUB00000102	14,510	_
93.077	National Institute on Drug Abuse	Virginia Commonwealth Univ	FP00006477 SA010	18,288	_
93.080	Centers for Disease Control and Prevention	Hemophilia Fdn of Michigan	CDC12-13-HTC432	7,942	_
93.103	Food and Drug Administration	University Of Kansas	ZAD00001	31,926	_
93.110	Health Resources and Services Administration	OH Dept of Health	02540031MS0120	1,294,496	297.843
93.110	Health Resources and Services Administration	OH Dept of Health	41825	647,364	348,666
93.110	Maternal & Child Health Bureau	Hemophilia Fdn of Michigan	H30MC24047	33,532	-
93.113	National Institute of Environmental Health Sciences	Bowling Green State University	10009736-OSU03	15,470	-
93.113	National Institute of Environmental Health Sciences	Research Foundation for Mental Hygiene, Inc.	138895	71,601	-
93.113	National Institute of Environmental Health Sciences	Univ of Alabama at Birmingham	000520645-002	51,661	-
93.113	National Institute of Environmental Health Sciences	Univ of North Carolina	5116830	43,792	-
93.121	National Institute of Dental and Craniofacial Research	Texas A & M Univ	M1803466	13,613	-
93.121	National Institute of Dental and Craniofacial Research	Univ of Pennsylvania	575712	214,881	-
93.136	Centers for Disease Control and Prevention	Case Western Reserve Univ	RES514914	47,019	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listing			Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
		• .		·	·
Research and Development	Cluster —				
Pass-through from other sou	rces:				
93.136	Centers for Disease Control and Prevention	Franklin County Public Health	CDCOD2A - 210 Year 2	27,905	-
93.136	Centers for Disease Control and Prevention	Franklin County Public Health	CDCOD2A01 Year 1	124,936	-
93.136	Centers for Disease Control and Prevention	The Research Institute at Nationwide Children's Hospital	710053-0720-02	37,943	-
93.136	Centers for Disease Control and Prevention	The Research Institute at Nationwide Children's Hospital	PRELIMINARY AWARD	2,501	-
93.136	COVID-19 US Department of Health & Human Services	Stark County Health Department	Agreement Dated 9/18/2020	7,282	-
93.145	Health Resources and Services Administration	University of Illinois	17688	161,951	-
93.145	COVID-19 Health Resources and Services Administration	University of Illinois	18109	27,787	-
93.172	National Human Genome Research Institute	Baylor College of Medicine	PO# 7000001242	6,411	-
93.172	National Human Genome Research Institute	Baylor University	PRELIMINARY AWARD	27,691	-
93.172	COVID-19 National Human Genome Research Institute	Univ of Chicago	AWD061089 (SUB00000339)	142,954	-
93.172	National Human Genome Research Institute	Univ of North Carolina	5118566	73,822	-
93.173	National Institute on Deafness and Other Communication Disorders	Florida State Univ	R01771	(10,245)	-
93.173	National Institute on Deafness and Other Communication Disorders	Massachusetts Eye and Ear Infirmary	530732	19,026	-
93.173	National Institute on Deafness and Other Communication Disorders	MGH Institute of Health Professions	300363	68,699	-
93.173	National Institute on Deafness and Other Communication Disorders	Univ of Southern California	127139511	10,630	_
93.173	National Institute on Deafness and Other Communication Disorders	Univ of Southern California	131604135	26,101	_
93.173	National Institute on Deafness and Other Communication Disorders		UTA20-000211	197.067	_
93.173	COVID-19 National Institute on Deafness and Other Communication	Univ of Texas at Austin	UTA20-000211	40.844	_
93.173	National Institute on Deafness and Other Communication Disorders		SA19-0068	1,139	_
93.213	National Center for Complementary and Integrative Health	Case Western Reserve Univ	RES514710	5,087	_
93.213	National Center for Complementary and Integrative Health	Mount Sinai Medical Center of Florida	TACT2	331	_
93.213	National Center for Complementary and Integrative Health	New York University School of Medicine	17-A0-00-008501/114813	26,266	_
93.226	Agency for Healthcare Research and Quality	Indiana Univ	2222680	5,075	_
93.226	Agency for Healthcare Research and Quality	Indiana Univ	8762-OSU	22.802	_
93.226	Agency for Healthcare Research and Quality	Univ of North Carolina	5115872	136,690	_
93.226	Agency for Healthcare Research and Quality	Univ of North Carolina	5119905	51,909	_
93.226	Agency for Healthcare Research and Quality	Washington Univ	WU-20-230 / WU-21-212	114,638	_
93.242	National Institute of Mental Health	Dartmouth College	R1022	36,762	-
93.242	National Institute of Mental Health	Indiana Univ	8375-OSU	32.070	-
93.242	National Institute of Mental Health	The Research Institute at Nationwide Children's Hospital	700172-0519-00	253.046	-
93.242		•	SUBK00011903	253,046 51,233	-
93.242	National Institute of Mental Health National Institute of Mental Health	Univ of Michigan Univ of North Carolina	5115413	30,385	-
93.242	National Institute of Mental Health	Univ of Pennsylvania	568947/10052478/19815	26,681	-
93.242	National Institute of Mental Health	Univ of South Carolina	16-3128	53,428	_
93.242	National Institute of Mental Health	University of Oregon	215680B	107,805	_
93.242	National Institute of Mental Health	Washington Univ	WU-21-301	44,233	-
93.243	Substance Abuse & Mental Health Services Administration	American Psychiatric Nurses Association	Agreement Dated 1/26/2021	2,500	_
93.243	Substance Abuse & Mental Health Services Administration	Council on Social Work Education	Agreement dated 12/17/2019	11,153	-
93.243	Substance Abuse & Mental Health Services Administration	OH Dept of Mental HIth & Addiction Svcs	2000384	37,457	-
93.243	Substance Abuse & Mental Health Services Administration	OH Dept of Mental HIth & Addiction Svcs	2000503	8,333	-
93.243	COVID-19 Substance Abuse & Mental Health Services Administration	•	2000633/2100145	123,672	-
93.243	Substance Abuse & Mental Health Services Administration	OH Dept of Mental HIth & Addiction Svcs	2100326	20,749	-
93.243	Substance Abuse & Mental Health Services Administration	Ohio Suicide Prevention Foundation	Agreement dated 9/9/2019	6,834	-
93.262	Centers for Disease Control and Prevention	Univ of Michigan	SUBK00011840	7,161	-
93.262 93.262	Centers for Disease Control and Prevention National Institute for Occupational Safety and Health	Univ of Wisconsin New York University School of Medicine	183405350 15-A1-00-003772-01	1,912 17,627	-
93.202	ivational institute for Occupational Safety and Health	New TOIR OTHERSTLY SCHOOL OF MEDICINE	13-41-00-003/12-01	17,027	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Li	sting		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Number	rederal Agency Sponsor	Pass-Through Sponsor	identification	Expenditures	to Subrecipients
December 1 December 1	and Oliveton				
Research and Developm					
Pass-through from other	sources:				
93.279	National Institute on Drug Abuse	Case Western Reserve Univ	RES512265	10,481	
93.279	National Institute on Drug Abuse	Dartmouth College	Subaward #R846	(4,130)	
93.279	National Institute on Drug Abuse	Medical Univ of South Carolina	A00-3898-S005	34,863	
93.279	National Institute on Drug Abuse	Miriam Hospital	7147113	14,630	_
93.279	National Institute on Drug Abuse	Mu Therapeutics	RDA045414A	(2,804)	
93.279	National Institute on Drug Abuse	New York University School of Medicine	20-A0-S1-003671	306,391	_
93.279	National Institute on Drug Abuse	Univ of North Carolina	5111929	75.962	_
93.279	National Institute on Drug Abuse	Univ of Pennsylvania	578002	181,802	_
93,279	National Institute on Drug Abuse	Univ of Pittsburgh	AWD00000068 (132578-2)	58.238	_
93.286	National Institute of Biomedical Imaging and Bioengineering	Case Western Reserve Univ	RES511497	31,691	_
93.286	National Institute of Biomedical Imaging and Bioengineering	Case Western Reserve Univ	RES512820	23,738	_
93,286	National Institute of Biomedical Imaging and Bioengineering	Massachusetts General Hospital	237468	14.650	_
93.286	National Institute of Biomedical Imaging and Bioengineering	Massachusetts Inst Tech	S4851, PO# 338371	98,475	_
93.286	National Institute of Biomedical Imaging and Bioengineering	The Research Institute at Nationwide Children's Hospital	700170- 0521-S1	29.179	_
93.286	National Institute of Biomedical Imaging and Bioengineering	Univ of Massachusetts - Lowell	S51110000031136	111,889	68,659
93.286	National Institute of Biomedical Imaging and Bioengineering	Univ of Washington	UWSC10824	717	-
93.286	National Institute of Biomedical Imaging and Bioengineering	University Of Memphis	5-40312	28.553	_
93.286	National Institute of Biomedical Imaging and Bioengineering	University Of Memphis	PO160703	(5,612)	_
93.286	National Institute of Biomedical Imaging and Bioengineering	University Of Memphis	Subaward No. 5-40926	122,767	_
93.307	National Institute on Minority Health and Health Disparities	Boston College	5105521-2	361,503	8,874
93.307	National Institute on Minority Health and Health Disparities	Indiana State University	17-049-01	49,771	-
93.307	National Institute on Minority Health and Health Disparities	Rush University	18060410-Sub01	13,257	_
93.307	National Institute on Minority Health and Health Disparities	Univ of Utah	Subaward No. 10044779-05	18.446	_
93.307	National Institute on Minority Health and Health Disparities	University of Central Florida	26036A01-01	158.628	_
93.307	National Institute on Minority Health and Health Disparities	University of Central Florida	26036A04	15.825	_
93.307	National Institute on Minority Health and Health Disparities	University of Central Florida	26036A05	34.816	_
93.310	National Cancer Institute	Univ of Utah	10054782-01	105.590	_
93.310	National Cancer Institute	University of Hawaii	KA 1616	23,336	_
93.310	Office of the Director, National Institutes of Health	New York University	19-A0-00-1003237	14,153	_
93.310	Office of the Director, National Institutes of Health	Vanderbilt University Medical Center	VUMC86858	6,264	_
93.350	National Center for Advancing Translational Sciences	Oregon Health and Science University	1013749 OSU	159,659	_
93.350	National Center for Advancing Translational Sciences	Univ of Missouri	C00061087-2	18.186	_
93.350	National Center for Advancing Translational Sciences	Univ of Pittsburgh	AWD00000243 (134445-8)	39,000	_
93.350	National Center for Advancing Translational Sciences	Univ of Southern California	119680448	660	_
93.350	National Center for Advancing Translational Sciences	Vanderbilt Univ	VUMC 59242	37,574	-
93.350	COVID-19 National Center for Advancing Translational Sciences	Vanderbilt University Medical Center	VUMC86144	55,682	-
93.351	Office of the Director, National Institutes of Health	Harvard Univ	153205.5106688.0002	218,069	-
93.353	National Cancer Institute	The Research Institute at Nationwide Children's Hospital	700210-0720-00/01/04	305,837	-
93.353	National Cancer Institute	Univ of Kentucky	3200003559-21-043	688,720	-
93.361	National Institute of Nursing Research	Emory Univ	A075320	(11)	-
93.361	National Institute of Nursing Research	Michigan State Univ	RC111387A	19,504	-
93.361	National Institute of Nursing Research	Univ of Florida	SUB00002203	44,295	-
93.361	National Institute of Nursing Research	University Of Colorado	FY19.105.008	947	-
93.378	Centers for Medicare & Medicaid Services	The Research Institute at Nationwide Children's Hospital	710064-1221-00	57,353	-
93.393	National Cancer Institute	City of Hope	53332.2004159.669303	1,195	-
93.393	National Cancer Institute	Dana-Farber Cancer Inst	1315801	54,882	-
93.393	National Cancer Institute	Duke Univ	A031817	32,082	-
93.393	National Cancer Institute	Fred Hutchinson Cancer Research Center	0001011967	188,726	-
93.393	National Cancer Institute	Georgia State University Research Foundation	SPO0014488-01	10,812	-
93.393	National Cancer Institute	Medical Univ of South Carolina	A00-2527-S012	29,121	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2021

93.395

National Cancer Institute

Assistance List			Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developmen					
Pass-through from other so	ources:				
93.393	National Cancer Institute	Medical Univ of South Carolina	A00-3206-S001	14,630	-
93.393	National Cancer Institute	Moffitt (H Lee) Cancer Center and Research Institute	10-19488-99-01-G4	80,385	-
93.393	National Cancer Institute	Pennsylvania State Univ	OSUCA173465	2,313	-
93.393	National Cancer Institute	Univ of Arkansas	51710	15,372	-
93.393	National Cancer Institute	Univ of Minnesota	P006030501	23,569	-
93.393	National Cancer Institute	Univ of Minnesota	P006803701	30,880	-
93.393	National Cancer Institute	Univ of Minnesota	P006804101	31,386	-
93.393	National Cancer Institute	Univ of Minnesota	P006804201	233,531	-
93.393	National Cancer Institute	Univ of Utah	Subaward No. 10044693-04	21,449	-
93.393	National Cancer Institute	Univ of Utah	Subaward No. 10045740-05	36,212	-
93.393	National Cancer Institute	University of Oregon	217400A	143,172	-
93.393	National Cancer Institute	Virginia Commonwealth Univ	FP00005690_SA002	312,513	-
93.393	National Cancer Institute	West Virginia Univ	19-006-OSU	(99)	-
93.394	National Cancer Institute	Broad Institute	5000516-5500001456	28,218	-
93.394	National Cancer Institute	City of Hope	52422.2001475.669301	65,041	-
93.394	National Cancer Institute	Univ of Michigan	SUBK00009886	97,863	-
93.394	National Cancer Institute	Univ of Pittsburgh	0053387 (129061-6)	209	-
93.394	National Cancer Institute	Univ of Texas M D Anderson Cancer Center	00001960	(12)	-
93.394	National Cancer Institute	Wake Forest Univ Health Sciences	WFUHS116109	3,716	-
93.394	National Cancer Institute	Washington Univ	WU-15-398/16-151/16-383/18-6	86,626	-
93.394	National Cancer Institute	Washington Univ	WU-21-122	817,216	-
93.394	National Institute of Biomedical Imaging and Bioengineering	Iowa State Univ	023077A	10,281	-
93.394	National Institutes of Health	Stanford Univ	62369205-157597	23,138	-
93.395	National Cancer Institute	Am Coll of Radiology	1820	1,777,755	-
93.395	National Cancer Institute	Baylor College of Medicine	7000001213	127,004	-
93.395	National Cancer Institute	BioMimetix JV, LLC.	BMX-HGG-001/#00062660	32,419	-
93.395	National Cancer Institute	Brigham & Women's Hosp Inc	120629	51,051	-
93.395	National Cancer Institute	Brigham & Women's Hosp Inc	120870	33,716	-
93.395	National Cancer Institute	Brigham & Women's Hosp Inc	122012	89,965	-
93.395	National Cancer Institute	Case Western Reserve Univ	RES510725	12,309	-
93.395	National Cancer Institute	CerFlux	1R43CA254493-01	29,014	-
93.395	National Cancer Institute	City of Hope	52124.2001945.669301	206,772	-
93.395	National Cancer Institute	City of Hope	63561.2009317.669301	52,524	-
93.395	National Cancer Institute	Cornell University	170761/194115-1	220,694	-
93.395	National Cancer Institute	Emory Univ	A175191	101,374	-
93.395	National Cancer Institute	Emory Univ	T957511	51,127	-
93.395	National Cancer Institute	Georgetown Univ	GR412017	32,697	-
93.395	National Cancer Institute	Harvard Univ	1298801	125,812	-
93.395	National Cancer Institute	Icahn School of Medicine at Mount Sinai	PO# SC428092A	12,939	-
93.395	National Cancer Institute	Johns Hopkins Univ	2004703491	171,008	-
93.395	National Cancer Institute	Mayo Foundation for Medical Education and Research	OHI-188695	74,322	-
93.395	National Cancer Institute	Mayo Foundation for Medical Education and Research	OHI-259713/PO #66962972	27,295	-
93.395	National Cancer Institute	NRG Oncology	NRG-Backes-GY6	6,904	-
93.395	National Cancer Institute	NRG Oncology	NRG-Chakravarti-GY6	3,762	-
93.395	National Cancer Institute	NRG Oncology	NRG-White-GY6	16,746	-
93.395	National Cancer Institute	Oregon Health and Science University	1013080_OHIOSTATE	20,524	-
93.395	National Cancer Institute	The Scripps Research Institute	5-27238	6,342	-
93.395	National Cancer Institute	Univ of California at Los Angeles	1568 G TA901	7,837	-
93.395	National Cancer Institute	Univ of California-Davis	A19-1162-S001	32,040	-
00.005	N :: 10 1 ::: 1	H : (0 K : D :	DDEL IMMINARY AND DD	4.004	

PRELIMINARY AWARD

Univ of California-Davis

1,031

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance I	Listing		Additional Award	Federal	Expenditures
Numbe	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Develop					
Pass-through from othe	r sources:				
93.395	National Cancer Institute	Univ of Kentucky	3200000318-16-184	13,659	_
93.395	National Cancer Institute	Univ of Minnesota	P005570003	4,546	-
93.395	National Cancer Institute	Univ of Nebraska	34-5150-2065-001	3,578	_
93.395	National Cancer Institute	Univ of North Carolina	5115022	73,762	-
93.395	National Cancer Institute	Washington Univ	WU-19-323	71,538	-
93.395	National Cancer Institute	Weill Cornell Medical College	170761-1	5,647	_
93.396	National Cancer Institute	City of Hope	60985.2005358.669301	118,426	-
93.396	National Cancer Institute	Duke Univ	A03-2504	(39)	-
93.396	National Cancer Institute	Feinstein Institute for Medical Research	AWD00001175-OSU	14.207	_
93.396	National Cancer Institute	Medical Univ of South Carolina	A00-4018-S002	26,807	_
93.396	National Cancer Institute	Michigan State Univ	RC112115B	14,870	_
93.396	National Cancer Institute	Stanford Univ	61135382-118022	82.807	_
93.396	National Cancer Institute	Univ of Maryland	1701503	12,027	_
93.399	National Cancer Institute	Alliance NCTN Foundation	202010109	69.276	_
93.399	National Cancer Institute	Univ of Michigan	SUBK00011803	17,917	_
93.421	Centers for Disease Control and Prevention	National Association of Chronic Disease Directors	2102020	28.313	7.463
93.421	Centers for Disease Control and Prevention Centers for Disease Control and Prevention	National Association of Chronic Disease Directors	3132021	10.727	7,403
93.421	Centers for Disease Control and Prevention Centers for Disease Control and Prevention	National Association of Chronic Disease Directors	3182021	7.405	-
93.421	Centers for Disease Control and Prevention			7,405	-
		Ohio Department of Aging	Agreement dtd 3/24/20	·	-
93.421	Centers for Disease Control and Prevention	Prevent Blindness Ohio	PRELIMINARY AWARD	5,183	-
93.421	Centers for Disease Control and Prevention	Task Force for Global Health	PO # 3332	66,367	-
93.421	Centers for Disease Control and Prevention	Task Force for Global Health	PO #3525	212,521	2,550
93.421	COVID-19 Centers for Disease Control and Prevention	Task Force for Global Health	PO# 3691	19,512	-
93.426	Centers for Disease Control and Prevention	OH Dept of Health	42193	114,871	-
93.433	Administration for Community Living	Indiana Univ	8657	37,538	-
93.433	Administration for Community Living	Univ of Minnesota	A005198603	6,665	-
93.475	Administration on Children, Youth and Families	Wargo-Brock Workforce Dimensions LLC	Award signed 6/24/19	(6,013)	-
93.478	Centers for Disease Control and Prevention	OH Dept of Health	02540031DM0121	3,560	-
93.500	Administration on Children, Youth and Families	Arizona State Univ	ASUB00000395	(8)	-
93.516	Health Resources and Services Administration	Univ of Michigan	SUBK00008833	24,772	-
93.524	COVID-19 Centers for Disease Control and Prevention	Council of State and Territorial Epidemiologists	PRELIMINARY AWARD	14,919	-
93.524	Centers for Disease Control and Prevention	Council of State and Territorial Epidemiologists	V03-05214018	67,933	-
93.524	Centers for Disease Control and Prevention	National Association of Chronic Disease Directors	2132019	4,991	-
93.590	US Department of Health & Human Services	OH Dept of Job & Family Services	C-2021-22-0790	62,215	37,863
93.630	Administration for Community Living	Ohio Developmental Disabilities Planning Council	18PP05SC21	29,458	-
93.630	US Department of Health & Human Services	OH Developmental Disabilities Plng Cncl	20AT02FA20	(154)	-
93.632	Administration for Community Living	Univ of Wyoming	1004506-NCA	95,014	-
93.669	Administration for Children and Families	OH Dept of Job & Family Services	C-2021-06-0162	208,028	32,185
93.670	Administration for Children and Families	OH Dept of Job & Family Services	C-2021-22-0739	108,412	64,859
93.747	Administration for Community Living	OH Dept of Job & Family Services	C-2021-06-0509	75,413	-
93.788	Substance Abuse & Mental Health Services Administration	OH Dept of Health	02540034IN0221	387	-
93.788	Substance Abuse & Mental Health Services Administration	OH Dept of Mental HIth & Addiction Svcs	2100215	1,255,981	-
93.788	Substance Abuse & Mental Health Services Administration	OH Dept of Mental HIth & Addiction Svcs	2100594	447,388	-
93.837	National Heart, Lung, and Blood Institute	Basking Biosciences	1R44HL152869-01	335,346	-
93.837	National Heart, Lung, and Blood Institute	Beth Israel Deaconess Medical Center	01061674	(1,168)	-
93.837	National Heart, Lung, and Blood Institute	Brigham & Women's Hosp Inc	INVESTED	(107)	-
93.837	National Heart, Lung, and Blood Institute	Case Western Reserve Univ	RES515520	18,111	-
93.837	National Heart, Lung, and Blood Institute	Cleveland Clinic	1118-SUB	(8,059)	_
93.837	National Heart, Lung, and Blood Institute	Cleveland Clinic	1132-SUB	(1,200)	_

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listi	ing		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
				F	
Research and Developmer	nt Cluster —				
Pass-through from other so	ources:				
· ·					
93.837	National Heart, Lung, and Blood Institute	Cleveland Clinic	397SUB / 744SUB	317	-
93.837	National Heart, Lung, and Blood Institute	Coridea, LLC	2R44HL12771	780	-
93.837	National Heart, Lung, and Blood Institute	Duke Univ	Duke #177494/218214	229	-
93.837	National Heart, Lung, and Blood Institute	Fred Hutchinson Cancer Research Center	0001023338	2,158	-
93.837	National Heart, Lung, and Blood Institute	Kent County Memorial Hospital	5001381-Jackson	5,191	-
93.837	National Heart, Lung, and Blood Institute	Massachusetts General Hospital	224838	25,053	-
93.837	National Heart, Lung, and Blood Institute	Massachusetts General Hospital	224978	53,061	-
93.837	National Heart, Lung, and Blood Institute	New England Research Institutes	BEST-CLI Clinical Trial	8,571	-
93.837	National Heart, Lung, and Blood Institute	The Research Institute at Nationwide Children's Hospital	700180-1119-00	21,391	-
93.837	National Heart, Lung, and Blood Institute	The Research Institute at Nationwide Children's Hospital	700185-1220-00	37,775	-
93.837	National Heart, Lung, and Blood Institute	The Research Institute at Nationwide Children's Hospital	820525AA	55,448	-
93.837	National Heart, Lung, and Blood Institute	The Research Institute at Nationwide Children's Hospital	821283AA	26,321	-
93.837	National Heart, Lung, and Blood Institute	Univ of Alabama at Birmingham	000503570-021	31,546	-
93.837	National Heart, Lung, and Blood Institute	Univ of Louisville	ULRF 17-0344H1	3,165	-
93.837	National Heart, Lung, and Blood Institute	Univ of Minnesota	N006187420	678	-
93.837	National Heart, Lung, and Blood Institute	Univ of Pittsburgh	AWD00000172 (134339-1)	268,650	-
93.837	National Heart, Lung, and Blood Institute	Univ of Rochester	417365G / UR FAO GR510850	50,481	-
93.837	National Heart, Lung, and Blood Institute	Univ of Wisconsin	000000773	43,060	-
93.837 93.837	National Heart, Lung, and Blood Institute	University at Buffalo	Subaward No. R1193215	55,071 1.334	-
93.837	National Heart, Lung, and Blood Institute National Heart, Lung, and Blood Institute	University of Rhode Island Virginia Polytechnic Inst	0008393/12072020 432071-19074	1,334	-
93.837	National Heart, Lung, and Blood Institute National Heart, Lung, and Blood Institute	Virginia Polytechnic Inst Virginia Polytechnic Inst	432071-19074	(3,459)	-
93.837	National Heart, Lung, and Blood Institute	Washington Univ	WU-19-295	3,199	-
93.837	National Heart, Lung, and Blood Institute National Heart, Lung, and Blood Institute	Washington Univ	WU-19-296	2,532	
93.837	National Institutes of Health	Univ of Arizona	551217	1.997	
93.838	National Heart, Lung, and Blood Institute	Brigham & Women's Hosp Inc	121004	69,682	
93.838	National Heart, Lung, and Blood Institute	Case Western Reserve Univ	RES512324	1.092	
93.838	National Heart, Lung, and Blood Institute	Cleveland Clinic	1389-SUB	62.178	_
93.838	COVID-19 National Heart, Lung, and Blood Institute	Cleveland Clinic	1392-SUB	17,539	_
93.838	National Heart, Lung, and Blood Institute	Cleveland Clinic Lerner College of Medicine of Case Western F		17.835	_
93.838	National Heart, Lung, and Blood Institute	COPD Foundation	001	41.470	-
93.838	National Heart, Lung, and Blood Institute	George Washington Univ	ALP2021-CF15	17,779	-
93.838	National Heart, Lung, and Blood Institute	Stanford Univ	61576926-126644	113,110	-
93.838	National Heart, Lung, and Blood Institute	The Research Institute at Nationwide Children's Hospital	700215-0321-00	18,488	-
93.838	COVID-19 National Heart, Lung, and Blood Institute	Univ of Michigan	SUBK00013685-005	11,773	7,500
93.838	National Heart, Lung, and Blood Institute	Univ of Pittsburgh	CNVA00046691 (133106-34)	5,134	-
93.838	National Heart, Lung, and Blood Institute	University of Illinois	2015-05202-01-00 KN/RM	3,231	-
93.838	National Heart, Lung, and Blood Institute	Wake Forest Univ	321-120000-550052	23,273	-
93.839	National Heart, Lung, and Blood Institute	Columbia University	1(GG015816-01)	3,894	-
93.839	National Heart, Lung, and Blood Institute	The Research Institute at Nationwide Children's Hospital	700220-1221-01	5,483	-
93.839	National Heart, Lung, and Blood Institute	Univ of Pittsburgh	AWD00000392 (134345-1)	12,614	-
93.839	National Heart, Lung, and Blood Institute	Univ of Pittsburgh	AWD00002642 (135011-4)	37	-
93.839	National Heart, Lung, and Blood Institute	Vanderbilt University Medical Center	VUMC85003	25,714	-
93.846	National Institute of Allergy and Infectious Diseases	Univ of Pittsburgh	CNVA00062707 (132496-2)	58,481	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Dis		138708	14,370	-
93.846		seases Cleveland Clinic Lerner College of Medicine of Case Western F		13,916	-
93.846		seases Cleveland Clinic Lerner College of Medicine of Case Western F		33,577	-
93.846		seases Cleveland Clinic Lerner College of Medicine of Case Western F		56,287	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Dis		MUSC18-059-8D396	306,895	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Dis	seases Myofinity Biosciences, Inc.	1R41AR076276-01A1	72,483	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2021

93.855

National Institute of Allergy and Infectious Diseases

Assistance Listin	9		Additional Award	Federal	Expenditures
Number	9 Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Number	r ederal Agency Sponsor	r ass-rillough oponsor	identification	Experiorures	to Subrecipients
Research and Development	Cluster —				
Pass-through from other sou					
1 ass-tillough from other soc	11003.				
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	s The Research Institute at Nationwide Children's Hospital	700126-0819-00	35,908	_
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	•	700165-0520-00	134,557	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	•	700202-0520-00	42,356	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	s Univ of California San Francisco	11798sc	160,333	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	s Univ of Cincinnati	013476-002	4,072	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	s Univ of Michigan	SUBK00012374	23,500	-
93.846	National Institute of Arthritis and Musculoskeletal and Skin Disease	s Univ of Pennsylvania	572114	2,396	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Cleveland Clinic Lerner College of Medicine of Case Western Reservation	r 1344-SUB	1,063	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Columbia University	1(GG011016-01)	13,777	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Indiana Univ	8358	116,356	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Indiana Univ	IN-4687972-OS	51,222	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Mayo Foundation for Medical Education and Research	OHI-262468	28,843	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Medical Univ of South Carolina	A00-2010-S017	115,568	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Medical Univ of South Carolina	MUSC18-088-8D377	3,132	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	The EMMES Corp	U DK 114839A	2,083	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Univ of Georgia	PRELIMINARY AWARD	49,654	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Univ of Maryland	3001014 Request: 3729	29,294	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Univ of North Carolina	5112581/5112582	(10,935)	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Univ of North Carolina	5117457	1,821	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Univ of Tennessee	19-2388-OHSU 20-4741-OHSU	(3,728)	-
93.847	National Institute of Diabetes and Digestive and Kidney Diseases	Univ of Texas Health Sci Ctr-Houston	SA0000844	36,384	- 614
93.847 93.847	National Institute of Diabetes and Digestive and Kidney Diseases National Institute of Diabetes and Digestive and Kidney Diseases	Univ of Texas M D Anderson Cancer Center Univ of Texas M D Anderson Cancer Center	3000970771 3001662679	7,573 2.500	014
93.847	National Institute of Diabetes and Digestive and Kidney Diseases National Institute of Diabetes and Digestive and Kidney Diseases	University of Texas Southwestern Medical Center At Dallas	GMO-161125	2,500	-
93.853	National Institute of Neurological Disorders and Stroke	Brigham & Women's Hosp Inc	122235	16,566	-
93.853	National Institute of Neurological Disorders and Stroke	Columbia University	1(GG010509-01)	34,055	-
93.853	National Institute of Neurological Disorders and Stroke	Great Lakes NeuroTechnologies	R44NS081902	159	_
93.853	National Institute of Neurological Disorders and Stroke	Johns Hopkins Univ	2004290714	97,935	_
93.853	National Institute of Neurological Disorders and Stroke	Massachusetts General Hospital	NN106-CYTO-C	452	_
93.853	National Institute of Neurological Disorders and Stroke	Massachusetts General Hospital	NN108-TopCSPN	65,810	_
93.853	National Institute of Neurological Disorders and Stroke	Massachusetts General Hospital	NN110	1,845	-
93.853	National Institute of Neurological Disorders and Stroke	Mayo Foundation for Medical Education and Research	OSU-224063	25,172	-
93.853	National Institute of Neurological Disorders and Stroke	Myolex, Inc.	R44NS113756	78,270	-
93.853	National Institute of Neurological Disorders and Stroke	Salk Institute for Biological Studies	A21-00028-S002	58,676	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Cincinnati	010785-135725	33,523	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Cincinnati	011266-135725	2,015	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Cincinnati	011337-135725	25,047	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Cincinnati	011961-135725	34,450	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Cincinnati	012043-135725	15,125	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Cincinnati	012340-135725	554	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Michigan	SUBK00009087	1,214	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Michigan	SUBK10411CSPR-002	17,911	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Rochester	417792	26,399	-
93.853	National Institute of Neurological Disorders and Stroke	Univ of Texas at Austin	UTA20-001007	14,297	-
93.853	National Institute of Neurological Disorders and Stroke	Vanderbilt Univ	UNIV60280	214,967	-
93.853	National Institute of Neurological Disorders and Stroke	Virginia Polytechnic Inst	432107-19074	179,608	-
93.855 93.855	National Institute of Allergy and Infectious Diseases	Albert Einstein College of Medicine	31614H/31158/311559 FY19ITN331	20,467 6.777	-
93.855	National Institute of Allergy and Infectious Diseases National Institute of Allergy and Infectious Diseases	Benaroya Research Institute Brown University	00001555	17.065	-
33.033	reaconal module of Allergy and infectious Diseases	DIOWIT OTHER STATE	00001000	17,005	-

Columbia University

2(GG010480)

43,822

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listin			Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Number	rederal Agency Sponsor	r ass-i illough Sponsoi	identification	Experiultures	to Subrecipients
Research and Development	Cluster —				
Pass-through from other sou					
r ass-tillough hom other soc	inces.				
93.855	National Institute of Allergy and Infectious Diseases	Columbia University	3(GG010483)	35,189	_
93.855	National Institute of Allergy and Infectious Diseases	Columbia University	6(GG013567-24)	37.146	_
93.855	COVID-19 National Institute of Allergy and Infectious Diseases	Family Health International	PO20002536	368,973	_
93.855	COVID-19 National Institute of Allergy and Infectious Diseases	Family Health International	PO20002877	125,260	_
93.855	COVID-19 National Institute of Allergy and Infectious Diseases	Family Health International	PO20002891	218.090	_
93.855	National Institute of Allergy and Infectious Diseases	Georgetown Univ	AWD7773491-GR206140	19,265	-
93.855	National Institute of Allergy and Infectious Diseases	Hospital for Sick Children	6610100082	128,241	-
93.855	National Institute of Allergy and Infectious Diseases	The Children's Hospital of Philadelphia	3200900822	450,689	-
93.855	National Institute of Allergy and Infectious Diseases	The Research Institute at Nationwide Children's Hospital	700109-0120-01	4,945	_
93.855	National Institute of Allergy and Infectious Diseases	The Research Institute at Nationwide Children's Hospital	700109-0120-05	5,535	-
93.855	COVID-19 National Institute of Allergy and Infectious Diseases	The Research Institute at Nationwide Children's Hospital	700147-0721-S1	155,701	_
93.855	National Institute of Allergy and Infectious Diseases	The Research Institute at Nationwide Children's Hospital	700154-0119-00	8.721	_
93.855	National Institute of Allergy and Infectious Diseases	The Research Institute at Nationwide Children's Hospital	700164-0521-00	10.814	_
93.855	National Institute of Allergy and Infectious Diseases	The Research Institute at Nationwide Children's Hospital	700176-0820-00	4,950	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Alabama at Birmingham	000524470-SC001-Jon	17,793	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of California at Los Angeles	1560 B WA801	69,977	_
93.855	COVID-19National Institute of Allergy and Infectious Diseases	Univ of California at Los Angeles	1560 B WA801	142,266	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of California at Los Angeles	1560 G WB129	46.669	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of California at Los Angeles	1560 G YB432	51,336	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Florida	SUB00001792	38.363	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Florida	UFDSP00011934	28.034	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Iowa	W001065381/ 1001945138	10.563	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Louisville	ULRF 17-0672-01	92.075	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Michigan	3004610084	17,239	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of North Carolina	5110153	6,647	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of North Carolina	5111434	146.116	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Pittsburgh	AWD00002175 (134302-1)	31,255	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Pittsburgh	AWD00003300 (135506-1)	355.830	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Pittsburgh	CNVA00035825 (133878-1)	500,267	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Pittsburgh	CNVA00054948 (134634-3)	148.984	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Pittsburgh	CNVA00061940 (414857-1)	77,146	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Texas Health Sci Ctr-Houston	0014065B	14,441	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Utah	10050550	(354)	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Washington	UWSC10717	157,630	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Washington	UWSC12095	151,021	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Washington	UWSC7831	44,224	_
93.855	National Institute of Allergy and Infectious Diseases	Univ of Wisconsin	000000382	28.861	_
93.855	National Institute of Allergy and Infectious Diseases	University Of Colorado	FY19.914.002	47,739	_
93.855	National Institute of Allergy and Infectious Diseases	University Of Colorado	FY20.1023.003	198,122	_
93.855	National Institute of Allergy and Infectious Diseases	University Of Colorado	FY21.914.001	72,509	_
93.855	National Institute of Allergy and Infectious Diseases	University Of Kansas	FY2019-072	72.012	_
93.855	National Institute of Allergy and Infectious Diseases	Washington Univ	WU-19-399	440.425	_
93.855	National Institute of Allergy and Infectious Diseases	Wright State Univ	670606-1	42,697	-
93.855	National Institute of Allergy and Infectious Diseases	Yale Univ	CON-80002973 (GR112685)	4.921	_
93.855	National Institutes of Health	Univ of California at Los Angeles	1560 B YB351	35.414	_
93.855	National Institutes of Health	Univ of California at Los Angeles	1560 B YB351	283,258	_
93.859	National Cancer Institute	Duke Univ	A031048	9.796	_
93.859	National Institute of Diabetes and Digestive and Kidney Diseases	Vanderbilt Univ	UNIV60444	141,361	_
93.859	National Institute of General Medical Sciences	Cincinnati Children's Hos Med Ctr	308738	44,912	_
93.859	National Institute of General Medical Sciences	City University Of New York	CM00003243-00	11,049	-
				1,010	

Assistance L	istina		Additional Award	Federal	Expenditures
Number		Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
		. ass rimough openios.	i donumento.	_Aponana oo	to out on promo
Research and Developn	nent Cluster —				
Pass-through from other					
·					
93.859	National Institute of General Medical Sciences	Indiana Univ	8740	11,582	_
93.859	National Institute of General Medical Sciences	MassMatrix	R44GM1131484	39,719	-
93.859	National Institute of General Medical Sciences	Michigan State Univ	RC104246OSU	(212)	-
93.859	National Institute of General Medical Sciences	Pennsylvania State Univ	5602-OSU-DHHS-1858	84,479	-
93.859	National Institute of General Medical Sciences	The Scripps Research Institute	5-53755 / 5-53861 / 5-54112	63,870	-
93.859	National Institute of General Medical Sciences	Univ of Arizona	489569	8,825	-
93.859	National Institute of General Medical Sciences	Univ of California-Davis	A20-0350-S001	16,987	-
93.859	National Institute of General Medical Sciences	Univ of California-Davis	A21-0534-S003	23,517	-
93.859	National Institute of General Medical Sciences	Univ of Florida	SUB00001625	22,887	-
93.859	National Institute of General Medical Sciences	Univ of Florida	SUB00001772	131,600	-
93.859	National Institute of General Medical Sciences	Univ of North Carolina	5110021	53,405	-
93.859	National Institute of General Medical Sciences	University of Texas Health Science Center - San Antonio	168930/168929	46,117	-
93.859	National Institute of General Medical Sciences	Virginia Commonwealth Univ	FP00003749_SA001	90,818	-
93.859	National Institute of General Medical Sciences	Virginia Commonwealth Univ	FP00005773_SA001	179,948	-
93.859	NIGMS	e-MSion	2/2/21	9,529	-
93.865	National Institute of Child Health and Human Development	Albert Einstein College of Medicine	311487	47,748	-
93.865	National Institute of Child Health and Human Development	Arkansas Children's Hospital	034939	20,530	-
93.865	National Institute of Child Health and Human Development	Columbia University	4 (GG013709-01)	15,399	-
93.865	National Institute of Child Health and Human Development	Emory Univ	A275218	192,993	-
93.865	National Institute of Child Health and Human Development	George Washington Univ	Agreement dated 4/21/2014	569,797	12,066
93.865	National Institute of Child Health and Human Development	Harvard Univ	117267-0112-5115582	59,609	-
93.865	National Institute of Child Health and Human Development	Indiana Univ	8757	18,991	-
93.865	National Institute of Child Health and Human Development	Minnesota HealthSolutions Corporation	1R43HD101139-01	42,422	-
93.865	National Institute of Child Health and Human Development	Minnesota HealthSolutions Corporation	EFF 1/14/2021	37,344	-
93.865	National Institute of Child Health and Human Development	New York University	F0998-26	1,071	-
93.865	National Institute of Child Health and Human Development	Pennsylvania State Univ	5471-OSU-DHHS-0659	53,082	-
93.865	National Institute of Child Health and Human Development	Pennsylvania State Univ	6018-OSU-DHHS-0659	(1,878)	-
93.865	National Institute of Child Health and Human Development	The Research Institute at Nationwide Children's Hospital	700097-1120-00	30,426	-
93.865	National Institute of Child Health and Human Development	The Research Institute at Nationwide Children's Hospital	700123-0419-00	7,954	-
93.865	National Institute of Child Health and Human Development	The Research Institute at Nationwide Children's Hospital	700195-0421-00 PO 4604891-0-46	44,441	-
93.865	National Institute of Child Health and Human Development	The Research Institute at Nationwide Children's Hospital	700204-0720-00	13,194	-
93.865	National Institute of Child Health and Human Development	The Research Institute at Nationwide Children's Hospital	700230-0721-00	14,995	-
93.865	National Institute of Child Health and Human Development	The Research Institute at Nationwide Children's Hospital	700232-0821-00	23,225	-
93.865	National Institute of Child Health and Human Development	Univ of Alabama at Birmingham	000509380-SP004-009	(1,844)	-
93.865	National Institute of Child Health and Human Development	Univ of Michigan	SUBK00013311	9,985	-
93.865	National Institute of Child Health and Human Development	Univ of Minnesota	H008512501	39,216	-
93.865	National Institute of Child Health and Human Development	Univ of North Carolina	5106224	12,923	-
93.865	National Institute of Child Health and Human Development	Univ of Texas at Austin	UTA16-000486	2,599	-
93.865	National Institute of Child Health and Human Development	Univ of Texas at Austin	UTA20-00682	84,297	-
93.865	National Institute of Child Health and Human Development	Univ of Texas Medical Branch at Galvestn	20-84827-15	14,926	-
93.865	National Institute of Child Health and Human Development	Univ of Toronto	503689-Subgrant1	19,296	-
93.865	National Institute of Child Health and Human Development	University Of Colorado	1559817	109,129	-
93.865	National Institute of Child Health and Human Development	University Of Kansas	ZAC00050	58,173	-
93.865	National Institute of Child Health and Human Development	University of Texas Health Science Center - San Antonio	165959/165767	2,374	-
93.865	National Institute of Child Health and Human Development	Virginia Polytechnic Inst	412575-19074	253,234	-
93.866	National Institute on Aging	Bertec Corporation	R42AG062065	198,313	-
93.866	National Institute on Aging	Case Western Reserve Univ	RES513755	225,384	-
93.866	National Institute on Aging	Cleveland Clinic Fdn	1396-SUB	193,143	-
93.866	National Institute on Aging	Duke Univ	A032814	749	-
93.866	National Institute on Aging	Johns Hopkins Univ	2003050473	10,858	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Research and Development Cluster		
Pass-through from other sources:	Expenditures	to Subrecipients
Pass-through from other sources: 93.986		
93.866 National Institute on Aging Northwestern University 60040682 OSU		
93.866 National Institute on Aging Northwestern University 6004682 OSU		
93.866 National Institute on Aging Northwestern University 6004682 OSU	5.346	_
93.866 National Institute on Aging Univ of Ababama at Birmingham 00052390 S-0001-Nag 93.866 National Institute on Aging Univ of Ababama at Birmingham 00052390 S-0001-Nag 93.866 National Institute on Aging Univ of Ababama at Birmingham 00052390 S-0001-Nag 93.866 National Institute on Aging Univ of California to Los Angeles 2000 G SD114 193.866 National Institute on Aging Univ of California San Francisco 10478sc 10478sc 93.866 National Institute on Aging Univ of Michigan SIJER00011758 SIJE	8,470	_
93.866 National Institute on Aging Univ of Alabama at Birmingham 00052390-SC001-Nag 93.866 National Institute on Aging Univ of California at Los Angeles 2000 G SD114 193.866 National Institute on Aging Univ of California San Francisco 10478ec 2000 G SD114 193.866 National Institute on Aging Univ of California San Francisco 10478ec 2000 G SD114 193.866 National Institute on Aging Univ of Minnesota Hotology	59,872	-
93.886 National Institute on Aging Univ of Alabama at Birmingham 000527881-001-Rec	21,175	-
93.886	26,087	_
93.866 National Institute on Aging Univ of Kalifornia San Francisco 19478cc 93.866 National Institute on Aging Univ of Michigan SURKDO011788 93.866 National Institute on Aging Univ of Pernsylvania 571838 93.866 National Institute on Aging Univ of Souther California 6140-1043-00-A 93.866 National Institute on Aging Univ of Southern California 138801641 93.866 National Institute on Aging Univ of Southern California 79888018 93.866 National Institute on Aging Univ of Tennessee 21-3883-OSU 93.866 National Institute on Aging Univ of Tennessee 21-3883-OSU 93.866 National Institute on Aging University of Miami OS00000082 93.866 National Institute on Aging Vanderbilt Univ UNIVOT3307 93.866 National Institute on Aging Vanderbilt Univ VUMC73307 93.867 National Eye Institute Jaeb Ctr for Health Res Master Agrint did 9/17/19 93.867 National Eye Institute Jaeb Ctr for Health Res Master Agrint did 9/17/19	(572)	-
193.866	98,663	-
193.866 National Institute on Aging Univ of Minnesota H008512401	167.426	_
93.866	2,127	_
93.866 National Institute on Aging Univ of South Florida 135801641 93.866 National Institute on Aging Univ of Southern California 135801641 93.866 National Institute on Aging Univ of Southern California 79686018 93.866 National Institute on Aging Univ of Tennessee 21-3883-OSU 93.866 National Institute on Aging Univ of Tennessee A19-0828-S001 93.866 National Institute on Aging Univ of Tennessee A19-0828-S001 93.866 National Institute on Aging University of Miami OS00000082 93.866 National Institute on Aging Vanderbit Univ UNIV61525 93.866 National Institute on Aging Vanderbit Univ UNIV61525 93.866 National Institute on Aging Vanderbit Univ UNIV61525 93.867 National Eye Institute Aging Vanderbit Univ VUMC79600 93.867 National Eye Institute Aging Vanderbit University Medical Center VUMC79600 93.867 National Eye Institute Michigan State Univ RC10743405U 93.867 National Eye Institute Michigan State Univ RC10743405U 93.867 National Eye Institute Stanford Univ Stone R42EY022545 93.867 National Eye Institute Stanford Univ State Stanford Univ Stan	111,498	-
93.866 National Institute on Aging Univ of Southern California 135801641 93.866 National Institute on Aging Univ of Tennessee 21-3883-OSU 93.866 National Institute on Aging Univ of Tennessee A19-0828-S001 93.866 National Institute on Aging University of Milami OS00000082 93.866 National Institute on Aging Vanderbilt Univ UNIV61525 93.866 National Institute on Aging Vanderbilt Univ UNIV673907 93.866 National Institute on Aging Vanderbilt Univ UVIMC73907 93.866 National Eye Institute Jaeb Ctr for Health Res Master Agmt did 9/17/19 93.867 National Eye Institute Jaeb Ctr for Health Res Master Agmt did 9/17/19 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Precision Vision R22EY022545 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 Na	15,810	_
93.866 National Institute on Áging Univ of Southern California 79886018 93.866 National Institute on Aging Univ of Tennessee 21-3883-OSU 93.866 National Institute on Aging Univ of Tennessee A19-8628-S001 93.866 National Institute on Aging University of Miami OS00000082 93.866 National Institute on Aging Vanderbilt Univ UNIV61525 93.866 National Institute on Aging Vanderbilt Univ VUMC73007 93.866 National Institute on Aging Vanderbilt University Medical Center VUMC73007 93.867 National Eye Institute Jab Ct Tor Health Res Master Agmt did 9/17/19 93.867 National Eye Institute Precision Vision R2EY022545 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Tuffs Medical Ctr 5016211-SERV 93.867 National Eye Institute Univ of Alabama at Birmingham 00052678-SC001 93.867 National Eye Institute Univ of Louisville ULR Ts.1546-01 93.867 N	2,123	_
93.866 National Institute on Aging Univ of Tennessee 21-3883-OSU 93.866 National Institute on Aging Univ of Tennessee A19-0828-S001 93.866 National Institute on Aging University of Miami OS00000082 93.866 National Institute on Aging Vanderbilt Univ UNIV61525 93.866 National Institute on Aging Vanderbilt Univ VUMC73307 93.867 National Eye Institute Jack Ctr for Health Res Master Agmt dtd 9/17/19 93.867 National Eye Institute Michigan State Univ RC1073430SU 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Tufts Medical Ctr 5016211-SERV 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Chainant 013457-003 93.867 National Eye Institute Univ of Chainant 013457-003 93.867 National Eye Institute <	148,075	_
93.866 National Institute on Aging Univ of Tennessee A19-0828-S001 93.866 National Institute on Aging University of Miamin OS00000062 93.866 National Institute on Aging Vanderbilt Univ UNIVE/525 93.866 National Institute on Aging Vanderbilt University Medical Center VUMC75900 93.867 National Institute on Aging Vanderbilt University Medical Center VUMC75960 93.867 National Eye Institute Jaeb Ctr for Health Res Master Agmit did 9/17/19 93.867 National Eye Institute Michigan State Univ RC107343/0SU 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Stanford Univ 62538042-188339 93.867 National Eye Institute Univ of Alabama at Birmingham 00052671-SEQ01 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SQ01 93.867 National Eye Institute Univ of Cincinnati Univ of Cincinnati 93.867 National Eye Institute Univ of Cincinnati Univ of Cincinnati <tr< td=""><td>188,587</td><td>_</td></tr<>	188,587	_
93.866 National Institute on Aging University of Miami OS0000082 93.866 National Institute on Aging Vanderbilt Univ UNIV61525 93.866 National Institute on Aging Vanderbilt Univ VUMC73907 93.866 National Institute on Aging Vanderbilt University Medical Center VUMC75960 93.867 National Eye Institute Michigan State Univ RC1073430SU 93.867 National Eye Institute Michigan State Univ RC1073430SU 93.867 National Eye Institute Precision Vision R42EY022645 93.867 National Eye Institute Stanford Univ G538042-158339 93.867 National Eye Institute Univ of Alabama at Birmingham O00590933-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham O00590933-SC001 93.867 National Eye Institute Univ of Cincinnati Univ of O0559093-SC001 93.867 National Eye Institute Univ of Cincinnati Univ of Univ Of Cincinnati Univ Of Univ Of O059093-SC001 93.867 National Eye Institute Univ of Cincinnati Univ Of Univ Of Officinnati Univ Officinati Univ Officinati Univ Officinnati Univ Officinati Univ Officinati Univ Univ Officinati Univ Officinati Univ Officinati Univ Officinati Univ Officinati	2.371	_
93.866 National Institute on Aging Vanderbilt Univ Univ Univ (73307) 93.866 National Institute on Aging Vanderbilt Univ Vanderbilt Univ (73307) 93.867 National Eye Institute (73408) 93.867 National Eye Institute (74408) 93.867 National Eye Institute (74508) 93.868 National Eye Institute (74508) 93.869 National Library of Medicine (74508) 93.879 National Library of Medicine (74508) 93.870 National Library of Medicine (74508) 93.871 National Library of Medicine (74508) 93.872 National Library of Medicine (74508) 93.873 Nationa	298,900	_
93.866 National Institute on Áging Vanderbilt Univ 93.866 National Institute on Aging Vanderbilt University Medical Center VUMC75960 93.867 National Eye Institute Jaeb Ctr for Health Res Master Agmt dtd 9/17/19 93.867 National Eye Institute Michigan State Univ RC107343OSU 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Stanford Univ 6253042-158339 93.867 National Eye Institute Stanford Univ 638607 National Eye Institute Stanford Univ 74 Masham at Birmingham 1005509033-8C001 93.867 National Eye Institute Univ of Alabama at Birmingham 1005509033-8C001 93.867 National Eye Institute Univ of Cincinnati 1013457-003 93.867 National Eye Institute Univ of Washington Univ 1014 Univ 1	124,652	_
93.866 National Institute on Aging Vanderbilt University Medical Center VUMC75960 93.867 National Eye Institute Michigan State Univ RC107343OSU 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Stanford Univ 62538042-158339 93.867 National Eye Institute Univ 67 Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Cincinnati 013457-033 93.867 National Eye Institute Univ Of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ Of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ Of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ Of Michigan 202913OSU 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Eye Institute Univ Of Michigan SUBK00013136 93.879 National Institutes Of Health Univ Of Michigan Univ WU-19-88 93.879 National Library of Medicine Indiana Univ In4688956OSU 93.879 National Eyel Inst	(20)	_
93.867 National Eye Institute Michigan State Univ RC107343OSU 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Stanford Univ 62538042-158339 93.867 National Eye Institute Tufts Medical Ctr 5016211-SERV 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Coulswille ULRF 13-1546-01 93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine University of Illinois 18152 93.936 National Institutes and Services Administration OH Dept of Mental Hith & Addiction Svcs 2000252 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000335 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100141	1,878	_
93.867 National Eye Institute Michigan State Univ RC107343OSU 93.867 National Eye Institute Precision Vision R42EY022545 93.867 National Eye Institute Stanford Univ 6253042-156339 93.867 National Eye Institute Tufts Medical Ctr 5016211-SERV 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute University Of Notre Dame 2029130SU 93.867 National Eye Institute University Of Notre Dame 2029130SU 93.867 National Eye Institute University Of Notre Dame 2029130SU 93.867 National Isitutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine	39,130	_
93.867 National Eye Institute Stanford Univ 62538042-158339 93.867 National Eye Institute Tufts Medical Ctr 5016211-SERV 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Colicinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Washington Univ Wu-19-88 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ IN46899560SU 93.879 National Library of Medicine Indiana Univ IN46899560SU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration Univ of Illinois Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000252 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100216	16,008	_
93.867 National Éye Institute Stanford Univ 62538042-158339 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ of More Dame 2029130SU 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Services Administration University of Illinois 18152 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000255 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100135	145,027	31,684
93.867 National Eye Institute Tufts Medical Ctr 5016211-SERV 93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute University Of Notre Dame 2029130SU 93.867 National Eye Institute Washington Univ Wu-19-88 93.867 National Institutes of Health University Of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine University of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000235 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	8,506	-
93.867 National Eye Institute Univ of Alabama at Birmingham 000509033-SC001 93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000252 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	131.860	_
93.867 National Eye Institute Univ of Alabama at Birmingham 000526778-SC001 93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ IN4688956OSU 93.879 National Library of Medicine Univ IN4068056OSU 93.879 National Library of Medicine Univ IN4068056OSU 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000252 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100141	(50)	_
93.867 National Eye Institute Univ of Cincinnati 013457-003 93.867 National Eye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000325 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	828	_
93.867 National Éye Institute Univ of Louisville ULRF 13-1546-01 93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000325 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	25.628	_
93.867 National Eye Institute University Of Notre Dame 202913OSU 93.867 National Eye Institute Washington Univ Wu-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ Ind	809	_
93.867 National Eye Institute Washington Univ WU-19-88 93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000252 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	23	_
93.867 National Institutes of Health Univ of Michigan SUBK00013136 93.879 National Library of Medicine Indiana Univ BL-4648724-OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.884 Health Resources and Services Administration University of Illinois MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000252 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	8,775	
93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000252 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000355 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	19,994	
93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000252 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 21000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	3,007	
93.879 National Library of Medicine Indiana Univ IN4688956OSU 93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000252 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100141	133,713	
93.879 National Library of Medicine Univ of Iowa MOU dtd 5/15/17 93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	38.253	_
93.884 Health Resources and Services Administration University of Illinois 18152 93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000252 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	1,429	_
93.936 National Institutes of Health Microgen, LLC PRELIMINARY AWARD 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hlth & Addiction Svcs 2000252 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hlth & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hlth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hlth & Addiction Svcs 2100141	6,928	
93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000252 93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100141	1,141	_
93.958 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100256 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental Hith & Addiction Svcs 2100141	41.202	15,483
93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2000335 93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	41,002	13,463
93.959 Substance Abuse & Mental Health Services Administration OH Dept of Mental HIth & Addiction Svcs 2100141	53,013	_
· ·	68,850	-
55.517 Centers for Disease Control and Prevention City of Columbus	7,645	-
93.977 Centers for Disease Control and Prevention Cols Public Health PO222430	10,225	-
93.994 Health Resources and Services Administration OH Dept of Health 34908	9,211	-
93.994 Health Resources and Services Administration OH Dept of Health 41470	14.943	-
93.994 Health Resources and Services Administration OH Dept of Health 41470 93.RD Administration for Community Living Univ of Pittsburgh (blank)	14,943 51,856	-
93.RD Agency for Healthcare Research and Quality Case Western Reserve Univ PRELIMINARY AWARD	16,709	-
· · · · · · · · · · · · · · · · · · ·	111,595	-
93.RD Agency for Healthcare Research and Quality IBM Corp 156709 93.RD Agency for Healthcare Research and Quality Res Triangle Inst 30-312-0214643-66275L	111,595	-
93.RD Agency for Healthcare Research and Quality Res Triangle Inst 30-312-0214643-66321L	31,018	-

Assistance Listi			Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
Research and Developmen	at Cluster				
Pass-through from other so					
rass-illiough hom other so	ources.				
93.RD	Agency for Healthcare Research and Quality	Res Triangle Inst	3-312-0216363-66260L	2.083	-
93.RD	Agency for Healthcare Research and Quality	Res Triangle Inst	3-312-0217290-66241L	11,421	-
93.RD	Biomedical Advanced Research and Development Authority	Battelle Memorial Inst	Subcontract No. 763072	12,078	-
93.RD	Biomedical Advanced Research and Development Authority	Beckman Coulter Inc.	C69685	27,730	_
93.RD	COVID-19 Biomedical Advanced Research and Development Autr	o Regeneron Pharmaceuticals, Inc	R10933-10987-COV-2066	72,049	-
93.RD	Biomedical Advanced Research and Development Authority	Syneos Health LLC	SMT19969/C005	699	-
93.RD	Centers for Disease Control and Prevention	Hemophilia Fdn of Michigan	PRELIMINARY AWARD	14,012	-
93.RD	Centers for Disease Control and Prevention	Vanderbilt University Medical Center	VUMC75293	13,489	-
93.RD	COVID-19 Centers for Disease Control and Prevention	Vanderbilt University Medical Center	VUMC81586	114,896	-
93.RD	COVID-19 Centers for Disease Control and Prevention	Vanderbilt University Medical Center	VUMC89535	1,275	-
93.RD	Food and Drug Administration	Indiana Univ	8145-OSU	257,381	-
93.RD	Health Resources and Services Administration	OH Dept of Health	44494	104,133	-
93.RD	Health Resources and Services Administration	The Research Institute at Nationwide Children's Hospital	720414-1219-00	3,493	-
93.RD	National Cancer Institute	Ambay Immune Sensors and Controls	75N91020C0003	4,326	-
93.RD	National Cancer Institute	Columbus NanoWorks, Inc	75N91019C00014	89,344	-
93.RD	National Cancer Institute	Leidos, Inc	19Q055 Task Order 1	297,056	-
93.RD	National Cancer Institute	Leidos, Inc	IDIQ 19Q055 Task Order 2	20,504	-
93.RD	National Cancer Institute	Leidos, Inc	P9775/P17046	(195)	-
93.RD	National Cancer Institute	Leidos, Inc	SA20012 AMC-085	12,355	-
93.RD	National Institute of Allergy and Infectious Diseases	Seattle Children's Research Institute	PRELIMINARY AWARD	181,061	-
93.RD	National Institute of Allergy and Infectious Diseases	St. Jude Children's Research Hospital	112100020-7901863/112100030-7950712	623,063	-
93.RD	National Institute of Allergy and Infectious Diseases	St. Jude Children's Research Hospital	112108012-7852610/112336022-7955449	204,910	-
93.RD	National Institute of Allergy and Infectious Diseases	St. Jude Children's Research Hospital	PRELIMINARY AWARD	34,813	-
93.RD	National Institute of General Medical Sciences	Protein Metrics	PRELIMINARY AWARD	20,105	-
93.RD	National Institutes of Health	The Research Institute at Nationwide Children's Hospital	PRELIMINARY AWARD	17,377	-
93.RD	National Institutes of Health	Univ of Alabama at Birmingham	PRELIMINARY AWARD	2,118	-
93.RD	COVID-19 National Institutes of Health	Univ of Chicago	AWD101462-N	34,611	-
93.RD	National Institutes of Health	Worcester Polytechnic Institute	PRELIMINARY AWARD	12,393	-
	Total Department of Health and Human Services Pass-Throug	h Awards		34,563,437	936,309
om					
Office of the Director of N		Dettelle Menseriel heet	000470	000.057	
95.RD	Intelligence Advanced Research Projects Activity	Battelle Memorial Inst	806476	206,857	-
95.RD 95.RD	Intelligence Advanced Research Projects Activity Intelligence Advanced Research Projects Activity	Battelle Memorial Inst Brown University	PO US001-0000786259 00001474	49,253 26,344	-
95.RD	Intelligence Advanced Research Projects Activity	Signature Science, LLC	IARPA-BAA-17	131,043	-
00.112	monigorio / lavario a rescaron ri rojecto / tolavity	Signature Colonics, EEC	7.4.4.7.2.7.6.17	101,040	
	Total Office of the Director of National Intelligence Pass-throu	gh Awards		413,497	<u> </u>
Social Security Administr	ration				
96.007	Social Security Administration	Univ of Wisconsin	000000418	38,498	-
96.007	Social Security Administration	Univ of Wisconsin	000001157	81,178	-
96.007	COVID-19 Social Security Administration	Univ of Wisconsin	Agreement # 0000000813	107,220	-
	Total Social Security Administration Pass-through Awards			226,896	-
Department of Homeland	Socurity				
97.061	US Department of Homeland Security	Univ of Southern California	75727558	118,176	
37.001	Go Department of Homeland Security	Only of Coduletti California	13121330	110,170	-
	Total Department of Homeland Security Pass-through Awards			118,176	-

Assistance Lis Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Research and Developme	ent Cluster —				
Pass-through from other s	sources:				
Agency for International	I Development				
98.001	Agency for International Development	Global Environment and Technology Foundation	Agreement effective 10/28/2018	311,267	-
98.001	Agency for International Development	Michigan State Univ	RC108887-OSU	24,236	18,040
98.001	Agency for International Development	National Academy of Sciences	2000007138	18,897	-
98.001	Agency for International Development	National Academy of Sciences	200008312	36,857	-
98.001	Agency for International Development	Purdue Univ	F0004868402086	45,368	-
98.001	Agency for International Development	Univ of Georgia	SUB00001896	33,830	24,893
98.001	Agency for International Development	Virginia Polytechnic Inst	451364-19074	25,839	-
98.001	Agency for International Development	Virginia Polytechnic Inst	451364-19074A	104,983	94,716
98.011	Agency for International Development	Global Environment and Technology Foundation	WADA Subagreement	100,411	80,055
	Total Agency for International Development Pass-Through	n Awards		701,688	217,704
Medicaid and CHIP Payı	ment and Access Commission				
99.RD	Medicaid and CHIP Payment and Access Commission	AcademyHealth	840.2019.003	6,855	-
	Total Medicaid and CHIP Payment and Access Commission	on Pass-Through Awards		6,855	-
Subtotal pass-through fr	rom other sources			\$ 82,383,856	\$ 2,401,729
Total Research and Dev	velopment Cluster			\$ 435,945,027	\$ 56,384,488

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Li Number	•	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Student Financial Aid Clu	uster —				
Funds received directly fr	rom the following federal agencies:				
Department of Educatio	on				
84.007	Supplemental Education Opportunity Grant			\$ 2,350,042	\$ -
84.033	Federal Workstudy Program			3,801,704	-
84.038	Perkins Loans outstanding balance at 7/1/2021			29,051,009	-
84.038	Perkins administrative cost allowance and collection costs			85,611	-
84.063	Pell Grant Program			58.509.968	_
84.268	Direct Lending subsidized student advances during fiscal year 2021			48,827,412	-
84.268	Direct Lending unsubsidized student advances during fiscal year 2021			180,369,937	-
84.268	Direct Lending parent (undergraduate) advances during fiscal year 2021			46,637,329	-
84.268	Direct Lending parent (graduate) advances during fiscal year 2021			36,179,684	-
84.379	Teacher Ed Assistance for College and Higher Ed Grants			26,355	-
	Total Department of Education Direct Awards			405,839,051	-
Department of Health ar	nd Human Services				
93.264	Nursing Faculty Loans outstanding balance at 7/1/2020			984,638	-
93.264	Nursing Faculty Loans advances during fiscal year			206,020	-
93.342	Health Professions Student Loans outstanding balance at 7/1/2020			14,076,872	-
93.342	Health Professions Student Loans advances during fiscal year			2,005,993	-
93.342	Primary Care Loans, outstanding balance at 7/1/2020			390,902	-
93.342	Disadvantaged Student Loans outstanding balance at 7/1/2020			61,170	-
93.364	Nursing Student Loans outstanding balance at 7/1/2020			642,197	-
93.364	Nursing Student Loans advances during fiscal year			49,965	-
93.U03	ARRA Nursing Faculty Loan outstanding balance at 7/1/2020			8,062	-
	Total Department of Health and Human Services Direct Awards			18,425,819	-
Subtotal Student Finar	ncial Aid Cluster			\$ 424,264,870	\$ -

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listi Number	ing Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification		Federal penditures	Expendit to Subreci	
Trio Cluster — Funds received directly from	n the following federal agencies:						
•	•						
Department of Education 84.042	US Department of Education		P042A150002	\$	81,867	œ.	
84.042	US Department of Education		P042A100002 P042A200030	φ	284,108	φ	-
84.047	US Department of Education		P047A170955		238,674		
84.047	US Department of Education		P047A171153		221,433		-
	Total Department of Education Direct Awards				826,082		-
Subtotal Trio Cluster				\$	826,082	\$	
Health Centers Cluster — Funds received directly from Department of Education	n the following federal agencies:						
93.224	Health Resources and Services Administration		H80CS33660	\$	790,628	\$	_
93.224	COVID-19 Health Resources and Services Administration		H8CCS34891	*	41,731	•	_
93.224	COVID-19 Health Resources and Services Administration		H8DCS36665		473,474		-
93.224	COVID-19 Health Resources and Services Administration		H8ECS37973		134,024		-
93.527	Health Resources and Services Administration		H80CS33660		17,732		-
	Total Health Resources & Services Admin Direct Awards				1,457,589		-
Subtotal Health Centers	Cluster			\$	1,457,589	\$	
Head Start Cluster — Funds received directly from	n the following federal agencies:						
Department of Health and	Human Services						
93.600	COVID-19 Administration for Children and Families		05HP000316	\$	3,146,158	\$	-
93.600	School Psych CDC Head Start				51,455		-
	Total Department of Health and Human Services Direct Awards				3,197,613		-
Subtotal Head Start Clus	ster			\$	3,197,613	\$	

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listi Number	ing Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures		openditures Subrecipients
Supplemental Nutrition Assi Pass throughs from other so	•					
Department of Agriculture	9					
10.561	USDA Food and Nutrition Service	OH Dept of Job & Family Services	G-1819-17-0725	\$ 54,	387 \$	_
10.561	USDA Food and Nutrition Service	OH Dept of Job & Family Services	G-2021-17-0437	3,213,		157,528
10.561	USDA Food and Nutrition Service	OH Dept of Job & Family Services	G-2021-17-0894	5,023,		-
	Total Department of Agriculture Pass-Through Awards			8,291,	416	157,528
Subtotal Supplemental N	Nutrition Assistance Program Cluster			\$ 8,291,	416 \$	157,528
CDBG - Entitlement Grants Pass throughs from other so						
-						
Department of Housing ar		City of Classical Department of Ferrosis Development		6 44	000 ¢	
14.218 14.218	US Department of Housing and Urban Development	City of Cleveland Department of Economic Development	PRELIMINARY AWARD SG2020-0233	\$ 14, 68,	329 \$	-
14.210	US Department of Housing and Urban Development	Cleveland Department of Community Development	SG2020-0253	00,	901	-
	Total Department of Housing and Urban Development Pas	s-Through Awards		83,	B10	-
Subtotal CDBG - Entitler	ments Grants Cluster			\$ 83,	310 \$	<u>-</u>
HOPE VI Cluster— Pass throughs from other so Department of Housing ar 14.889		Urban Strategies Inc	Agreement dated 9/4/2020	\$ 23,	802 \$	-
	Total Department of Housing and Urban Development Pas	s-Through Awards		23,	802	
Subtotal HOPE VI Cluste	or.			\$ 23,	302 \$	
Sublotal HOPE VI Gluste	ci			φ 23,	502 \$	<u>-</u>
Fish and Wildlife Cluster — Pass throughs from other so	ources:					
Department of the Interior	r					
15.605	US Fish and Wildlife Service	OH Division of Wildlife	Agreement dated 06/18/2019	\$ 188,	592 \$	35,812
15.605	US Fish and Wildlife Service	OH Division of Wildlife	Agreement dated 06/19/2020	854,	931	30,047
15.605	US Fish and Wildlife Service	OH Division of Wildlife	No Award Number	,	127)	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	Agreement Dated 04/06/20		973	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	Award dated 03/19/2021	49,		-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	Award dated 09/26/2019		345	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	CC21-03104	3,	700	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	CC21-08103	3,	000	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	CC21-09105	2,	509	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	CC21-29107	2,	199	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources	CC21-57102	2,	537	-
	0 1	in a Nata at the Oak at the of Famous literature of Fadous I A	d-			470

THE OHIO STATE UNIVERSITY SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Lis Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification		ederal enditures	Expenditures to Subrecipients
15.611	US Fish and Wildlife Service	OU Dood of Notice Doods was	CC21-72101		7,892	
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources OH Dept of Natural Resources	CC21-72101 CC21-83105		7,092 864	-
15.611	US Fish and Wildlife Service	•	CC21-83103 CC21-87100		4,780	-
15.611	US Fish and Wildlife Service	OH Dept of Natural Resources OH Division of Wildlife	Agreement Dated 09/23/2019		41,091	-
15.611	US Fish and Wildlife Service		•			-
15.611	US Fish and Wildlife Service	OH Division of Wildlife OH Division of Wildlife	Agreement dated 12/23/2020 W-134-P-20		64,683 4,020	-
15.011	US FISH and Wilding Service	On Division of Wildine	W-134-F-20		4,020	-
	Total Department of the Interior Pass-Through Awards		•		1,236,313	65,859
Subtotal Fish and Wildl	life Cluster			\$	1,236,313 \$	65,859
WIOA Cluster —	201722					
Pass throughs from other	sources.					
Department of Labor						
17.258	Employment and Training Administration	OH Dept of Job & Family Services	C-2021-15-0358	\$	1,537 \$	-
17.258	Employment and Training Administration	OH Dept of Job & Family Services	C-2021-15-0762		89,397	-
17.259	Employment and Training Administration	OH Dept of Job & Family Services	C-2021-15-0358		1,631	-
17.259	Employment and Training Administration	OH Dept of Job & Family Services	C-2021-15-0762		94,815	-
17.278	Employment and Training Administration	OH Dept of Job & Family Services	C-2021-15-0358		1,490	-
17.278	Employment and Training Administration	OH Dept of Job & Family Services	C-2021-15-0762		86,688	-
	Total Department of Labor Pass-Through Awards				275,558	-
Subtotal WIOA Cluster				\$	275,558 \$	-
Highway Planning and Cor Pass throughs from other						
Department of Transpor	tation					
20.205	Federal Highway Administration	OH Dept of Transportation	32375	\$	22,789 \$	-
20.205	Federal Highway Administration	OH Dept of Transportation	32376	*	130,398	<u>-</u>
20.205	Federal Highway Administration	OH Dept of Transportation	33807		657,513	94,175
20.205	Federal Highway Administration	OH Dept of Transportation	34888		65,939	
20.205	Federal Highway Administration	OH Dept of Transportation	Agreement #34657		17,472	12,320
20.205	Federal Highway Administration	OH Dept of Transportation	Inlet protection comparison		125,360	,520
20.205	Federal Highway Administration	OH Dept of Transportation	ODOT 32373		1,522,180	894,310
20.205	Federal Highway Administration	Ohio University	Subaward UT20480 - PO 31866		18,480	-
	Total Department of Transportation Pass-Through Awa	ards			2,560,131	1,000,805
Subtotal Highway Plani	ning and Construction Cluster			\$	2,560,131 \$	1,000,805

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Li Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification		deral ditures	Expenditures to Subrecipients
Highway Safety Cluster - Pass throughs from other	sources:					
Department of Transpor	tation					
20.600	National Highway Traffic Safety Administration	OH Dept of Public Safety	GG-202000020	\$	322,003	\$ 260,397
20.600	US Department of Transportation	OH Dept of Public Safety	GG-2020-00015		49,026	-
20.616	US Department of Transportation	OH Dept of Public Safety	GG-202100016		100,400	67,761
	Total Department of Transportation Pass-Through Awards			-	471,429	328,158
Subtotal Highway Safe	ety Cluster			\$	471,429	\$ 328,158
Special Education (IDEA)	Cluster —					
Pass throughs from other	sources:					
Department of Educatio	n					
84.027	US Department of Education	OH Dept of Educ	Agreement Dated 10/3/19	\$	(429)	\$ -
84.027	US Department of Education	OH Dept of Educ	Agreement Dated 10/5/20		143,305	-
84.027 84.027	US Department of Education US Department of Education	OH Dept of Educ OH Dept of Educ	Agreement dated 11/3/20 EDU2018053		124,153 (16,138)	-
84.027	US Department of Education	Univ of Cincinnati	012124-002		1,594	-
04.027	oo bepartment of Education	Only of Ontoninati	012124-002		,	
	Total Department of Education Pass-Through Awards				252,485	-
Subtotal Special Educa	ation (IDEA) Cluster			\$	252,485	\$ -
Aging Cluster — Pass throughs from other	sources:					
Department of Health ar	nd Human Services					
93.044	Administration for Community Living	Central Ohio Area Agency on Aging	Agreement dated 1/13/2020	\$	15,313	\$ -
93.044	Administration for Community Living	Central Ohio Area Agency on Aging	Agreement dated 1/5/2021		12,235	-
	Total Department of Health and Human Services Pass-Through	h Awards		-	27,548	-
Subtotal Special Educa	ation (IDEA) Cluster			\$	27,548	\$ -
477 Cluster —						
Pass throughs from other	sources:					
Department of Health ar						
93.558	Administration for Children and Families	Ohio Governor's Office of Faith-Based and Community Initiatives	G-1415-21-0756	\$	601,446	\$ -
93.558	US Department of Health & Human Services	Butler County Board of Commissioners	20-01-00147		181,254	-
93.558 93.558	US Department of Health & Human Services	Community Action Committee of Pike County Community Action Committee of Pike County	Agreement dated 11/31/2020		1,176 356	-
93.558 93.558	US Department of Health & Human Services US Department of Health & Human Services	OH Dept of Job & Family Services	Award dated 12/17/2019 G-2021-17-0755		356 795	-
93.558	US Department of Health & Human Services	OH Dept of Job & Family Services OH Dept of Job & Family Services	G-2021-17-0755 G-2021-17-0984		1,729	-
93.558	US Department of Health & Human Services	Produce Perks Midwest	TANF-20-001		15,782	-
-	•				-,	

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listii Number	ng Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification			Expenditures o Subrecipients
	Total Department of Health and Human Services Pass-Th	rough Awards		-	802,538	-
C., ht-t-1 477 Cht				Φ.	000 500	
Subtotal 477 Cluster				\$	802,538 \$	
CCDF Cluster — Pass throughs from other so	purces:					
Department of Health and	Human Services					
93.575	US Department of Health & Human Services	Wyoming Department of Family Services	Agreement Dated 6/3/20	\$	74,408 \$	-
	Total Department of Health and Human Services Pass-Th	rough Awards			74,408	-
Subtotal CCDF Cluster				\$	74,408 \$	-
Head Start Cluster — Pass throughs from other so	purces:					
Department of Health and	Human Services					
93.600	Administration for Children and Families	OH Dept of Educ	Agreement Dated 9/25/20	\$	10,005 \$	-
93.600 93.600	Administration for Children and Families	OH Dept of Educ	EDU20200047		13,797	-
93.000	Administration for Children and Families	Ohio Head Start Association	Agreement dated 12/22/2020		4,055	-
	Total Department of Health and Human Services Pass-Th	rough Awards			27,857	-
				\$	27,857 \$	-
Subtotal Head Start Clus	ter					
Medicaid Cluster - Pass throughs from other so	purces:					
Department of Health and						
93.778	Centers for Medicare & Medicaid Services	Case Western Reserve Univ	RES515832	\$	32,885 \$	-
93.778	Centers for Medicare & Medicaid Services	Case Western Reserve Univ	RES515889		159,976	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM201801		(6,952)	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM201803		(3,394)	<u>-</u>
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM201938		177,216	67,274
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202001		351,237	34,890
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202002		146,640	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202003		52,026	47,297
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202004		30,058	440.707
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202005		174,548	118,727
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202007		247,062	26,894
93.778	COVID-19 Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202007		892,583	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202009		96,116	400 400
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202010		124,666	108,482
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202012		381,511	-

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listi	ing		Additional Award	Federal	Expenditures
Number	Federal Agency Sponsor	Pass-Through Sponsor	Identification	Expenditures	to Subrecipients
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202013	10,703	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202014	86,244	60,36
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202015	81,241	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202016	2,300,622	1,902,293
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202017	587,153	337,834
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202018	155,387	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202020	6,508	6,508
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202021	47,546	39,528
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202025	31,791	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202026	114,136	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202027	101,387	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202028	123,018	73,507
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202029	149,372	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202030	120,585	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202038	1,132,715	976,408
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202045	1,702,192	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202047	288,500	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202049	417,092	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202050	321,359	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202058	347,130	117,293
93.778	COVID-19 Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202106	127,481	38,945
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202108	78,455	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202113	270,256	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202134	217,296	106,739
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202136	25,864	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202137	151,949	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	ODM202139	84,756	-
93.778	Centers for Medicare & Medicaid Services	Ohio Department of Medicaid	PRELIMINARY AWARD	14,401	-
	Total Department of Health and Human Services Pass-Th	rough Awards		11,951,317	4,062,98
Medicaid Cluste	er			\$ 11,951,317	\$ 4,062,983

THE OHIO STATE UNIVERSITY SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

Assistance Listi Number	Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Funds received directly from Other Programs:	n the following federal agencies				
Peace Corps					
08.U01	Peace Corps		1145PC20P0023	33,147	\$ -
08.U02	Peace Corps		PC-15-8-032	1,898	-
	Total Peace Corps Direct Awards		-	35,045	-
Department of Agriculture	9				
10.310	National Institute of Food and Agriculture		20177000627174	7,655	-
10.310	National Institute of Food and Agriculture		20154152023772	78,675	-
10.310	National Institute of Food and Agriculture		20164152025616	4,258	-
			CFDA 10.310 Subtotal	90,588	-
10.319	National Institute of Food and Agriculture		20173850427123	96,898	21,937
10.329	National Institute of Food and Agriculture		20177000627174	273,262	-
10.511	Cooperative Extension Service			12,475,034	-
10.514	Cooperative Extension Service			2,055,076	-
10.515	Cooperative Extension Service			52,617	-
10.500	National Institute of Food and Agriculture		20154152023772	48,230	16,462
10.500	National Institute of Food and Agriculture		20164152025616	295,335	75,423
10.500	National Institute of Food and Agriculture		20174152127067	117,727	-
10.500	National Institute of Food and Agriculture		20174159027337	148,452	86,484
10.500	National Institute of Food and Agriculture		20184610028783	57,944	-
10.500	National Institute of Food and Agriculture		20204610032842	118,965	-
			CFDA 10.500 Subtotal	786,653	178,369
10.855	USDA Rural Development		OH 727-A58	32,447	-
10.902	Natural Resources Conservation Service		NRCSADS093 NR195E34XXXXC001	245,523	-
10.962	USDA Foreign Agricultural Service		FX21CO-10962R016	9,965	-
	Total Department of Agriculture Direct Awards		_	16,118,063	200,306
Department of State					
19.900	US Department of State		SRB10019CA0179	65,379	-
	Total Department of State Awards		_	65,379	-
Department of Transporta	ition				
20.106	COVID-19 Federal Aviation Administration		3-39-0027-034-2020	198,718	-
	Total Department of Transportation Direct Awards		_	198,718	-

THE OHIO STATE UNIVERSITY SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

Assistance Li Number	sting Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Funds received directly fr Other Programs:	om the following federal agencies				
National Foundation on	the Arts and the Humanities				
45.161	COVID-19 National Endowment For The Humanities		RJ-274341-20	80,493	-
	Total National Foundation on the Arts and the Humanities Pass-Through Awa	rds	_	80,493	-
Department of Veterans	Affairs				
64.125	Vocational and Educational Counseling for Veterans			25,859	-
	Total Department of Veterans Affairs		_	25,859	-
Department of Education	n				
84.015	US Department of Education		P015A180036	178,780	-
84.015	US Department of Education		P015A180037	206,127	-
84.015	US Department of Education		P015A180070	258,421	2,348
			CFDA 84.015 Subtotal	643,328	2,348
84.310	US Department of Education		U310A180049	850,982	217,485
84.335	US Department of Education		P335A180304	329,989	-
84.425E	COVID-19 Higher Education Emergency Relief Fund - Student Portior		D4055004007 004	25,309,917	-
84.425F	COVID-19 Higher Education Emergency Relief Fund - Institutional Portion		P425F204697 - 20A	33,534,287	-
84.425M	COVID-19 Higher Education Emergency Relief Fund - Strengthening Institutions Pr	ograr	_	310,559	
	Total Department of Education Direct Awards			60,979,062	219,833
Department of Health a	nd Human Services				
93.243	Substance Abuse & Mental Health Services Administration		H79SM081411	138,233	-
93.318	COVID-19 Centers for Disease Control and Prevention		NU2HGH000069	283,070	178,374
93.461	COVID-19 Testing for the Uninsurec			1,013,184	-
93.498	COVID-19 Provider Relief Fund			143,492,543	-
93.788	Substance Abuse & Mental Health Services Administration		H79TI081897	307,264	-
93.788	Substance Abuse & Mental Health Services Administratior		H79TI083265 CFDA 93.788 Subtotal	21,599 328,863	
93.U03	Food and Drug Administration		HHSF223201850065A	80,254	-
	Total Department of Health and Human Services Direct Awards		<u>-</u>	145,336,147	178,374
Subtotal funds receive	d directly from federal agencies		<u>. s</u>	\$ 222,838,766	\$ 598,513

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listing Number	g Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Pass-through from other sou Other Programs:	rces:				
Department of Agriculture					
10.001	USDA Agricultural Research Service	Univ of Arkansas	UA AES 05687-01	(68,663)	\$ -
10.001	USDA Agricultural Res Service	Univ of Arkansas	UA AES 05714-01	157,832	-
			CFDA 10.001 Subtotal	89,169	-
10.200	National Institute of Food and Agriculture	Iowa State Univ	416-41-71G	41,549	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H005722949	8,206	-
10.215	COVID-19 National Institute of Food and Agriculture	Univ of Minnesota	H005722965	3,209	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H006607441	41,237	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007813910	15,391	7,903
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H007813920	33,283	-
10.215	National Institute of Food and Agriculture	Univ of Minnesota	H008568304	12,278	_
	J		CFDA 10.215 Subtotal	113,604	7,903
10.225	National Institute of Food and Agriculture	Asian Services In Action	2018-33800-28392	3,084	_
10.329	National Institute of Food and Agriculture	Michigan State Univ	RC108974E	2,031	_
10.023	National institute of Food and Agriculture	wholigan otate only	1101003742	2,001	_
10.331	National Institute of Food and Agriculture	Farmers Market Coalition	Agreement dated 7/22/2020	1,500	-
10.331	National Institute of Food and Agriculture	Produce Perks Midwest	FINI-001	76,149	-
			CFDA 10.331 Subtotal	77,649	-
10.500	National Institute of Food and Agriculture	Kansas State Univ	A00-0983-S064	12,430	-
10.500	National Institute of Food and Agriculture	Univ of Nebraska	25-6324-0150-317	(4,107)	_
10.500	National Institute of Food and Agriculture	Univ of Nebraska	25-6324-0187-008	7,514	_
10.500	National Institute of Food and Agriculture	Univ of Nebraska	25-6324-0187-017	7,424	_
	J		CFDA 10.500 Subtotal	23,261	-
10.525	National Institute of Food and Agriculture	Iowa State Univ	021546A	4,845	-
10.558	US Department of Agriculture	OH Dept of Educ	Agreement Dated 11/22/19	(5,749)	_
10.558	US Department of Agriculture	OH Dept of Educ	Agreement Dated 12/9/20	16,185	_
10.550	OO Bepartment of Agriculture	Off Book of Eddo	CFDA 10.558 Subtotal	10,436	
			5. 27. 15.000 50.000.	.0,.00	
10.664	USDA Forest Service	Purdue Univ	F9000151802023	4,716	-
10.890	USDA Rural Development	Purdue Univ	F0008521002135	5,020	-
10.902	Natural Resources Conservation Service	Great Lakes Comsn	GLSNRP-10-06	17,482	-
10.902	Natural Resources Conservation Service	Great Lakes Comsn	WS07-17-14	25,368	-
			CFDA 10.902 Subtotal	42,850	-
10.U04	US Department of Agriculture	Rural Action	PRELIMINARY AWARD	11,062	-
	Total Department of Agriculture Pass-Through Awards		_	429,276	7,903

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Assistance Listir Number	ng Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Pass-through from other sou Other Programs:	urces:				
Department of Labor					
11.611	National Institute of Standards and Technology	Ohio Development Services Agency	MEPG20190471	(14,256)	-
11.611	US Department of Commerce	Ohio Development Services Agency	MEPG20200048	221,811	-
11.611	COVID-19 US Department of Commerce	Ohio Development Services Agency	MEPG20200520	124,448	-
			CFDA 11.611 Subtotal	332,003	-
	Total Department of Labor Pass-Through Awards		-	332,003	-
Department of Defense					
12.630	Army Research Office	Technology Student Association	Agreement dated 01/17/2020	11,062	-
	Total Department of Defense Pass-Through Awards		-	11,062	-
Department of Housing an	nd Urban Development				
14.U05	US Department of Housing and Urban Development	Monroe County Board of Commissioners	Agreement dated 02/20/2019	17,796	-
	Total Department of Housing and Urban Development Pas	ss-Through Awards	-	17,796	-
Department of Justice					
16.548	Office of Juvenile Justice and Delinquency Prevention	OH Dept Youth Services	2020-JV-PYD-3001	9,188	-
16.575	US Department of Justice	Ohio Office of Attorney General	2020-VOCA-132920910	90,276	-
16.726	Office of Juvenile Justice and Delinquency Prevention	National 4-H Council	Agreement Dated 05/01/2020	116,316	_
16.726	Office of Juvenile Justice and Delinquency Prevention	National 4-H Council	Agreement signed 7/16/2020	58,488	-
			CFDA 16.726 Subtotal	174,804	-
16.738	US Department of Justice	Office of Criminal Justice Services	2017-JG-A02-6663F	7,299	-
	Total Department of Justice Pass-Through Awards		-	281,567	-
Department of Treasury					
21.019	COVID-19 Dept of Treasury	City of Columbus	Agreement dated 09/01/2020	74,211	-
21.019	COVID-19 Dept of Treasury	City of Columbus	Agreement dated 11/6/2020	164,937	-
21.019	COVID-19 Dept of Treasury	Mahoning County Board of Commissioners	Agreement dated 9/3/2020	29,668	-
21.019	COVID-19 Dept of Treasury	Miami County Board of Commissioners	Agreement dated 11/12/2020	15,263	-
21.019	COVID-19 Dept of Treasury	Seneca County Board of Commissioners	Agreement dated 12/16/2020	37	-
21.019	COVID-19 Dept of Treasury	Ohio Department of Higher Education	Application ID 17918	42,622,136	-
	Total Department of State Pass-through Awards		-	42,906,252	-
Appalachian Regional Cor	nmission				
23.002	Appalachian Regional Commission	Catalyst Connection	CATALYST-20-017	5,257	-
	Total Appalachian Regional Commission Pass-Through A	wards	-	5,257	-

THE OHIO STATE UNIVERSITY

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2021

	Assistance Listin	ng Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Pass-throug Other Progra	gh from other sou rams:	urces:				
	eronautics and 43.008	Space Administration National Aeronautics and Space Administration Headquarters	Ohio Space Grant Consortium	Award lettter dated 3.30.2020	4,997	-
		Total National Aeronautics and Space Administration Pass-Th	rough Awards	-	4,997	-
National En	ndowment for the	he Humanities				
	45.310	Institute Of Museum And Library Services	State Library Board	II-10-20	1,000,000	-
	45.310	Institute Of Museum And Library Services	State Library Board	II-2-21	500,000	-
				CFDA 45.310 Subtotal	1,500,000	-
		Total National Endowment for the Humanities Pass-Through A	Awards	_	1,500,000	-
Small Busii	ness Administr	ation				
	59.037	Small Business Administration	Ohio Development Services Agency	OSBG-20-314	68,680	-
	59.037	COVID-19 Small Business Administration	Ohio Development Services Agency	OSBG-20-341	37,125	-
	59.037	Small Business Administration	Ohio Development Services Agency	OSBG-21-314	168,944	-
				CFDA 59.037 Subtotal	274,749	-
		Total Small Business Administration Pass-through Awards		, -	274,749	
Environme	ntal Protection	Agency				
	66.716	Environmental Protection Agency	eXtension	SA-2019-57	(74)	-
	66.716	Environmental Protection Agency	eXtension	SA-2020-42	10,811	-
	66.716	Environmental Protection Agency	eXtension	SA-2021-21	5,422	-
				CFDA 59.037 Subtotal	16,159	-
		Total Environmental Protection Agency Pass-Through Awards	5	_	16,159	-
Donartmon	t of Education					
•	84.215	US Department of Education	Binghamton University	020SUB359	97,431	_
	84.287	US Department of Education	Columbiana County Educational Service Center	Agreement dated 10/1/2020	1,658	_
	84.425C	COVID-19 US Department of Education	Ohio Department of Higher Education	S425C200040	1,688,079	-
		Total Department of Education Pass-Through Awards		_	1,787,168	
Department of Health and Human Services						
•	93.136	Centers for Disease Control and Prevention	Franklin County Public Health	CDCOD2A	150,174	_
	30.100	Centers for Discase Control and Frevention	Trankin Godity Fubic Floatin	OBOODZA	150,174	
	93.243	Substance Abuse & Mental Health Services Administration	Alcohol, Drug and Mental Health Board of Franklin County	Agreement signed 8/5/19	392,526	-
	93.243	Substance Abuse & Mental Health Services Administration	OH Dept of Mental HIth & Addiction Svcs	2100410	80,387	<u> </u>
				CFDA 93.243 Subtotal	472,913	-
	93.297	Office of Population Affairs	The Research Institute at Nationwide Children's Hospital	710061-0621-00	75,094	
	93.576	Administration for Children and Families	U.S. Committee for Refugees and Immigrants	MOU dated 6/11/2019	2,250	-
	55.575	, diffined and for or o	o.o. osminico foi redagoos and minigranis	11100 dated 0/11/2019	2,230	-

THE OHIO STATE UNIVERSITY

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2021

	Assistance Listin Number	rg Federal Agency Sponsor	Pass-Through Sponsor	Additional Award Identification	Federal Expenditures	Expenditures to Subrecipients
Pass-throu Other Prog	igh from other sou grams:	urces:				
	93.590 93.590	US Department of Health & Human Services US Department of Health & Human Services	Univ Hospitals of Cleveland Univ Hospitals of Cleveland	Agreement dated 9/17/2019 Agreement dated 9/22/2020 CFDA 93.590 Subtotal	958 2,511 3,469	- - -
	93.788 93.788	Substance Abuse & Mental Health Services Administration Substance Abuse & Mental Health Services Administration	OH Dept of Health OH Dept of Mental Hith & Addiction Svcs	02540034IN0322 2100836 CFDA 93.788 Subtotal	25,627 16,875 42,502	- - -
	93.855 93.889 93.898 93.958 93.U06	COVID-19 National Institute of Allergy and Infectious Diseases COVID-19 US Department of Health & Human Services US Department of Health & Human Services Substance Abuse & Mental Health Services Administration US Department of Health & Human Services	Univ of Pittsburgh Ohio Hospital Association dba the Institute for Health Innovation OH Dept of Health New Horizons Mental Health Services Ohio University	AWD00002407 (134589-1) 1 U3REP200665-01-06 02540034CL0321 agreement dated 12/9/16 19434	173,551 64,893 68,150 19,411 5,000	- - - -
		Total Department of Health and Human Services Pass-Throug	ıh Awards	-	1,077,407	-
Departme	nt of Homeland S 97.036	COVID-19 Federal Emergency Management Agency	Ohio Emergency Management Agency	FEMA-4507-PA-OH	15,608,340	-
		Total Department of Homeland Security Pass-Through Award	s		15,608,340	-
Agency to	98.001	Agency for International Development	Universidad ISA	2020-HEPDR-02	51,051	-
		Total Agency for International Development Pass-Through Av	vards	-	51,051	-
Subtotal բ	pass-through from	other sources		_	\$ 64,303,084	\$ 7,903
Total Federal Expenditures			\$ 1,178,911,643	\$ 62,606,237		

THE OHIO STATE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

1. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying schedule of expenditures of federal awards ("the schedule") includes the federal grant activity for the year ended June 30, 2021 for the following entities, which constitute the primary institution for financial reporting purposes:

- The Ohio State University and its hospitals and clinics
- Ohio Agricultural Research and Development Center
- The Ohio Technology Consortium (OH-TECH)

In addition, the following university blended component units are included in the university's financial statements and schedule of expenditures of federal awards:

- The Ohio State University Foundation
- OSU Health Plan, Inc.
- Oval Limited
- Pelotonia

In addition to the blended component units above, the university's financial statements and schedule of expenditures of federal awards include the following discretely presented component units:

- The Ohio State University Physicians, Inc.
- Campus Partners for Community Urban Redevelopment, Inc.
- Transportation Research Center of Ohio, Inc.
- Dental Faculty Practice Association, Inc.
- Science and Technology Campus Corporation

The schedule has been prepared on the accrual basis in accordance with accounting principles generally accepted in the United States of America for state-assisted colleges and universities. Negative amounts represent current year adjustments of amounts reported in prior years. CFDA and pass-through entity numbers are included when available. The information in the schedule is presented in accordance with the requirements of Title 2 of the U.S. Code of Federal Regulations, Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements. 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.

THE OHIO STATE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

2. Reimbursement of Facilities and Administrative Costs and Uniform Guidance

On November 27, 2020, the U.S. Department of Health & Human Services (DHHS) established predetermined facilities and administrative cost recovery rates through June 30, 2024. The facilities and administrative cost rate structure, including the rates submitted within the certificate, is as follows:

	Negotiate	
Rate Type	FY21	FY22
Organized Research		
On campus	56.0%	57.5%
Off campus	26.0%	26.0%
Instruction		
On campus	52.0%	52.0%
Off campus	26.0%	26.0%
Other Sponsored Activities		
On campus	30.5%	32.0%
Off campus	26.0%	26.0%

The university applies its predetermined approved facilities and administrative cost recovery rate when charging indirect costs to federal awards rather than the 10% de minimis cost rate as described in Section 200.414 of the Uniform Guidance.

3. Federal Direct Loan Program

Under the William D. Ford Federal Direct Loan Program, students and parents borrow funds directly from the federal government; the university is responsible for verifying student eligibility, electronically transmitting the loan records to the federal processor and distributing the loan funds directly to the student account or parent borrower. The amount of new loans to the university's students and parents during the fiscal year ended June 30, 2021 is shown in the schedule.

The university is responsible only for the performance of certain administrative duties with respect to the Federal Direct Loan Program and, accordingly, these loans are not included in the university's basic financial statements. It is not practical to determine the balance of loans outstanding under these programs at June 30, 2021.

THE OHIO STATE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2021

4. University-Administered Loan Programs with Continuing Compliance Requirements

The federal loan programs listed below are administered directly by the university, and balances and transactions related to these programs are included in the university's financial statements. The amount of loans outstanding at the beginning of the fiscal year and loans made during the year are included in the federal expenditures presented in the schedule. The balances of loans outstanding as of June 30, 2021 are as follows:

	CFDA Number	bal	standing ance at 30, 2021
Department of Education			
Federal Perkins Program	84.038	\$ 2	23,951,416
Department of Health and Human Services			
Health Professions Student Loan Program	93.342		
Dentistry			6,777,669
Optometry			1,731,128
Medicine			95,002
Pharmacy			694,602
Veterinary			3,845,360
Primary Care Loan Program	93.342		
Medicine			318,839
Loans to Disadvantaged Student Program	93.342		
Dentistry			17,741
Optometry			-
Medicine			4,147
Veterinary			298
		1	L3,484,786
Nursing Student Loan Program	93.364		540,634
ARRA - Nursing Faculty Loan Program	93.408		5,492
Nursing Faculty Loan Program	93.264		1,073,620
Total Federal Loans Outstanding		\$ 3	39,055,948

THE OHIO STATE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30. 2021

5. Department of Health and Human Services Provider Relief Funds

The University was the recipient of funding under CFDA # 93.498, Provider Relief Funds, and as required by the Addendum to the 2020 Compliance Supplement such expenditures have been included from the Schedule of Expenditures of Federal Awards for the year ending June 30, 2021.

6. HRSA COVID-19 Testing and Treatment for the Uninsured

The University conducted COVID-19 testing and/or provided treatment for uninsured individuals with a COVID-19 primary diagnosis on or after February 4, 2020 and as such has requested claims reimbursement under CFDA #93.461 Health Resources and Services Administration's ("HRSA") COVID-19 Claims Reimbursement to Health Care Providers and Facilities for Testing, Treatment and Vaccine Administration for the Uninsured program. The University has recorded \$1,013,184 on the Schedule of Expenditures of Federal Awards consisting of \$766,385 and \$27,376 reimbursed to date from HRSA on claims with service dates during fiscal year 2021 and 2020, respectively, and 219,423 in claims with service dates in fiscal year 2021 that have not yet been reimbursed. Fiscal year 2020 claims not reimbursed in fiscal year 2020 were estimated based on services provided and expected reimbursement rates. Adjustments of \$27,376 based on actual cash receipts were reflected in the University's fiscal year 2021 Schedule of Expenditures of Federal Awards. Fiscal year 2021 claims not reimbursed have been estimated based on services provided and expected reimbursement rates, and any adjustments based on actual cash receipts will be reflected in the University's fiscal year 2022 Schedule of Expenditures of Federal Awards.



Report of Independent Auditors 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

To the Board of Trustees of The Ohio 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 primary institution and of the aggregate discretely presented component units of The Ohio State University (the "University"), a component unit of the State of Ohio, which comprise the statements of net position as of June 30, 2021, and the related statements of revenues, expenses, and changes in net position and of cash flows for the year then ended, and the related notes to the financial statements, which collectively comprise the University's basic financial statements, and have issued our report thereon dated November 19, 2021.

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") as a basis for designing 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 entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. 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.

PricewaterhouseCoopers LLP, 41 South High Street, Suite 2500, Columbus, OH 43215 T: (614) 225 8700, F: (614) 224 1044, www.pwc.com

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 financial statements. 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*.

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.

November 19, 2021

Pricewaterhous Coopers LLP



Report of Independent Auditors on Compliance with Requirements That Could Have a Direct and Material Effect on Each Major Program and on Internal Control Over Compliance in Accordance with the Uniform Guidance

To the Board of Trustees of The Ohio State University

Report on Compliance for Each Major Federal Program

We have audited The Ohio State University's (the "University") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2021. 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.

Auditors' 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* (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 Ohio State 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 its major federal programs for the year ended June 30, 2021.

Other Matters

As indicated in Part I to the accompanying Schedule of Findings and Questioned Costs, we have audited the Student Financial Assistance cluster as a major program. Also, as indicated in the first paragraph of this report, we performed our audit of compliance using the compliance requirements contained in the OMB Compliance Supplement, including those contained in Part V 5.3, Compliance Requirement N, Special Tests and Provisions, Section 10 "Gramm-Leach-Bliley Act-Student Information Security." This section includes three suggested audit procedures with respect to verification that the institution (1) designated an individual to coordinate the information security program, (2) performed a risk assessment that addresses the three required areas in 16 CFR 314.4(b), and (3) documented a safeguard for each risk identified. Our procedures in relation to these three items were limited to inquiry of and obtaining written representation from management and obtaining and reading management's documentation related to these three items. Our procedures did not include an analysis of the adequacy or completeness of the risk assessment performed or the safeguards for each risk identified by management.

Report on Internal Control Over Compliance

Management of The Ohio State 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.

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 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. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

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.

April 13, 2022

Pricewaterhous Coopers LLP

THE OHIO STATE UNIVERSITY SCHEDULE OF FINDINGS AND QUESTIONED COSTS FOR THE YEAR ENDED JUNE 30, 2021

Section I - Summary of Auditor's Results

(d)(1)(i)	Type of Financial Statement Opinion	Unmodified
(d)(1)(ii)	Were there any material weaknesses in internal control reported at the financial statement level (GAGAS)?	No
(d)(1)(ii)	Were there any significant deficiencies in internal control reported at the financial statement level (GAGAS)?	None identified
(d)(1)(iii)	Was there any reported material noncompliance at the financial statement level (GAGAS)?	No
(d)(1)(iv)	Were there any material weaknesses in internal control reported for major federal programs?	No
(d)(1)(iv)	Were there any significant deficiencies in internal control reported for major federal programs?	None identified
(d)(1)(v)	Type of Major Programs' Compliance Opinion	Unmodified
(d)(1)(vi)	Are there any reportable findings under 2 CFR § 200.516(a)?	No
(d)(1)(vii)	Major Programs (list):	Refer to the listing below
(d)(1)(viii)	Dollar Threshold: Type A\B Programs	Type A: > \$ 3,536,000
		Type B: > \$ 884,000
(d)(1)(ix)	Low Risk Auditee under 2 CFR §200.520?	Yes

Major programs (list):

		•
#	Assistance Listing Number(s)	Name of Federal Program or Cluster
1	Various	Research and Development Cluster
2	Various	Student Financial Assistance Cluster
3	10.500	Cooperative Extension Cluster
4	10.561	Supplemental Nutrition Assistance Program Cluster
5	21.019	Coronavirus Relief Fund
6	20.205	Highway Planning and Construction Cluster
7	84.425E, 84.425F, 84.425C, 84.425M	Higher Education Emergency Relief Fund
8	93.461	HRSA COVID-19 Uninsured Program
9	93.498	Provider Relief Fund
10	97.036	Disaster Grants-Public Assistance

THE OHIO STATE UNIVERSITY SCHEDULE OF FINDINGS AND QUESTIONED COSTS FOR THE YEAR ENDED JUNE 30, 2021

Section II - Financial Statement Findings

None noted in the current year

THE OHIO STATE UNIVERSITY SCHEDULE OF FINDINGS AND QUESTIONED COSTS FOR THE YEAR ENDED JUNE 30, 2021

Section III - Federal Award Findings and Questioned Costs

There are no findings and/or questioned costs related to federal awards to be reported.

THE OHIO STATE UNIVERSITY SUMMARY OF PRIOR YEAR AUDIT FINDINGS FOR THE YEAR ENDED JUNE 30, 2021

There were no findings and/or questioned costs related to federal awards reported in the prior year.