Vanderbilt University Report on Federal Awards in Accordance with the

Report on Federal Awards in Accordance with the OMB Uniform Guidance For the Year Ended June 30, 2023 EIN: 62-0476822

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Letter from Chancellor Daniel Diermeier

The end of this fiscal year finds Vanderbilt University looking ahead to a great new era. Emboldened by the long tradition of excellence from our past and a surge of momentum from our present success, we are rapidly progressing toward an extraordinary future for our university.

In spring 2023, we launched the yearlong celebration of the 150th anniversary of Vanderbilt's founding. As of today, that first, visionary gift from Cornelius Vanderbilt from which our university was born has grown into an endowment that now stands at \$9.7 billion—enabling our transformative education and pathbreaking research, scholarship, and innovation to create life-changing impact around the globe.

During that same, momentous spring, we also publicly launched the \$3.2 billion Dare to Grow campaign, the most ambitious fundraising campaign in Vanderbilt's history. Fiscal year 2023 was a tremendous success, raising a record \$323 million in new commitments and surpassing the fiscal year fundraising goal of \$195 million. Ending the fiscal year at \$2.63 billion, the Dare to Grow campaign is now moving at full steam ahead through its three philanthropic pathways, designed together to empower our students and faculty, advance our capacity for pioneering discovery, and strengthen all aspects of our collaborative One Vanderbilt community.

Through the campaign, and in all ways, Vanderbilt dares to grow. Today's Vanderbilt students are our most qualified and diverse yet, and our faculty our most expert and accomplished—with stories of scholarly impact that frequently make headlines. Our university's global presence is stronger than ever, too—distinguished by recent events and initiatives such as Clinton Global Initiative University and our second annual Summit on Modern Conflict and Emerging Threats.

But we are determined to do even more—and to grow even more—with an eye toward educating tomorrow's leaders and solving humanity's most pressing problems. Heeding society's call to help solve the rampant political polarization of our times, we are excited to soon be launching Dialogue Vanderbilt: an initiative beginning this fall that aims to promote civil discourse and constructive conversation on our campus and beyond. In this way, and in many more, we are well on track toward our mission to define, and become, the Great University of the 21st Century.

I am pleased to share this year's financial report with you, and I look forward to sharing our future ahead. Thank you for your ongoing dedication to Vanderbilt University.

Daniel Diermeier Chancellor

Vanderbilt University Statistics

		2022/2023		2021/2022		2020/2021	2	2019/2020	2	2018/2019
STUDENTS										
Undergraduate		7,151		7,111		7,057		6,886		6,861
Graduate and professional		6,559		6,685		6,480		6,245		5,963
Total fall enrollment		13,710		13,796		13,537		13,131		12,824
Undergraduate admissions										
Applied		46,377		47,152		36,646		37,310		34,313
Accepted		3,093		3,368		4,259		3,402		3,298
Enrolled		1,619		1,626		1,698		1,604		1,602
Selectivity		6.7%		7.1%		11.6%		9.1%		9.6%
Yield		52.3%		48.3%		39.9%		47.1%		48.6%
Degrees conferred										
Baccalaureate		1,820		1,715		1,712		1,691		1,700
Master's		1,797		1,674		1,459		1,512		1,382
M.D.		104		99		97		82		100
Other doctoral		796		735		671		568		599
Total degrees conferred		4,517		4,223		3,939		3,853		3,781
Undergraduate six-year graduation rate		92.6%		92.6%		93.4%		92.6%		93.0%
Undergraduate tuition	\$	58,130	\$	54,840	\$	52,780	\$	50,800	\$	48,600
% increase over prior year		6.0%		3.9%		3.9%		4.5%		4.5%
FACULTY AND STAFF ¹										
		1 5 1 4		1 465		1 442		1 466		1 469
Full-time faculty Full-time staff		1,514		1,465		1,442		1,466		1,468
		4,700		4,362 271		3,937 298		4,555		4,245
Part-time faculty Part-time staff		282		271 370		298 277		324		348
		547 7,043			_	5,954		448		412
Total faculty and staff		7,043		6,468		5,954		6,793		6,473
GRANT AND CONTRACT FUNDING										
(in thousands)	¢	209,608	¢	191.007	¢	100 207	¢	165 522	¢	1(0.059
Government sponsors	\$		\$	181,007	\$	188,306	\$	165,532	\$	160,958
Private sponsors		31,454		22,540		31,551		30,199		27,656
Facilities and administrative costs recovery	¢	75,241	¢	68,277	¢	64,709	¢	62,233	¢	60,408
Total grants and contracts	\$	316,303	\$	271,824	\$	284,566	\$	257,964	\$	249,022
ENDOWMENT										
Market value (in thousands)	\$	9,684,196	\$	10,206,068	\$	10,928,512	\$	6,917,371	\$	6,270,877
Endowment return		-2.0%		-4.4%		57.1%		-0.1%		6.7%
Endowment per student	\$	706,360	\$	739,785	\$	807,307	\$	526,797	\$	488,995
Endowment payout		4.2%		3.5%		3.9%		4.7%		4.5%

University ("VU") and vanderbilt University ("VU") and vanderbilt University Medical Center ("VUMC") became two separate legal entities. Vanderbilt transferred clinical services operations, post-graduate training programs, and clinical department research activities, along with related assets and liabilities, to VUMC as a newly incorporated Tennessee not-for-profit corporation in exchange for \$1,230 million of consideration. In addition to the faculty employed by VU for all the years presented, some employees of VUMC held VU faculty appointments. These additional VUMC-employed, VU faculty comprised:

VUMC-employed, VU faculty appointments	2022/2023	2021/2022	2020/2021	2019/2020	2018/2019
Full-time	3,044	3,018	2,970	2,892	2,817
Part-time	184	160	104	101	93
Total	3,228	3,178	3,074	2,993	2,910



Financial Overview

FINANCIAL OVERVIEW

The university ended fiscal 2023 with \$176 million of net operating results compared with \$234 million in fiscal 2022. Vanderbilt's net assets without donor restrictions decreased \$155 million from fiscal 2022 to 2023 primarily driven by investment returns.

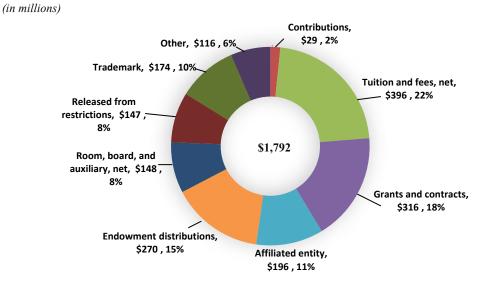
OPERATING REVENUES

Vanderbilt's operating revenues without donor restrictions for the years ended June 30, 2023, and June 30, 2022, were as follows:

(in millions)	2023	2022
Tuition and educational fees, net	\$ 396	\$ 388
Government grants and contracts	210	181
Private grants and contracts	31	23
F&A costs recovery	75	68
Contributions	29	28
Endowment distributions	270	244
Room, board, and other auxiliary services, net	148	129
Trademark, license, and royalty revenue	174	208
Affiliated entity revenue	196	186
Other sources	116	87
Net assets released from restrictions	147	139
Total operating revenue	\$ 1,792	\$ 1,681

Operating revenues without donor restrictions increased \$111 million, or 7%, to \$1,792 million in fiscal 2023 from \$1,681 million in fiscal 2022. Total revenue related to grants and contracts increased by \$44 million, driven by a \$32 million increase in new grant activity in the academic units and the inclusion of grants supporting emergency relief from the COVID-19 global pandemic. Other sources increased by \$29 million as a result of higher interest rates and related investment income. Endowment distributions increased by \$26 million due to payouts from the additional investments in the endowment based on the endowment spending policy. Room, board, and other auxiliary services, net, increased by \$19 million primarily due to higher residence hall occupancy resulting from the opening of Rothschild College and a reduced number of beds held offline for quarantine and isolation housing. These increases were primarily offset by a decrease in trademark, license, and royalty revenue of \$34 million related to decreased trademark revenues associated with the Vanderbilt University Medical Center and decreased royalty revenues associated with technology transfer.

Operating Revenues without Donor Restrictions by Type (Fiscal 2023)



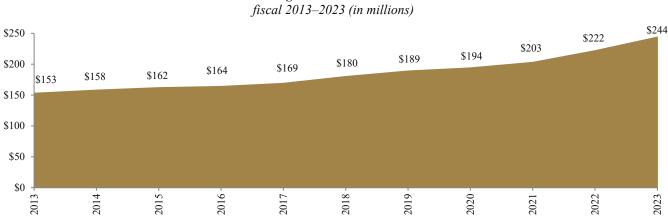
TUITION, ROOM, AND BOARD

Supporting Vanderbilt's commitment to student access and affordability, the university provides significant financial aid to students and their families. In fiscal 2023, Vanderbilt provided \$366 million in support to its students for tuition, room, and board as shown in the table below.

Student count	Unde	ergraduate 7,151	Professional 4,195	Graduate 2,364	Total 13,710
(in millions)					
Tuition and fees	\$	429	\$ 215	\$ 69	\$ 713
Financial aid ⁽¹⁾		(195)	(64)	(58)	(317)
Tuition and fees, net	\$	234	\$ 151	\$ 11	\$ 396
Room and board		107	-	-	107
Financial aid ⁽¹⁾		(49)	-	-	(49)
Room and board, net	\$	58	\$ -	\$ -	\$ 58
Total financial aid ⁽¹⁾	\$	244	\$ 64	\$ 58	\$ 366
Average financial aid per student ⁽²⁾	\$	34,000	\$ 15,000	\$ 25,000	\$ 27,000

¹ Financial aid excludes Pell Grants of \$7 million as these amounts represent agency funds.

² Rounded to the nearest thousand.



Undergraduate Financial Aid

Vanderbilt expanded its undergraduate financial aid significantly over the past decade. In fiscal 2023, undergraduate aid as a percentage of gross tuition, room and board, and educational fees was 46%. Since fiscal 2013, undergraduate aid has grown by 59%. The university's Opportunity Vanderbilt no-loan initiative, which began in fiscal 2009, is crucial to this support. Through fiscal 2023, generous donors have committed, through gifts and pledges, \$544 million to support undergraduate financial aid. A portion of operations (\$154 million), endowment distributions and gifts (\$84 million), and external agencies (\$6 million) funded fiscal 2023 undergraduate aid (excludes Pell Grants of \$7 million).

GRANTS AND CONTRACTS

Direct grant revenue increased by \$37 million, or 18%, to \$241 million in fiscal 2023 from \$204 million in fiscal 2022. Government grants and contracts revenue increased \$29 million, or 16%, to \$210 million in fiscal 2023 from \$181 million in fiscal 2022, due to increased grant activity from the Department of Health and Human Services and the National Science Foundation. In addition, the U.S. Department of Homeland Security provided funds in fiscal 2023 in relation to emergency relief from the COVID-19 global pandemic. Private grants and contracts revenues increased \$8 million, or 35%, over the same period to \$31 million in fiscal 2023 from \$23 million in fiscal 2022, due to increased activity in various academic units related to new awards.

As shown in the following table, the largest source of direct government grant and contract revenue was the Department of Health and Human Services (primarily the National Institutes of Health, or NIH).

Grants and Contracts Revenues by Funding Source

(in millions)	2023	%	2022	%
Department of Health and Human Services	\$ 111	53%	\$ 106	59%
National Science Foundation	24	11%	20	11%
Department of Education	16	8%	16	9%
Department of Defense	16	8%	14	8%
Department of Homeland Security	12	6%	-	-
Department of Energy	9	4%	8	4%
Other government agencies	22	10%	17	9%
Total government grants and contracts by funding source	\$ 210	100%	\$ 181	100%

Sponsored research and project awards represent research funding commitments not yet expended by Vanderbilt and include multiple-year grants and contracts from government sources, foundations, associations, and corporations. As of June 30, 2023, and 2022, such awards totaled \$301 million and \$258 million, respectively, as shown in the following table.

Sponsored Program Awards

Total sponsored research and project awards	\$ 301	\$ 258
Private awards	38	38
Government awards	\$ 263	\$ 220
(in millions)	2023	2022

PHILANTHROPY

Vanderbilt reports contributions revenue within the consolidated financial statements based on U.S. GAAP. This basis for measurement differs from guidelines established by the Council for Advancement and Support of Education (CASE). CASE guidelines focus on philan-thropic distributions of private resources (primarily gifts and foundation grants) to benefit the public.

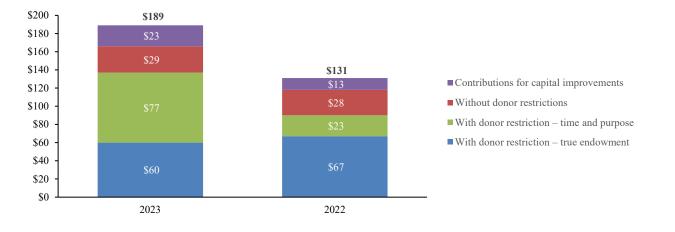
GAAP to CASE Reconciliation

(in millions)	2023		2022
Contributions revenue			
Without donor restriction	\$ 29	\$	28
With donor restriction – time and purpose	77		23
With donor restriction – true endowment	60		67
Total contributions revenue	166	-	118
Total contributions for capital improvements	23		13
Total consolidated GAAP contributions revenue	\$ 189	\$	131
Net (increase) decrease in contributions receivable	\$ (61)	\$	1
Grants and similar agreements meeting CASE guidelines (gifts per CASE standards)	14		6
Other	(5)		(3)
Total CASE reported gifts (cash basis)	\$ 137	\$	135

Vanderbilt reported \$189 million in consolidated contributions revenue, including pledges and contributions for capital improvements, which is \$58 million higher than the \$131 million fiscal 2022 level due to large contributions received in fiscal 2023 in support of the capital campaign.

Consolidated Contributions (GAAP Basis)

(in millions)



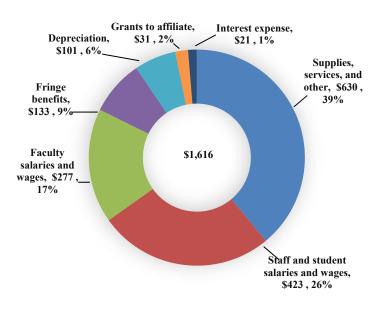
OPERATING EXPENSE

Total operating expenses	\$ 1,61	5 \$	1,447
Grants to affiliate	3		28
Depreciation	10		96
Interest expense	2		18
Supplies, services, and other	63)	538
Salaries, wages, and benefits	\$ 83.	3 \$	767
(in millions)	202.	3	2022

Consolidated operating expenses increased \$169 million to \$1,616 million in fiscal 2023 from \$1,447 million in fiscal 2022. The primary drivers of this increase were a \$92 million increase in supplies, services, and other expenses driven by an increase in professional services fees and travel and entertainment and a \$66 million increase in salaries, wages, and benefits as a result of headcount and merit increases.

Operating Expenses by Type (Fiscal 2023)

(in millions)



OTHER CHANGES IN NET ASSETS WITHOUT DONOR RESTRICTIONS

Total changes from nonoperating	\$ (324)	\$ (449)
Nonoperating net asset reclassifications	-	(2)
Capital contributions and releases from restriction	24	10
Change in appreciation of other investments, net of distributions	19	46
Change in appreciation of endowment, net of distributions	\$ (367)	\$ (503)
(in millions)	2023	2022

Fiscal 2023 nonoperating activity primarily consisted of a change in appreciation of endowment, net of distributions of \$(367) million, an increase of \$136 million compared with fiscal 2022. The change in value for the endowment resulted from a -2.0% investment return offset by 4.2% of the endowment utilized for distributions during fiscal 2023, compared to a -4.4% investment return and 3.5% of the endowment utilized for distributions during fiscal 2022. Change in appreciation of other investments, net of distributions, decreased \$27 million, which represents the appreciation on the original \$200 million Treasury lock agreement entered into during fiscal 2022 to hedge a portion of a future debt issuance. As of June 30, 2023, \$175 million total notional of the original \$200 million notional Treasury Lock had been terminated for \$56 million in total proceeds. The positive mark-to-market on the remaining \$25 million notional of the Treasury Lock was \$9 million in Vanderbilt's favor in fiscal 2023. In addition, releases from restrictions for capital contributions totaled \$24 million in fiscal 2023. Releases from restrictions for capital contributions occurred at the time the asset or building was placed into service and included \$20 million for the Owen Graduate School of Management renovations, \$3 million for housing projects, and \$1 million related to athletic facilities in fiscal 2023.

Noncontrolling Interests

Net assets related to noncontrolling interests decreased \$7 million to \$10 million in fiscal 2023 from \$17 million in fiscal 2022 due to distributions of \$7 million during fiscal 2023.

SUMMARY OF FINANCIAL POSITION

Vanderbilt's summarized Statements of Financial Position as of June 30, 2023, and June 30, 2022, were as follows:

(in millions)	2023	2022
ASSETS		
Cash and cash equivalents	\$ 937	\$ 1,184
Accounts and contributions receivable, net	267	220
Investments	10,048	10,402
Right of use assets	50	58
Property, plant, and equipment, net	1,817	1,634
Prepaid expenses and other assets	62	64
Total assets	\$ 13,181	\$ 13,562
LIABILITIES		
Payables and accrued liabilities	\$ 329	\$ 345
Deferred revenue	48	49
Deferred trademark revenue	1,797	1,841
Long-term debt and commercial paper	665	673
Securities sold short	579	614
Lease liabilities	52	61
Total liabilities	3,470	3,583
NET ASSETS		
Without donor restrictions	5,477	5,632
With donor restrictions	4,234	4,347
Total net assets	9,711	9,979
Total liabilities and net assets	\$ 13,181	\$ 13,562

Vanderbilt's assets decreased \$381 million, or 3%, from fiscal 2022 to fiscal 2023. Investments decreased \$354 million, or 3%, to \$10,048 million in fiscal 2023 from \$10,402 million in fiscal 2022. The endowment, net of securities sold short, returned -2.0%, and its value decreased to \$9,684 million in fiscal 2023 from \$10,206 million in fiscal 2022 after the impact of distributions in support of operations and the addition of new gifts and quasi-endowments. Cash and cash equivalents decreased \$247 million, or 21%, from fiscal 2022 to fiscal 2023 primarily attributable to a decrease in endowment cash. These decreases are offset by an increase in property, plant, and equipment, net, of \$183 million, or 11%, driven by \$250 million in additions, net, offset by \$67 million in accumulated depreciation and an increase in contributions receivable, net of \$61 million primarily driven by a significant pledge of \$75 million received in June 2023.

Total liabilities decreased \$113 million, or 3%, from fiscal 2022 to fiscal 2023. This decrease is primarily attributable to a decrease of \$44 million in deferred trademark revenue and a decrease of \$35 million in the fair value of securities sold short. The fair value of open short positions is recorded as a liability, \$579 million in fiscal 2023, and the university records an unrealized gain or loss to the extent of the difference between the proceeds received and the value of the open short position. By entering short sales, the university bears the market risk of increases in the value of the security sold short in excess of the proceeds received.

Cash and Liquidity

Vanderbilt continues to invest operating assets in a conservative, diversified manner to ensure adequate security and liquidity under a variety of stress scenarios. Investments, along with cash and cash equivalents, provide liquidity support for Vanderbilt's operations. Of these combined amounts, based on prevailing market conditions as of June 30, 2023, \$979 million of liquid assets were available on a same-day basis and an additional \$3,580 million was available within 30 days. This strong liquidity position contributes to the university's ability to satisfy potential liquidity risks. Vanderbilt maintains the highest short-term ratings from the major credit rating agencies.

To provide supplemental liquidity support, Vanderbilt maintains two separate lines of credit in the amounts of \$250 million and \$100 million with two different banks. These lines of credit may be drawn upon for any general use purpose.

Capital Expenditures

Maintaining the university's campus, which dates back to 1873, and investing in the university's capital assets are fundamental to achieving Vanderbilt's mission.

Over the past decade, Vanderbilt has focused increasingly on revitalizing the campus and student experience through the continued construction and renovation of residential colleges in direct support of the academic strategic plan:

- Offering students a rich and diverse intellectual community that educates the whole person and cultivates lifelong learning;
- Investing in multidisciplinary and interdisciplinary programs to lead in defining and addressing important problems facing society, while pursuing new and exciting opportunities;
- Transforming education models through technology and research; and
- Building distinctive and distinguished programs that develop and offer effective solutions to pressing health care problems.

Additionally, these investments serve to support FutureVU, Vanderbilt's land use planning initiative, the goal of which is to ensure that the Vanderbilt University campus is designed and prepared at every level to support its students, faculty, and staff in their work each day to carry out the university's mission and values.

Capital Projects

(in millions)	2023	2022
Housing projects	\$ 59	\$ 68
Infrastructure projects	43	2
Academic projects	41	30
Administrative support	40	12
Minor capital expenditures	39	80
Athletics projects	37	10
Property acquisitions	35	55
Total capital projects	\$ 294	\$ 257

During fiscal 2023, Vanderbilt University invested \$294 million in capital projects as compared with \$257 million in fiscal 2022. This enabled progress on several significant projects, including, but not limited to:

- Renovation of Kirkland Hall to transform the building into a welcoming, energetic, and innovative space that reflects the ideals espoused by the university;
- Continued expansion of the residential college program, which contributes to the living and learning experience of upper-division students;
- Completion of the Owen Graduate School of Management renovation and expansion, enhancing Owen's world-class culture of excellence in teaching, research, and placement;
- Continued expansion of the available space in the Engineering and Science Building that positions the School of Medicine, the College of Arts and Science, and the School of Engineering to build collaborations that grow and transform Vanderbilt's national and international reputation;
- Renovations and additions to athletic facilities that enhance the experience for student-athletes and fans, including the basketball practice facility, basketball visitor locker rooms, and the South end zone; and
- Acquisition of property adjacent to Vanderbilt's campus.

As capital projects conclude or new acquisitions occur during the fiscal year, capital asset balances increase. A total of \$280 million of completed projects and purchased property and equipment came into service during fiscal 2023.

The Board of Trust Executive Committee reviews the university's five-year capital plan annually; however, major capital projects are approved individually. The fiscal 2023–28 capital plan brings a continued focus on the academic strategic plan, including the student experience, through investments in new residential colleges, science buildings, acquisitions, infrastructure, and athletics.

ENDOWMENT

For fiscal 2023, Vanderbilt's endowment portfolio returned -2.0%. For the three years ending June 30, 2023, the endowment's annualized gain was 13.7%. The endowment ended fiscal 2023 with a total market value of \$9,684 million, compared with \$10,206 million at the end of fiscal 2022. The difference between the investment return and change in absolute value of the endowment was attributable to the net impact of new endowment gifts, additions to institutional endowments (quasi-endowments), costs for managing the endowment (including internal management costs of \$15 million, endowment excise tax of \$7 million, and \$6 million in other taxes), and the distribution of endowment funds to support university operations. During fiscal 2023, the university added \$92 million to the endowment portfolio through new gifts, recapitalizations, and additions to institutional endowments. Endowment distributions totaled \$416 million in fiscal 2023, compared with \$374 million in fiscal 2022. These distributions support the university's education, research, and public service missions.

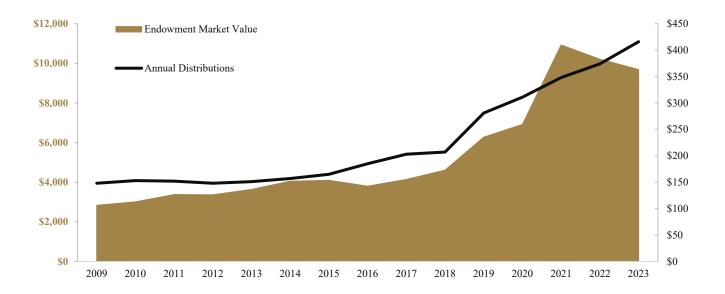
After a tumultuous fiscal 2022, global equity markets rebounded in fiscal 2023 across U.S. large caps (up 20%), U.S. small caps (up 12%), and non-U.S. developed markets (up 17%). Emerging markets generally benefitted from a weakening dollar, with equities (ex-China) up 12%. Chinese equities, however, underperformed and were down 17% as debt problems among real estate developers added to increasing concerns over geopolitical issues and economic growth. Despite tightening credit spreads, U.S. bond markets suffered modest losses (down 1%) as long-term U.S. Treasury yields rose. Commodity prices reversed course (down 18%, after gaining 45% and 57% in each of the prior two fiscal years), with Brent oil prices as a major contributing factor (down from \$115 to \$75 per barrel over the course of the fiscal year).

Global inflation remained elevated in the first half of the fiscal year, and many central banks aggressively raised rates in response. In the U.S., annualized inflation rates declined in the second half of the fiscal year and equities surged, driven primarily by gains in a handful of large U.S. technology companies. In November 2022, OpenAI publicly released ChatGPT, which sparked a frenzy over companies associated with artificial intelligence technologies. Although stalwarts like Microsoft (up 43%) and Alphabet (up 36%) saw substantial gains in the second half of the fiscal year, semiconductor manufacturers were the big winners. Broadly, the sector gained 46% in the second half, while Nvidia, which had declined by 4% in the first half, led the way with a near tripling of its share price in the second half. As additional fuel for the equity rally and as inflation generally slowed, many global central banks paused their rate increases.

In fiscal 2024, markets face some headwinds. U.S. equity valuations remain elevated, as eight companies (Meta, Apple, Amazon, Netflix, Alphabet, Microsoft, Nvidia, and Tesla) accounted for approximately 80% of the recent surge in the S&P 500. The U.S. Federal Reserve has emphasized the need for additional rate hikes, which could pressure equity prices. European markets face ongoing uncertainty regarding the Russia/Ukraine conflict and the risk of price disruptions in commodities such as natural gas and wheat. Geopolitical tensions between the U.S. and China, the world's two largest economies, represent an ongoing risk to the global capital markets. Times of uncertainty often lead to volatility and temporary market dislocations. Vanderbilt's endowment is poised to take advantage of such market opportunities through the combination of a strong asset base and partnerships with some of the world's best investment managers across all major asset classes.

Endowment Market Value and Annual Distributions

(in millions)



Endowment Asset Allocation

As of June 30, 2023 (% of portfolio)	Allocation
Global equities	20%
Hedged strategies	22%
Commodities	2%
Fixed income	8%
Cash and cash equivalents	3%
Total public investments	55%
Private capital	36%
Real estate	3%
Natural resources	6%
Total nonmarketable	45%
Total endowment	100%

LOOKING FORWARD

Vanderbilt officially launched the yearlong celebration of its Sesquicentennial with a full slate of events in March 2023. Among the highlights was a formal ceremony where members of the Vanderbilt community took to the stage in academic regalia to recount details of the university's founding in 1873 and reflect on key moments in Vanderbilt's history. Vanderbilt was created 150 years ago to make the world a better place, and now, in Vanderbilt's 150th year, Vanderbilt continues to "dare to grow."

Two core values that define Vanderbilt and set it apart include a deep belief in realizing our full potential, intellectually and as human beings, and the belief that people grow best as members of a community that supports and challenges them.

Vanderbilt has become a destination for the most talented and ambitious students and faculty across the globe. For all students, Vanderbilt's intentional culture of belonging and empowerment sets in from the moment they join the community and continues until and after their graduation—when they apply their diverse experiences, collaborative mindset, critical thinking, and open-minded perspectives to their roles across business, civil society, medicine, the arts and countless other areas. By investing in students and faculty, Vanderbilt's reputation is strengthened around the world, making the university a destination of choice for the best and brightest.

Life-changing discoveries happen in environments where Vanderbilt students can thrive, where faculty can do their best work and where every member of Vanderbilt's community can grow and learn from one another. Vanderbilt provides the training, resources, and culture to cultivate this environment, while also creating new opportunities for Vanderbilt students and faculty to engage in the kind of innovation and entrepreneurship that puts Vanderbilt in the company of trailblazing leaders in business, science, and industry. By investing in research, discovery and creative expression, visionary philanthropists can catalyze vital work across our labs, archives, and studios, ultimately enriching our partnerships as part of an innovation ecosystem that spans Nashville and well beyond.

Radical collaboration sets us apart, enabling us to have greater impact in everything we do. Vanderbilt embraces this collaborative spirit in every facet of university life, which strengthens our commitment to open discourse and free expression and to the interdisciplinary research programs that solve complex problems by bringing disparate viewpoints together. Together, these elements and others strengthen the collective power of our One Vanderbilt community at large.

Vanderbilt's audited financial statements and other key financial metrics for fiscal 2023 are included in the following pages.



Consolidated Financial Statements



Report of Independent Auditors

To the Board of Trust of Vanderbilt University

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying consolidated financial statements of Vanderbilt University and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2023 and 2022, and the related consolidated statements of activities and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the University as of June 30, 2023 and 2022, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for one year after the date the consolidated financial statements are issued.



Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS and *Government Auditing Standards*, will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with US GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards for the year ended June 30, 2023 and the financial responsibility ratios as of and for the year ended June 30, 2023 are 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 the Department of Education, respectively, and are not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial



statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated 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 and financial responsibility ratios are fairly stated, in all material respects, in relation to the consolidated financial statements taken as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Letter from Chancellor Daniel Diermeier, Vanderbilt University Statistics, and the Financial Overview, but does not include the consolidated financial statements and our auditors' report thereon. Our opinion on the consolidated financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the consolidated financial statements or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 29, 2023, 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, 2023. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting 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.

Price waterhouse Coopers LLP

Nashville, Tennessee September 29, 2023

Vanderbilt University Consolidated Statements of Financial Position

As of June 30, 2023, and June 30, 2022 (in thousands)

	 2023		2022		
ASSETS					
Cash and cash equivalents	\$ 937,070	\$	1,184,069		
Accounts receivable, net	101,503		114,800		
Prepaid expenses and other assets	14,331		14,923		
Contributions receivable, net	165,559		105,568		
Student loans and other notes receivable, net	17,918		17,926		
Investments	10,037,569		10,384,751		
Investments allocable to noncontrolling interests	10,444		17,061		
Right-of-use assets	49,602		58,145		
Property, plant, and equipment, net	1,817,056		1,634,036		
Interests in trusts held by others	 30,071		31,063		
Total assets	\$ 13,181,123	\$	13,562,342		
LIABILITIES					
Accounts payable and accrued liabilities	\$ 202,895	\$	202,284		
Accrued compensation and withholdings	81,471		89,925		
Deferred revenue	47,803		48,781		
Deferred trademark revenue	1,796,712		1,841,610		
Actuarial liabilities	30,614		36,308		
Government advances for student loans	15,502		16,770		
Commercial paper and other short-term debt	49,688		49,728		
Long-term debt	614,660		623,504		
Fair value of securities sold short	579,171		614,316		
Lease liabilities	52,027		60,652		
Total liabilities	 3,470,543		3,583,878		
NET ASSETS					
Without donor restrictions, controlled by Vanderbilt	5,466,592		5,614,870		
Without donor restrictions, related to noncontrolling interests	10,444		17,061		
Total net assets without donor restrictions	 5,477,036		5,631,931		
With donor restrictions	4,233,544		4,346,533		
Total net assets	 9,710,580		9,978,464		
Total liabilities and net assets	\$ 13,181,123	\$	13,562,342		

Vanderbilt University Consolidated Statement of Activities

Year Ended June 30, 2023 (in thousands)

	2023							
		Without	W	ith Donor				
	Don	or Restriction	estriction Restriction			Total		
REVENUES AND OTHER SUPPORT								
Tuition and educational fees, net	\$	395,983	\$	-	\$	395,983		
Grants and contracts:								
Government sponsors		209,608		-		209,608		
Private sponsors		31,454		-		31,454		
Facilities and administrative costs recovery		75,241		-		75,241		
Total grants and contracts		316,303		-		316,303		
Contributions		28,963		136,416		165,379		
Endowment distributions		269,705		146,345		416,050		
Room, board, and other auxiliary services, net		148,124		-		148,124		
Trademark, license, and royalty revenue		173,974		-		173,974		
Affiliated entity revenue		195,411		-		195,411		
Other sources		116,245		(1,342)		114,903		
Net assets released from restrictions		147,104		(147,104)		-		
Total revenues and other support		1,791,812		134,315		1,926,127		
EXPENSES								
Salaries, wages, and benefits		832,612		-		832,612		
Supplies, services, and other		630,222		-		630,222		
Interest expense		20,820		-		20,820		
Depreciation		101,355		-		101,355		
Grants to affiliate		30,845		-		30,845		
Total expenses		1,615,854		-		1,615,854		
Results of operations		175,958						
OTHER CHANGES IN NET ASSETS								
Change in appreciation of endowment, net of distributions		(366,394)		(246,798)		(613,192)		
Change in appreciation of other investments, net of distributions		18,580		-		18,580		
Contributions for capital improvements		-		23,041		23,041		
Net assets released from restrictions for capital improvements		23,795		(23,795)		-		
Nonoperating net asset reclassifications		(248)		248				
Other nonoperating activity		31		-		31		
Total other changes in net assets		(324,236)		(247,304)		(571,540)		
Changes in net assets controlled by Vanderbilt		(148,278)		(112,989)		(261,267)		
Changes in net assets related to noncontrolling interests		(6,617)		-		(6,617)		
Total changes in net assets	\$	(154,895)	\$	(112,989)	\$	(267,884)		
Net assets, June 30, 2022	\$	5,631,931	\$	4,346,533	\$	9,978,464		
Net assets, June 30, 2023	\$	5,477,036	\$	4,233,544	\$	9,710,580		

Vanderbilt University Consolidated Statement of Activities

Year Ended June 30, 2022 (in thousands)

	2022						
		Without	W	ith Donor	1 Donor		
	Don	or Restriction	F	Restriction		Total	
REVENUES AND OTHER SUPPORT							
Tuition and educational fees, net	\$	387,874	\$	-	\$	387,874	
Grants and contracts:							
Government sponsors		181,007		-		181,007	
Private sponsors		22,540		-		22,540	
Facilities and administrative costs recovery		68,277		-		68,277	
Total grants and contracts		271,824		-		271,824	
Contributions		27,922		89,878		117,800	
Endowment distributions		244,440		130,008		374,448	
Room, board, and other auxiliary services, net		129,317		-		129,317	
Trademark, license, and royalty revenue		208,566		-		208,566	
Affiliated entity revenue		185,527		-		185,527	
Other sources		86,898		(14,182)		72,716	
Net assets released from restrictions		138,511		(138,511)		-	
Total revenues and other support		1,680,879		67,193		1,748,072	
EXPENSES							
Salaries, wages, and benefits		766,643		-		766,643	
Supplies, services, and other		538,361		-		538,361	
Interest expense		17,878		-		17,878	
Depreciation		95,889		-		95,889	
Grants to affiliate		28,100		-		28,100	
Total expenses		1,446,871		-		1,446,871	
Results of operations		234,008					
OTHER CHANGES IN NET ASSETS							
Change in appreciation of endowment, net of distributions		(502,778)		(339,586)		(842,364)	
Change in appreciation of other investments, net of distributions		45,988		-		45,988	
Contributions for capital improvements		-		13,055		13,055	
Net assets released from restrictions for capital improvements		9,900		(9,900)		-	
Nonoperating net asset reclassifications		(1,869)		1,869			
Other nonoperating activity		3				3	
Total other changes in net assets		(448,756)		(334,562)		(783,318)	
Changes in net assets controlled by Vanderbilt		(214,748)		(267,369)		(482,117)	
Changes in net assets related to noncontrolling interests		(11,747)		-		(11,747)	
Total changes in net assets	\$	(226,495)	\$	(267,369)	\$	(493,864)	
Net assets, June 30, 2021	\$	5,858,426	\$	4,613,902	\$	10,472,328	
Net assets, June 30, 2022	\$	5,631,931	\$	4,346,533	\$	9,978,464	

Vanderbilt University Consolidated Statements of Cash Flows

Years Ended June 30, 2023, and 2022 (in thousands)

Years Ended June 30, 2023, and 2022 (in thousands)		2023	3 20		
CASH FLOWS FROM OPERATING ACTIVITIES				(102.0(1)	
Change in total net assets	\$	(267,884)	\$	(493,864)	
Adjustments to reconcile change in total net assets to net cash provided by (used in)					
operating activities:		((17		11 749	
Change in net assets related to noncontrolling interests		6,617		11,748	
Realized and unrealized loss on investments, net		336,342		456,930	
Contributions for capital improvements and endowment		(40,251)		(56,954)	
Contributions of donated securities		(26,624)		(21,821)	
Proceeds from sale of donated securities		7,514		3,081	
Depreciation		101,355		95,889	
Amortization of bond discounts and premiums		41		41	
Amortization of right-of-use assets		13,930		12,799	
Loss from disposals of property, plant, and equipment		867		603	
Change in:					
Accounts receivable, net		13,297		(20,534)	
Prepaid expenses and other assets		592		1,951	
Contributions receivable, net		(59,991)		1,194	
Interests in trusts held by others		1,060		(165)	
Accounts payable and accrued liabilities, net of nonoperating items		(20,256)		62,614	
Accrued compensation and withholdings		(8,454)		(12,553)	
Deferred revenue		(978)		8,229	
Deferred trademark revenue		(44,898)		(43,461)	
Actuarial liabilities		(5,694)		(1,767)	
Lease liabilities		(14,012)		(12,461)	
Net cash (used in) operating activities		(7,427)		(8,501)	
CASH FLOWS FROM INVESTING ACTIVITIES					
Purchases of investments		(6,256,125)		(8,193,224)	
Proceeds from sales of investments		5,931,958		8,741,715	
Purchases of investments allocable to noncontrolling interests		(55)		-	
Proceeds from sales of investments allocable to noncontrolling interests		7,340		8,140	
Acquisitions of property, plant, and equipment		(264,376)		(242,288)	
Student loans and other notes receivable disbursed		(2,805)		(2,646)	
Principal collected on student loans and other notes receivable		2,813		4,048	
Net cash (used in) provided by investing activities		(581,250)		315,745	
CASH FLOWS FROM FINANCING ACTIVITIES		(001,200)		010,110	
Contributions for capital improvements and endowment		40,251		56,954	
Change in gross government advances for student loans		(1,268)		(1,893)	
Principal payments of debt		(58,612)		(8,903)	
Proceeds from new debt issuances		49,688		49,966	
Proceeds from new deet issuances Proceeds from sale of donated securities restricted for capital improvements and endowment		19,110		18,740	
Proceeds from noncontrolling interests in investment partnerships		55		-	
Payments to noncontrolling interests in investment partnerships		(7,340)		(8,140)	
Net cash provided by financing activities		41,884		106,724	
Net (decrease) increase in cash, cash equivalents, and restricted cash		(546,793)		413,968	
	\$		\$		
Cash and cash equivalents and restricted cash at beginning of year		2,100,636		1,686,668	
Cash and cash equivalents and restricted cash at end of year	\$	1,553,843	\$	2,100,636	
Sumplemental disalection of each flow information					
Supplemental disclosure of cash flow information:	¢	21.055	¢	21.272	
Cash paid for interest	\$ ©	21,055	\$ ¢	21,273	
Accrued liabilities related to additions of property, plant, and equipment	\$	61,534	\$	40,667	

Vanderbilt University Notes to the Consolidated Financial Statements

1. ORGANIZATION

The Vanderbilt University ("Vanderbilt" or the "university") is a private, coeducational, not-for-profit, nonsectarian institution located in Nashville, Tennessee. Founded in 1873, Vanderbilt owns and operates educational and research facilities as part of its mission to be a leading center for informed and creative teaching, scholarly research, and public service. Vanderbilt provides educational services to approximately 7,200 undergraduate and 6,600 graduate and professional students enrolled across its 10 schools and colleges.

The consolidated financial statements include the accounts of all entities in which Vanderbilt has a significant financial interest and over which Vanderbilt has control.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements have been prepared on the accrual basis in accordance with U.S. generally accepted accounting principles ("GAAP"). Vanderbilt eliminates all material intercompany accounts and transactions in consolidation.

Net Asset Classifications

Based on the existence or absence of donor-imposed restrictions, Vanderbilt classifies resources into two categories: without donor restrictions and with donor restrictions.

Net assets without donor restrictions are free of donor-imposed restrictions. This classification includes all revenues, gains, and losses not restricted by donors. Vanderbilt reports all expenses as decreases in net assets without donor restrictions.

Net assets with donor restrictions are subject to donor-imposed restrictions that will be met by either actions of Vanderbilt or the passage of time. These net assets may include unconditional pledges, split-interest agreements, interests in trusts held by others, and donor-restricted endowments. Generally, the donor-imposed restrictions of these assets permit Vanderbilt to use a portion of the income earned on related investments for specific purposes.

Vanderbilt reports expirations of donor restrictions on net assets (i.e., the passage of time and/or fulfillment of donor-imposed stipulations) as net assets released from restrictions between the applicable net asset classes in the consolidated statements of activities.

Cash and Cash Equivalents

Cash and cash equivalents are liquid assets with minimal interest rate risk and maturities of three months or less when purchased. Such assets, reported at fair value, primarily consist of depository account balances, money market funds, and short-term U.S. Treasury securities. Cash designated for investment is included within investments in the accompanying consolidated statements of financial position.

The following table provides a reconciliation of cash and cash equivalents and restricted cash reported within the consolidated statements of financial position that correspond to the amounts reported in the consolidated statements of cash flows.

	2023	2022
Cash and cash equivalents	\$ 937,070	\$ 1,184,069
Cash included in investments	616,773	916,567
Total cash and cash equivalents and restricted cash shown in the consolidated statements of cash flows	\$ 1,553,843	\$ 2,100,636

Prepaid Expenses and Other Assets

Prepaid expenses and other assets primarily represent prepaid expenses and other segregated investment-related assets managed by third parties related to a legacy deferred compensation program that are earmarked to ultimately settle certain liabilities recorded in accrued payroll and withholdings. Vanderbilt excludes this latter group of assets, reported at fair value, from the investments category.

Fair Value Measurements

Fair value measurements represent the price received to sell an asset or price paid to transfer a liability in an orderly transaction between market participants at the measurement date. GAAP provides a hierarchy for fair value measurements based on the observable inputs to the valuation of an asset or liability at the measurement date. Inputs to the valuation techniques used are prioritized to measure fair value by giving the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements).

Vanderbilt gives consideration to certain investment funds that do not have readily determinable fair values, including private investments, hedge funds, real estate, and other funds. Vanderbilt elected the practical expedient, which allows for the use of net asset value per share or its equivalent in estimating the fair value of interests in investment companies for which a readily determinable fair value is not available. Vanderbilt reports these assets separately from the fair value hierarchy in Note 12.

Investments

Vanderbilt reports investments at fair value using the three-level hierarchy established under GAAP. After review and evaluation, Vanderbilt utilizes estimates provided by fund managers for certain alternative investments, mainly investments in limited partnerships where a ready market for the investments does not exist.

Vanderbilt has exposure to a number of risks, including liquidity, interest rate, counterparty, basis, tax, regulatory, market, and credit risks for both marketable and nonmarketable securities. Due to the level of risk exposure, it is possible that near-term valuation changes for investment securities will occur to an extent that could materially affect the amounts reported in Vanderbilt's financial statements.

Vanderbilt sometimes uses derivatives to manage investment market risks and exposure. The consolidated financial statements contain derivatives, which consist of both internally managed transactions and those entered into through external investment managers, at fair value. The most common instruments utilized are futures contracts and hedges against currency risk for investments denominated in currencies other than U.S. dollars. For internally managed transactions, Vanderbilt utilizes futures contracts with durations of less than three months.

Vanderbilt records purchases and sales of securities on the trade dates, and realized gains and losses are determined based on the average historical cost of the securities sold. Vanderbilt reports net receivables and payables arising from unsettled trades as a component of investments.

Unless donor-restricted endowment gift agreements require separate investment, Vanderbilt manages all endowment investments as an investment pool.

Investments Allocable to Noncontrolling Interests and Net Assets Related to Noncontrolling Interests

Vanderbilt reports the respective assets for entities in which other organizations are minority equity participants at fair value as investments allocable to noncontrolling interests on the consolidated statements of financial position.

The balance representing such organizations' minority or noncontrolling interests is recorded based on contractual provisions, which represent an estimate of a settlement value assuming the entity was liquidated in an orderly fashion as of the report date.

Leases

Vanderbilt determines if an arrangement is or contains a lease at inception. Vanderbilt has both leases under which it is obligated as a lessee and leases for which it is a lessor. Operating leases in which Vanderbilt is a lessee are included in right-of-use assets and lease liabilities on the consolidated statements of financial position. These assets and liabilities are initially recognized based on the present value of the future minimum lease payments over the lease term at commencement date discounted using an appropriate incremental borrowing rate. Options to extend or terminate a lease are included in the amount recognized to the extent that Vanderbilt is reasonably certain to exercise those options. Lease expense for lease payments is recognized on a straight-line basis over the lease term. Variable lease payments based on an index or rate, such as the consumer price index, are initially measured using the index or rate in effect at lease commencement. Rental revenue arising from operating leases in which Vanderbilt is a lessor is included in room, board, and other auxiliary services, net, in the consolidated statements of activities.

Vanderbilt has elected the short-term lease exception under ASU 2016-02, Leases (ASC Topic 842) for all leases, and therefore, leases with an initial term of 12 months or less are not included on the consolidated statements of financial position.

Split-Interest Agreements and Interests in Trusts Held by Others

Vanderbilt's split-interest agreements with donors consist primarily of irrevocable charitable remainder trusts, charitable gift annuities, and life income funds for which Vanderbilt serves as trustee. Vanderbilt reports assets held in these trusts in investments at fair value. Vanderbilt recognizes contribution revenue at the dates the trusts are established, net of the liabilities for the present value of the estimated future payments to the donors and/or other beneficiaries. Annually, Vanderbilt records the change in fair value of split-interest agreements based on the assets that are associated with each trust and recalculates the liability for the present value of the estimated future payments to the donors and/or other beneficiaries.

Vanderbilt is also the beneficiary of certain trusts held and administered by others. Vanderbilt records its share of these trust assets at fair value as interests in trusts held by others with any resulting gains or losses reported as investment income with donor restrictions.

Property, Plant, and Equipment

Purchased property, plant, and equipment, recorded at cost, includes, where appropriate, capitalized interest on construction financing. Vanderbilt capitalizes donated assets at fair value on the date of donation, expenses repairs and maintenance costs as incurred, and expenses additions to the fine art and library collections at the time of purchase.

Vanderbilt calculates depreciation using the straight-line method to allocate the cost of various classes of assets over their estimated useful lives. Vanderbilt follows the half-year convention to calculate depreciation associated with construction-related assets (e.g., land improvements, buildings, leasehold improvements, and fixed equipment). Under the half-year convention, Vanderbilt treats fixed assets constructed during the year as if placed in service on January 1, regardless of in-service date. All other purchased assets (e.g., moveable equipment) begin depreciation on the in-service date. Vanderbilt removes property, plant, and equipment from the accounting records upon disposal.

Conditional asset retirement obligations related to legal requirements to perform certain future activities associated with the retirement, disposal, or abandonment of assets are accrued utilizing site-specific surveys to estimate the net present value for applicable future costs (e.g., asbestos abatement or removal).

Vanderbilt reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Vanderbilt recognizes an impairment charge when the fair value of the asset or group of assets is less than the carrying value.

Debt Portfolio Financial Instruments

Vanderbilt reports long-term debt at carrying value. The carrying value of Vanderbilt's debt is the par amount adjusted for the net unamortized amount of bond premiums and/or discounts.

Contributions

Vanderbilt recognizes unconditional promises to give (pledges) as contribution revenue upon receipt of a commitment from the donor, with payments due in future periods reported as increases in net assets with donor restrictions at the estimated present value of future cash flows. Vanderbilt recognizes pledges net of an allowance for amounts estimated to be uncollectible based upon past collection experience and other judgmental factors.

Vanderbilt records contributions with donor-imposed restrictions as net assets without donor restrictions revenue if the university receives the contribution and meets the restrictions in the same reporting period. Otherwise, Vanderbilt records contributions with donor-imposed restrictions as increases in net assets with donor restrictions.

After meeting donor stipulations, Vanderbilt releases contributions from restriction and recognizes these contributions as net assets without donor restrictions. Vanderbilt releases from restrictions contributions for capital improvements and recognizes these contributions as nonoperating net assets released from restrictions for capital improvements when the related asset is placed in service.

In contrast to unconditional promises, Vanderbilt does not record conditional promises (primarily bequest intentions and conditional grants) until the university meets donor stipulations.

Measure of Operations

The university's measure of operations, the change in net assets without donor restriction from operating activity, as presented in the consolidated statements of activities, includes revenue from tuition and fees (net of financial aid), grants and contracts, trademark revenue, revenue from affiliates, contributions for operating programs, endowment distributions in support of operations, and other revenues. Vanderbilt reports operating expenses on the consolidated statements of activities by natural classification.

The university's nonoperating activity within the consolidated statements of activities includes endowment and other investment returns, contributions for capital improvements, and other nonrecurring items.

Income Taxes

Vanderbilt is a tax-exempt organization as described in Section 501(c)(3) of the Internal Revenue Code ("the Code") and generally is exempt from federal income taxes on related income pursuant to Section 501(a) of the Code. Vanderbilt is, however, subject to federal and state income tax on unrelated business income, and provision for such taxes is included in the accompanying consolidated financial statements. Vanderbilt regularly evaluates its tax position and does not believe it has any material uncertain tax positions that require disclosure or adjustment to the consolidated financial statements.

The Tax Cuts and Jobs Act ("TCJA") impacts Vanderbilt in several ways, including imposing excise taxes on certain excess compensation and net investment income, and establishing rules for calculating unrelated business taxable income. Vanderbilt has reflected the tax assets, liabilities, and payables in the consolidated financial statements based on reasonable estimates.

Use of Estimates

The preparation of financial statements requires the use of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses during the reporting period as well as the disclosure of contingent assets and liabilities. Actual results could differ from these estimates.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326) Measurement of Credit Losses on Financial Statements. ASU 2016-13 introduces an approach based on expected losses to estimate credit losses on certain types of financial instruments. The amendments of ASU 2016-13 are intended to provide financial statement users with more decision-useful information related to expected credit losses on financial instruments and other commitments to extend credit by replacing the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to determine credit loss estimates. ASU 2016-13 was originally effective for fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. In November 2019, the FASB issued ASU 2019-10, Financial Instruments – Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842) Effective Dates. These issuances deferred the effective dates of these standards for certain entities. Based on the updated guidance, ASU 2016-13 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Vanderbilt is evaluating the effect of adoption on the financial statements and related disclosures.

3. LIQUIDITY AND AVAILABILITY

manetal assets available for general expenditure within one year of suite 50 were as follows (<i>m n</i>		2022
	2023	2022
Total assets	\$ 13,181,123	\$ 13,562,342
Less nonfinancial assets:		
Property, plant, and equipment, net	1,817,056	1,634,036
Prepaid expenses and other assets	14,331	14,923
Right-of-use assets	49,602	58,145
Less assets unavailable for general expenditure within one year:		
Endowment funds, including institutional endowments	9,930,677	10,232,068
Contributions receivable, greater than one year	95,059	48,692
Interests in trusts held by others and investments allocable to minority interests	40,515	48,124
Annuities, trusts and other illiquid investments ¹	31,333	69,183
Student loans and other notes receivable, net	17,918	17,926
Financial assets available within one year	\$ 1,184,632	\$ 1,439,245

Financial assets available for general expenditure within one year of June 30 were as follows (in thousands):

¹Balance includes an \$8.7 million positive mark-to-market on the remaining \$25.0 million notional of the Treasury Lock as of June 30, 2023. As of June 30, 2023, \$175.0 million total notional of the original \$200.0 million notional Treasury Lock was terminated. The positive mark-to-market balance is recorded in "Investments" on the consolidated statements of financial position.

Vanderbilt has \$1,184.6 million of financial assets that are available within one year of the balance sheet date to meet cash needs for general expenditure consisting of cash of \$937.1 million, accounts receivable of \$101.5 million, contributions receivable, less than one year of \$70.5 million, and short-term investments of \$75.5 million.

Vanderbilt manages its financial assets for availability when its operating expenditures, liabilities, and other obligations come due. In addition, Vanderbilt invests cash in excess of daily requirements in short-term investments or fixed-income securities. To supplement working capital and investment commitments, Vanderbilt had two general lines of credit of \$250.0 million and \$100.0 million as of June 30, 2023. The line of credit agreement of \$250.0 million was renewed in September 2023 and matures in September 2024. The \$100.0 million line of credit was renewed and matures in June 2024. In fiscal years 2023 and 2022, Vanderbilt did not borrow against any of its general use lines of credit to support operations. Vanderbilt's commercial paper limitation is \$300.0 million; Vanderbilt had \$25.0 million (par) of taxable commercial paper outstanding as of June 30, 2023, and \$50.0 million (par) of taxable commercial paper outstanding as of June 30, 2023.

Vanderbilt provides liquidity support for debt with short-term remarketing periods through self-liquidity. Additionally, Vanderbilt has institutional endowments of \$5,612.4 million and \$5,945.1 as of June 30, 2023, and June 30, 2022, respectively. Although Vanderbilt does not intend to spend from its institutional endowment funds, other than amounts appropriated for general expenditure as part of its annual budget approval and appropriation process, amounts from its institutional endowment funds could be made available if necessary. However, both the endowments with donor restrictions and institutional endowments contain investments with lock-up provisions that would reduce the total investments that could be made available (refer to Notes 7 and 12 for disclosures about investments).

4. ACCOUNTS RECEIVABLE

The major components of accounts receivable as of June 30 were as follows (in thousands):

	2023	2022
Research and sponsored programs	\$ 48,222	\$ 37,887
VUMC-related agreements	35,898	52,055
Royalty distributions receivable	4,664	19,227
Tuition and fees	3,051	3,273
Accrued investment income	571	817
Other	12,192	4,601
Accounts receivable	104,598	117,860
Less: Allowance for uncollectible amounts	(3,095)	(3,060)
Accounts receivable, net	\$ 101,503	\$ 114,800

Vanderbilt records allowances for uncollectible amounts based on management's assessment of expected net collections considering historical trends and current economic factors. Vanderbilt's accounts receivable balance on June 30, 2023, includes \$48.2 million related to research and sponsored programs and \$35.9 million related to agreements with VUMC. These receivables account for 83% of total net receivables as of June 30, 2023.

5. CONTRIBUTIONS RECEIVABLE

Contributions receivable, net	\$ 165,559	\$ 105,568
Less: Allowance for uncollectible promises	(15,547)	(18,408)
Less: Discount	(20,204)	(7,685)
Contributions receivable	201,310	131,661
in more than five years	3,151	5,577
between one year and five years	127,659	69,208
less than one year	\$ 70,500	\$ 56,876
Unconditional promises expected to be collected:		
	2023	2022

Vanderbilt discounts contributions receivable at a rate commensurate with the scheduled timing of receipt. Vanderbilt applied discount rates ranging from 4.0% to 5.4% and 2.8% to 3.0% to amounts outstanding as of June 30, 2023, and 2022, respectively. Vanderbilt's methodology for calculating the allowance for uncollectible promises consists of analyzing write-offs as a percentage of gross pledges receivable along with assessing the age and activity of outstanding pledges.

Contributions receivable, net as of June 30, were as follows (in thousands):

Contributions receivable, net	\$ 165,559	\$ 105,568
Restricted for endowment	41,419	43,128
Restricted for capital improvements	36,060	30,742
Restricted for programs and other operational purposes	\$ 88,080	\$ 31,698
	2023	2022

In addition to pledges reported as contributions receivable, Vanderbilt had cumulative bequest intentions, conditional grants, and conditional promises to give of approximately \$774.1 million and \$633.9 million as of June 30, 2023, and 2022, respectively. Due to their conditional nature, Vanderbilt does not recognize these intentions to give as assets.

6. STUDENT LOANS AND OTHER NOTES RECEIVABLE

		2023					2022					
	Re	ceivable	All	owance		Net	Re	ceivable	All	owance		Net
Student loans:												
Federal	\$	15,879	\$	(107)	\$	15,772	\$	16,070	\$	(132)	\$	15,938
Institutional		963		(131)		832		1,435		(351)		1,084
Total student loans		16,842		(238)		16,604		17,505		(483)		17,022
Faculty mortgages		1,314		-		1,314		904		-		904
Student loans, other notes receivable, and related allowances	\$	18,156	\$	(238)	\$	17,918	\$	18,409	\$	(483)	\$	17,926

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Vanderbilt remains committed to "no loans" for its undergraduate students, meaning that the university is meeting full-demonstrated financial need with scholarship and grant assistance. For other groups (e.g., professional school students), participation in several federal revolving loan programs, including the Perkins, Nursing, and Health Professionals Student Loan programs, has continued.

Vanderbilt carries loans to students at cost, which, based on secondary market information, approximates the fair value of education loans with similar interest rates and payment terms. The availability of funds for new loans under these programs is dependent on reimbursements to the pool from repayments on outstanding loans.

Vanderbilt assigns loans receivable from students under governmental loan programs, also carried at cost, to the federal government or its designees. Vanderbilt classifies refundable advances from the federal government as liabilities in the consolidated statements of financial position. Outstanding loans canceled under a governmental program result in a reduction of the funds available for loan and a decrease in Vanderbilt's liability to the government.

Vanderbilt establishes bad debt allowances based on prior collection experience and current economic factors, which, in management's judgment, could influence the ability of loan recipients to repay amounts due. When deemed uncollectible, Vanderbilt writes off institutional loan balances.

In an effort to attract and retain a world-class faculty, Vanderbilt provides various incentives and historically provided home mortgage financing assistance in select situations. Deeds of trust on properties concentrated in the surrounding region collateralize these notes. Vanderbilt has not recorded an allowance for doubtful accounts for loans based on their collateralization and prior collection history.

7. INVESTMENTS

Investments consist of the following as of June 30 (in thousands):

	2023	2022
Short-term securities ¹	\$ 212	\$ 196
Global equities ¹	2,087,037	1,977,690
Fixed income ¹	839,102	773,495
Hedged strategies ²	2,218,995	2,575,991
Private capital ³	3,739,760	3,841,567
Real estate ³	297,715	236,009
Natural resources ³	580,514	723,229
Commodities ⁴	212,650	192,619
Trusts ⁵	22,677	23,195
Private credit ¹	15,327	4,411
Other investments ^{5,6}	34,024	53,410
Total value ⁷	\$ 10,048,013	\$ 10,401,812

¹ Quoted prices in active markets determine fair value, or fund managers provide the net asset value per share of the specific investment to establish fair value.

² Quoted prices in active markets determine fair value, or fund managers provide the net asset value per share of the specific investment to establish fair value. Includes \$616.8 million and \$916.6 million of cash and cash equivalents classified as investments in fiscal 2023 and 2022, respectively.

³ Fund managers provide the net asset value of Vanderbilt's ownership interests at the fund level to establish fair value.

⁴ Quoted prices in active markets determine fair value.

⁵ Carrying value provides a reasonable estimate of fair value for certain components.

⁶ Balance includes an \$8.7 million positive mark-to-market on the remaining \$25.0 million notional of the Treasury Lock as of June 30, 2023. As of June 30, 2023, \$175.0 million total notional of the original \$200.0 million notional Treasury Lock was terminated. The positive mark-to-market balance is recorded in "Investments" on the consolidated statements of financial position.

⁷ Net of securities sold short of \$579.2 million and \$614.3 million, total value of investments is \$9,468.8 million and \$9,787.5 million in fiscal 2023 and 2022, respectively.

Included in the amounts above are investments allocable to noncontrolling interests (i.e., minority limited partners) reported at fair value. Changes in noncontrolling interests net assets for the fiscal year ended June 30, 2023, were as follows *(in thousands)*:

Fair value as of June 30, 2022	\$ 17,061
Distributions to minority limited partners	(7,340)
Capital commitments funded by minority limited partners	55
Appreciation allocable to minority limited partners	668
Fair value as of June 30, 2023	\$ 10,444

Changes in noncontrolling interests net assets for the fiscal year ended June 30, 2022, were as follows (in thousands):

Fair value as of June 30, 2021	\$ 28,808
Distributions to minority limited partners	(8,140)
Capital commitments funded by minority limited partners	-
Appreciation allocable to minority limited partners	(3,607)
Fair value as of June 30, 2022	\$ 17,061

Short-term securities primarily comprise short-term U.S. Treasury bills.

Global equities consist of investment funds globally diversified across public markets including U.S. markets, other developed markets, and emerging and frontier markets. Fund managers of these investments have the ability to shift investments from value to growth strategies, from small to large capitalization stocks, and from a net long position to a net short position.

Fixed income includes investments directed toward capital preservation and predictable yield as well as more opportunistic strategies focused on generating return on price appreciation. These investments are primarily public investments such as U.S. Treasuries and other government obligations, investment-grade corporate bonds, high-yield corporate bonds, bank debt, commercial mortgage-backed securities, residential non-agency mortgage-backed securities, asset-backed securities, direct lending, and below investment-grade developed and emerging market sovereign debt. Vanderbilt may make investments through commingled vehicles, separately managed accounts, synthetic transactions, and limited partnership interests.

Hedged strategies investments reflect multiple strategies such as event driven, relative value, and equity funds to diversify risks and reduce volatility in the portfolio generally in hedge fund structures. These strategies also include investments in long and short primarily creditoriented securities. Investments may include mortgage-backed securities, trade finance, debt and asset-backed securities, repurchase agreements, senior loans, bank loans, and cash designated for investment. The fair value of open short positions is recorded as a liability and Vanderbilt records an unrealized gain or loss to the extent of the difference between the proceeds received and the value of the open short position. By entering into short sales, Vanderbilt bears the market risk of increases in the value of the security sold short in excess of the proceeds received. Possible losses from short sales differ from losses that could be incurred from purchases of securities because losses from short sales may be unlimited, whereas losses from purchases cannot exceed the total amount invested.

Private capital consists of illiquid investments in buyouts, distressed debt, mezzanine debt, growth equity, and venture capital. Vanderbilt may make investments through commingled vehicles, separately managed accounts, synthetic transactions, limited partnership interests, and direct investments.

Real estate comprises illiquid investments in residential and commercial real estate assets, projects, publicly traded REITs or land held directly through separately managed accounts, limited partnership interests, and direct investments in properties. The nature of the investments in this category is such that distributions generally reflect liquidation of the underlying assets of the funds.

Natural resources include illiquid investments in timber, oil and gas production, mining, energy, and related services businesses held directly or in commingled limited partnership funds.

Commodities include public investments such as commodity futures, commodity-related equities, and private investments in energy, power, infrastructure, and timber. Investments may be made through commingled vehicles, separately managed accounts, synthetic transactions, limited partnership interests, and direct investments.

Trusts are Vanderbilt's split-interest agreements with donors, including charitable gift annuities, life income funds, and other nonendowed trusts.

Private credit includes privately originated or negotiated investments, comprising potentially higher yielding, illiquid opportunities across a range of risk and return profiles. They are not traded on the public markets.

8. ENDOWMENT

Endowment-related assets include donor-restricted endowments and institutional endowments (quasi-endowments). Vanderbilt's endowment does not include gift annuities, interests in trusts held by others, contributions pending donor designation, or contributions receivable.

Interpretation of Relevant Law

The Board of Trust's interpretation of its fiduciary responsibilities for donor-restricted endowments under the Uniform Prudent Management of Institutional Funds Act ("UPMIFA") requirements, barring the existence of any donor-specific provisions, is to preserve intergenerational equity. Under this broad guideline, future endowment beneficiaries should receive at least the same level of real economic support as the current generation. The overarching objective is to preserve and enhance the real (inflation-adjusted) purchasing power of the endowment in perpetuity. Vanderbilt invests assets to provide a relatively predictable and stable stream of earnings to meet spending needs and attain longterm return objectives without the assumption of undue risks.

UPMIFA specifies that unless stated otherwise in a gift instrument, donor-restricted assets in an endowment fund are restricted assets until appropriated for expenditure. Barring the existence of specific instructions in gift agreements for donor-restricted endowments, Vanderbilt reports both the historical value for such endowments and the net accumulated appreciation, including recapitalizations, as net assets with donor restrictions. In this context, historical value represents the original value of initial contributions restricted as perpetual endowments plus the original value of subsequent contributions and, if applicable, the value of accumulations made in accordance with the direction of specific donor gift agreements.

Spending Policy

Specific appropriation for expenditure of Vanderbilt's endowment funds occurs each spring when the Board of Trust approves the university's operating budget for the subsequent fiscal year. For fiscal years 2023 and 2022, Vanderbilt's Board of Trust approved endowment distributions based on 5.0% of the average of the previous three calendar year-end market values. Vanderbilt reinvests actual realized endowment return earned in excess of distributions. For years when the endowment return is less than the distribution, the endowment pool's cumulative returns from prior years cover the shortfall.

Vanderbilt may not fully expend Board-appropriated endowment distributions in a particular fiscal year. In some cases, Vanderbilt will reinvest distributions into the endowment. Institutional endowments, which are Board-designated, include amounts for student scholarships and support for faculty research and teaching.

The table below summarizes Vanderbilt's endowment for the fiscal years ended June 30 (in thousands):

2023	Without Donor Restrictions	With Donor Restrictions	Total
Endowments with donor restrictions	\$	\$ 3,797,946	\$ 3,797,946
Reinvested distributions	153,789	120,035	273,824
Institutional endowments	5,612,426	-	5,612,426
Endowment net assets as of June 30, 2023	\$ 5,766,215	\$ 3,917,981	\$ 9,684,196
2022	Without Donor Restrictions	With Donor Restrictions	Total
Endowments with donor restrictions	\$	\$ 3,974,041	\$ 3,974,041
Reinvested distributions	163,604	123,357	286,961
Institutional endowments	5,945,066	-	5,945,066

The purposes of endowments with donor restrictions as of June 30 were as follows (in thousands):

	2023	2022
Student scholarships	\$ 1,534,562	\$ 1,613,037
Endowed chairs	1,091,483	1,150,565
Operational support, not yet appropriated	694,479	732,738
Program support	313,378	328,096
Research	94,824	99,266
Faculty support and lectureships	68,516	49,669
Capital improvements	50,762	51,147
Other	69,977	72,880
Total endowments with donor restrictions	\$ 3,917,981	\$ 4,097,398

Return Objectives and Parameters

Currently, the endowment portfolio consists of three primary components designed to serve a specific role in establishing the right balance between risk and return. These three components are global, public, and private equity investments. Vanderbilt expects these three components, including private capital and many hedge funds, to produce favorable returns in environments of accelerated growth and economic expansion. Vanderbilt expects hedged strategies and fixed income investments to generate stable returns and preserve capital during periods of poor equity performance. Vanderbilt uses real estate and natural resources allocations to provide an inflation hedge.

Funds with Deficiencies

From time to time, the fair value of assets associated with an endowed fund may fall below the level that a donor or UPMIFA requires in terms of maintenance of perpetual duration endowments. Vanderbilt has a policy that permits spending from underwater funds, unless specifically prohibited by the donor or relevant laws and regulations. As of June 30, 2023, and 2022, Vanderbilt had 202 and 106 funds, respectively, with deficiencies of this nature resulting from unfavorable market declines that occurred after the investment of recent contributions with donor restrictions. Vanderbilt believes these declines are modest in relation to the total market value for donor-restricted endowments and that these deficiencies will be relatively short-term in nature. The amount of such deficiencies for the fiscal years ended June were as follows (*in thousands*):

	2023	2022
Aggregate original gift amount	\$ 76,946	\$ 29,370
Less aggregate fair value	72,330	27,398
Aggregate deficiency	\$ 4,616	\$ 1,972

Changes in endowment net assets for the fiscal years ended June 30 were as follows (in thousands):

2023	 thout Donor Restrictions	With Donor Restrictions	Total
Endowment net assets as of June 30, 2022	\$ 6,108,670	\$ 4,097,398	\$ 10,206,068
Endowment investment return, net	(117,872)	(79,586)	(197,458)
Gifts and additions to endowment, net	24,269	67,367	91,636
Endowment distributions	(248,852)	(167,198)	(416,050)
Endowment net assets as of June 30, 2023	\$ 5,766,215	\$ 3,917,981	\$ 9,684,196

2022	 thout Donor Restrictions	With Donor Restrictions	Total
Endowment net assets as of June 30, 2021	\$ 6,569,806	\$ 4,358,706	\$ 10,928,512
Endowment investment return, net	(280,728)	(189,712)	(470,440)
Gifts and additions to endowment, net	44,591	77,853	122,444
Endowment distributions	(224,999)	(149,449)	(374,448)
Endowment net assets as of June 30, 2022	\$ 6,108,670	\$ 4,097,398	\$ 10,206,068

9. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment as of June 30 were as follows (in thousands):

	2023	2022
Land	\$ 271,234	\$ 237,573
Buildings and improvements	2,339,073	2,116,130
Moveable equipment	335,048	345,075
Construction in progress	269,765	266,091
Property, plant, and equipment	3,215,120	2,964,869
Less: Accumulated depreciation	(1,398,064)	(1,330,833)
Property, plant, and equipment, net	\$ 1,817,056	\$ 1,634,036

Buildings and improvements include \$14.4 million of leasehold improvements in both the years ended June 30, 2023, and 2022. Vanderbilt reports property, plant, and equipment at cost or, if a gift, at fair value as of the date of the gift, net of accumulated depreciation. Vanderbilt computes depreciation using the straight-line method over the estimated useful lives of the assets: 10 to 50 years for buildings, building improvements, and land improvements; the shorter of the asset life or life of the lease including renewal options for leasehold improvements; and three to 25 years for machinery and equipment.

Purchases for the fine art and library collections are not included in the amounts above as Vanderbilt expenses such items at the time of purchase. As of June 30, 2023, the estimated replacement cost, including processing costs to properly identify, catalog, and shelve materials, for library collections totaled \$472.7 million and for fine art collections totaled \$49.0 million. Any proceeds from deaccessioned collection items are used for the direct care of existing collections. Direct care is an investment that enhances the life, usefulness, or quality of the collection.

Vanderbilt reported capitalized interest of \$2.2 million and \$3.5 million to construction in progress and/or buildings and improvements in the years ended June 30, 2023, and 2022, respectively.

Vanderbilt reviews property, plant, and equipment for recoverability whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The university recognizes an impairment loss if the carrying amount of a long-lived asset exceeds its fair value and is not recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Vanderbilt did not recognize any impairment losses in fiscal 2023 or 2022.

Vanderbilt identified conditional asset retirement obligations, primarily for the costs of asbestos removal and disposal, resulting in liabilities of \$6.6 million and \$3.8 million as of June 30, 2023, and 2022, respectively. These liability estimates, included in accounts payable and accrued liabilities in the consolidated statements of financial position, use an inflation rate of 8.26% and 4.16% as of June 30, 2023, and 2022, respectively, and a discount rate of 4.98% and 4.37% as of June 30, 2023, and 2022, respectively, based on relevant factors at origination.

10. LONG-TERM DEBT

Long-term debt consists of bonds and notes payable with scheduled final maturity dates at least one year after the original issuance date.

Outstanding long-term debt reflected in the financial statements at carrying value as of June 30 were as follows (in thousands):

		Fixed Coupon			Outstandin		Outstanding P		ıcipal
	Fiscal Year of Maturity	Interest Rates as of June 30, 2023	Effective Interest Rate		2023		2022		
FIXED-RATE DEBT									
Series 2016 - Taxable	2047	2.03% - 3.44%	3.2%	\$	112,490	\$	115,760		
Series 2018 - Private Placement	2049	3.93%	3.9%		300,000		300,000		
Series 2019 – Private Placement	2038	2.51%	2.5%		103,125		108,740		
Series 2020 - Private Placement	2050	3.00%	3.0%		100,000		100,000		
Fixed-rate debt (par amount)			3.4%	\$	615,615	\$	624,500		
Cost of issuance			-		(955)		(996)		
Total long-term debt			3.4%	\$	614,660	\$	623,504		
COMMERCIAL PAPER									
Tax-exempt commercial paper	< 1		3.3%	\$	25,000	\$	-		
Taxable commercial paper	< 1		3.0%		24,688		49,728		
Total commercial paper			3.0%	\$	49,688	\$	49,728		
Total long-term debt and commercial paper			3.4%	\$	664,348	\$	673,232		

All debt instruments are general obligations of Vanderbilt. Vanderbilt did not pledge any of its assets as collateral for this debt. Payments for interest costs occur on varying scheduled payment dates for debt. Vanderbilt calculates accrued interest expense for its debt based on applicable interest rates for the respective fiscal year. Interest expense of \$20.8 million in fiscal 2023 includes \$0.5 million of other interest expense and is net of capitalized interest of \$2.2 million. Interest expense of \$17.9 million in fiscal 2022 is net of capitalized interest of \$3.5 million.

Principal retirements and scheduled sinking fund requirements based on nominal maturity schedules for long-term debt due in subsequent fiscal years are as follows *(in thousands)*:

2024	\$ 16,125
2025	16,345
2026	16,605
2027	17,535
2028	17,815
Thereafter	531,190
Total long-term debt principal retirements	\$ 615,615

In May 2023, Vanderbilt retired \$25.0 million (par) Commercial Paper under its existing Taxable CP Program Series C using working capital and issued \$25.0 million (par) Commercial Paper under its new Taxable Commercial Paper Program to finance a strategic real estate acquisition adjacent to campus and other projects. In February 2023, Vanderbilt retired \$25.0 million (par) Commercial Paper issued under its existing Taxable CP Program Series C using working capital and issued \$25.0 million (par) Commercial Paper issued under its existing Taxable CP Program Series C using working capital and issued \$25.0 million (par) Commercial Paper under its new Tax-Exempt Commercial Paper Program Number One to finance its residential college program. In July 2021, Vanderbilt issued \$50.0 million (par) Commercial Paper under its existing Taxable CP Program Series C to finance a strategic real estate acquisition adjacent to campus and other projects.

On December 6, 2021, Vanderbilt executed a 24-month Treasury Lock (the "Lock") with a national, United States bank using the underlying 30-year U.S. Treasury rate. The notional amount of the Lock was \$200.0 million. The all-in locked rate, including the forward and execution premium, is 1.8%. Maturity on the Lock is December 6, 2023. No collateral postings are required during the term of the Lock. Vanderbilt executed this Lock in anticipation of future long-term debt issuances in fiscal years 2024 and 2025. The exact timing and amount of these future debt issuances are still under discussion internally as part of the university's long-term strategic capital planning evaluation process. As of June 30, 2023, Vanderbilt has terminated \$175.0 million notional of the original \$200.0 million notional Lock for \$55.5 million in total proceeds. As of June 30, 2023, the positive mark-to-market on the remaining \$25.0 million notional of the Lock was \$8.7 million. As of June

30, 2022, the positive mark-to-market on the \$200.0 million notional was \$46.0 million. The mark-to-market is recorded in "Investments" on the consolidated statements of financial position.

11. NET ASSETS

The following is a summary of net assets as of June 30 (in thousands):

2023	Without dono restrictio		With donor restriction	Total
Operations	\$ 182,40	9 \$	-	\$ 182,409
Deferred trademark license revenue	(1,796,712)	-	(1,796,712)
Net investment in plant	1,314,68	0	206	1,314,886
Endowment funds	5,766,21	5	3,917,981	9,684,196
Donor pledges and gifts		-	242,647	242,647
Split-interest agreements		-	72,710	72,710
Net assets attributable to Vanderbilt	5,466,59	2	4,233,544	9,700,136
Net assets related to noncontrolling interests	10,44	4	-	10,444
Total net assets as of June 30, 2023 ¹	\$ 5,477,03	6\$	4,233,544	\$ 9,710,580

¹ Total net assets with donor restrictions as of June 30, 2023, includes net asset with donor restrictions restricted in perpetuity of \$1,714,305.

2022	Without donor restriction	With donor restriction	Total
Operations	\$ 221,687	\$ -	\$ 221,687
Deferred trademark license revenue	(1,841,610)	-	(1,841,610)
Net investment in plant	1,126,123	-	1,126,123
Endowment funds	6,108,670	4,097,398	10,206,068
Donor pledges and gifts	-	176,944	176,944
Split-interest agreements	-	72,191	72,191
Net assets attributable to Vanderbilt	5,614,870	4,346,533	9,961,403
Net assets related to noncontrolling interests	17,061	-	17,061
Total net assets as of June 30, 2022 ¹	\$ 5,631,931	\$ 4,346,533	\$ 9,978,464

¹ Total net assets with donor restrictions as of June 30, 2022, includes net asset with donor restrictions restricted in perpetuity of \$1,654,864.

12. FAIR VALUE MEASUREMENT

Vanderbilt utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels:

Level 1 consist of quoted prices (unadjusted) in active markets for identical assets or liabilities accessible at the measurement date.

Level 2 include inputs other than quoted prices in Level 1 directly or indirectly observable for the assets or liabilities.

Level 3 are unobservable inputs for the assets or liabilities.

The level in the fair value hierarchy within which a fair value measurement in its entirety is classified depends on the lowest level input that is significant to the fair value measurement.

The significance of the unobservable inputs to the overall fair value measurement determines the classification of a financial instrument within level 3.

The fair values of alternative investments (interests in private equity, hedge, real estate, and other similar funds) for which quoted market prices are not available are generally measured based on the reported partner's capital or net asset value ("NAV") provided by the associated external investment managers. The reported partner's capital or NAV is subject to management's assessment that the valuation provided is representative of fair value.

The consolidated statements of activities reflect: all realized and unrealized gains and losses net of expenses on investments as appreciation of endowment or appreciation of other investments; gains and losses on investments allocable to noncontrolling interests as a component of appreciation of endowment; and net realized and unrealized gains and losses on interests in trusts held by others as other sources.

Rollforwards of amounts for level 3 financial instruments for the fiscal years ended June 30 follow (in thousands):

	ba	Beginning ance as of e 30, 2022	and	let realized unrealized ns(losses) ¹	Purchases	Sales	Transfers into/(out of) level 3	Ending alance as of ine 30, 2023
LEVEL 3 ASSETS								
Real estate	\$	16	\$	(4)	\$ -	\$ -	\$ -	\$ 12
Trusts		23,195		1,814	568	(2,900)	-	22,677
Other investments		1,648		14	750	-	-	2,412
Interests in trusts held by others		31,063		(580)	-	(412)	-	30,071
Total Level 3	\$	55,922	\$	1,244	\$ 1,318	\$ (3,312)	\$ -	\$ 55,172

¹ Total unrealized gains/(losses) relating to level 3 investment assets held by the university at June 30, 2023, is \$928.3 and is reflected in "Appreciation of endowment, net of distributions" for private capital and natural resources categories as well as "Other sources" for remaining categories in the consolidated statement of activities.

	ba	Beginning lance as of le 30, 2021	and	let realized unrealized ns(losses) ¹	Purchases	Sales	Transfers into/(out of) level 3	Ending alance as of ine 30, 2022
LEVEL 3 ASSETS								
Real estate	\$	16	\$	-	\$ -	\$ -	\$ -	\$ 16
Natural resources		15,226		859	-	(16,085)	-	-
Trusts		32,813		(3,842)	2,207	(7,983)	-	23,195
Other investments		1,437		63	364	(216)	-	1,648
Interests in trusts held by others		34,829		(3,766)	-	-	-	31,063
Total Level 3	\$	84,321	\$	(6,686)	\$ 2,571	\$ (24,284)	\$ -	\$ 55,922

¹ Total unrealized gains/(losses) relating to level 3 investment assets held by the university at June 30, 2022, is (\$24,043.7) and is reflected in "Appreciation of endowment, net of distributions" for private capital and natural resources categories as well as "Other sources" for remaining categories in the consolidated statement of activities.

The following tables present the amounts within each valuation hierarchy level for those assets and liabilities carried at fair value: cash and cash equivalents; investments; investments allocable to noncontrolling interests (in Vanderbilt-controlled real estate and other partnerships); interests in trusts held by others; securities sold short; and the fair value of interest rate exchange agreements.

Also included in the following tables, as a measure of liquidity, are the redemption terms and restrictions of investments, along with the numbers of days' notice required to liquidate these investments. Most investments classified as levels 2 and 3 consist of shares or units in investment funds as opposed to direct interests in the funds' underlying holdings. Vanderbilt's ability to redeem its interest at or near the financial statement date determines the net assets' classification as level 2 or level 3. Vanderbilt defines near-term as within 90 days of the financial statement date. The total asset values for short-term securities, global equities, fixed income, hedged strategies, and commodities provide varying levels of liquidity, with daily to annual redemption frequencies. These strategies allow Vanderbilt to provide notice to the fund managers to exit from the respective funds in the time periods noted.

The total asset values for private capital, real estate, natural resources, private credit, and other investments are illiquid as of June 30, 2023, and as of June 30, 2022. These amounts predominantly consist of limited partnerships. Under the terms of these limited partnership agreements, Vanderbilt is obligated to remit additional funding periodically as capital calls are exercised by the general partner. These partnerships have a limited existence, and the agreements may provide for annual extensions relative to the timing for disposing portfolio positions and returning capital to investors. Depending on market conditions, the ability or inability of a fund to execute its strategy, and other factors, the general partner may extend the terms or request an extension of terms of a fund beyond its originally anticipated existence or may liquidate the fund prematurely. Unforeseen events prevent Vanderbilt from anticipating such changes. As a result, the timing and amount of future capital calls or distributions in any particular year are uncertain and the related asset values are illiquid.

Trusts are restricted by donors according to the underlying gift agreement with assets held to satisfy annuity obligations or until a remainder portion becomes available upon termination. As such, trusts are illiquid until termination, the timing of which is unknown.

The following tables summarize the fair value measurements and terms for redemptions or liquidations for those assets and liabilities carried at fair value as of June 30 (in thousands):

Assets Reported at Fair Value as of June 30, 2023

	Fair Value Measurements								
		Level 1		Level 2		Level 3	NAV		Total
Cash and cash equivalents	\$	937,070	\$	-	\$	- \$	-	\$	937,070
Short-term securities		212		-		-	-		212
Global equities		1,876,446		59,909		-	150,682		2,087,037
Fixed income		232,568		543,860		-	62,674		839,102
Hedged strategies ¹		1,347,424		494,620		-	376,951		2,218,995
Private capital		18,368		31,269		-	3,690,123		3,739,760
Real estate		-		-		12	297,703		297,715
Natural resources		223		-		-	580,291		580,514
Commodities		212,650		-		-	-		212,650
Trusts		-		-		22,677	-		22,677
Private credit		-		-		-	15,327		15,327
Other investments ²		6,735		24,877		2,412	-		34,024
Interests in trusts held by others		-		-		30,071	-		30,071
Total assets reported at fair value	\$	4,631,696	\$	1,154,535	\$	55,172 \$	5,173,751	\$	11,015,154

Liabilities Reported at Fair Value as of June 30, 2023

Securities sold short	\$ 513,571	\$ 65,600 \$	- \$	- \$	579,171
Total liabilities reported at fair value	\$ 513,571	\$ 65,600 \$	- \$	- \$	579,171

¹Includes \$616.8 million of cash and cash equivalents classified as investments.

²Balance includes an \$8.7 million positive mark-to-market on the remaining \$25.0 million notional of the Treasury Lock as of June 30, 2023. As of June 30, 2023, \$175.0 million total notional of the original \$200.0 million notional Treasury Lock was terminated. The positive mark-to-market balance is recorded in "Investments" on the consolidated statements of financial position.

Assets Reported at Fair Value as of June 30, 2022

	Fair Value Measurements									
		Level 1		Level 2		Level 3	NAV		Total	
Cash and cash equivalents	\$	1,184,069	\$	-	\$	- \$	-	\$	1,184,069	
Short-term securities		196		-		-	-		196	
Global equities		1,707,847		59,533		-	210,310		1,977,690	
Fixed income		234,873		482,167		-	56,455		773,495	
Hedged strategies ¹		1,559,700		626,787		-	389,504		2,575,991	
Private capital		17,019		4,825		-	3,819,723		3,841,567	
Real estate		-		-		16	235,993		236,009	
Natural resources		122		-		-	723,107		723,229	
Commodities		192,619		-		-	-		192,619	
Trusts		-		-		23,195	-		23,195	
Private credit		-		-		-	4,411		4,411	
Other investments ²		(12,404)		64,166		1,648	-		53,410	
Interests in trusts held by others		-		-		31,063	-		31,063	
Total assets reported at fair value	\$	4,884,041	\$	1,237,478	\$	55,922 \$	5,439,503	\$	11,616,944	

Liabilities Reported at Fair Value as of June 30, 2022

Securities sold short	\$ 511,012	\$ 103,304	\$	\$ - \$	614,316
Total liabilities reported at fair value	\$ 511,012	\$ 103,304	\$ -	\$ - \$	614,316

¹ Includes \$916.6 million of cash and cash equivalents classified as investments. ² Includes the positive mark-to-market on the \$200.0 million notional 24-month Treasury Lock as of June 30, 2022, of \$46.0 million which is recorded in "Investments" on the consolidated statements of financial position.

	2023 Fair Value	Redemption Terms	Redemption Restrictions
Cash and cash equivalents	\$ 937,070	Daily, with same-day to 90-day notice	No restrictions
Short-term securities	212	Daily, with 1-day notice	No restrictions
Global equities	2,087,037	Daily to annually, with 1- to 90-day notice	Lock-up provision ranging from none to 2 years
Fixed income	839,102	Daily to annually, with 1- to 365-day notice	No restrictions
Hedged strategies	2,218,995	Daily to annually, with 15- to 90-day notice	Lock-up provision ranging from none to 2 years
Private capital	3,739,760	N/A	Not redeemable
Real estate	297,715	N/A	Not redeemable
Natural resources	580,514	N/A	Not redeemable
Commodities	212,650	Daily, with 1- to 30-day notice	No restrictions
Trusts	22,677	N/A	Not redeemable
Private credit	15,327	N/A	Not redeemable
Other investments	34,024	N/A	Not redeemable
Interests in trusts held by others	30,071	N/A	Not redeemable

Redemption Terms and Restrictions as of June 30, 2023

13. LEASES

Vanderbilt has recognized operating right-of-use assets (ROU) and lease liabilities for leases on its consolidated statements of financial position. The balances of prepaid and accrued rent, lease incentives, and unamortized assets and liabilities are presented within operating lease ROU assets on Vanderbilt's consolidated statements of financial position.

Vanderbilt is obligated under numerous operating leases to pay base rent through the respective lease expiration dates. Operating leases primarily consist of equipment and real property for educational campus facilities and office space with remaining lease terms of up to 10 years through fiscal 2032. Variable lease payments based on an index or rate, such as the consumer price index, are initially measured using the index or rate in effect at lease commencement. Vanderbilt has elected the short-term lease exception under Topic 842 for all leases and, as such, leases with an initial term of 12 months or less are not recorded on the consolidated statements of financial position. Vanderbilt recognizes lease expense for short-term leases on a straight-line basis over the lease term.

The following tables summarize the total lease expenses components incurred for the fiscal years ended June 30 (in thousands):

	2023	2022
Operating lease expense	\$ 13,505	\$ 12,824
Short-term lease expense	5,146	3,846
Total lease expense	\$ 18,651	\$ 16,670
Other lease information	2023	2022
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 13,857	\$ 12,917
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 2,750	\$ 6,560
Weighted-average remaining lease term - operating leases	4.37 years	6.36 years
Weighted-discount rate - operating leases	3.00%	2.08%

The undiscounted cash flows due by fiscal year related to significant noncancelable operating leases with initial terms in excess of one year as of June 30, 2023, along with a reconciliation to the discounted amount recorded as of June 30, 2023, were as follows *(in thousands)*:

Total lease obligation	\$ 52,027
Less amount representing imputed interest	3,375
Total undiscounted cash flows	\$ 55,402
Thereafter	3,923
2028	3,104
2027	5,823
2026	14,011
2025	14,250
2024	\$ 14,291

Property leases for buildings owned by Vanderbilt University Medical Center (43%) and 2100 West End Avenue (25%) account for approximately 68% of the total future minimum rentals as of June 30, 2023.

Vanderbilt is the lessor in several long-term noncancelable operating leases for commercial space through fiscal year 2114. Property leases owned by Vanderbilt University and leased by Vanderbilt University Medical Center account for approximately 98% of the total future minimum operating rental revenue as of June 30, 2023. Operating rental income was \$25.2 million and \$21.7 million of June 30, 2023, and June 30, 2022, respectively.

Future minimum operating rental revenue due as of June 30, 2023, is summarized below (in thousands):

Total future minimum rentals	\$ 1,857,870
Thereafter	1,714,922
2028	23,443
2027	24,111
2026	30,708
2025	32,058
2024	\$ 32,628

14. REVENUE RECOGNITION

The following table presents	Vanderbilt's sources	of revenue as of	June 30 as follows	(in thousands):

	2023	2022
Tuition and educational fees, net		
Undergraduate [net of financial aid, \$195,094 and \$177,814, respectively]	\$ 234,307	\$ 226,061
Professional [net of financial aid, \$64,503 and \$64,455, respectively]	150,427	152,871
Graduate [net of financial aid, \$57,547 and \$55,092, respectively]	11,249	8,942
Total tuition and educational fees, net	395,983	387,874
Grants:		
Government sponsors ¹	168,926	141,974
Private sponsors ¹	11,274	7,692
Facilities and administrative costs recovery ¹	48,229	42,880
Contracts:		
Government sponsors ²	40,682	39,033
Private sponsors ³	20,180	14,848
Facilities and administrative costs recovery 4	27,012	25,397
Total grants and contracts	316,303	271,824
Contributions ¹	165,378	117,800
Endowment distributions ¹	416,051	374,448
Room, board, and other auxiliary services, net		
Room and board, net [net of financial aid, \$48,768 and \$44,453, respectively]	57,798	47,188
Auxiliary revenue from affiliates	36,486	34,837
West Trace	17,558	15,181
Vanderbilt Legends Club	11,328	11,123
External rental revenue ¹	9,907	7,727
Parking and vehicle registration	6,285	5,434
Commissions revenue	2,747	3,183
Other auxiliary services	6,015	4,644
Total room, board, and other auxiliary services, net	148,124	129,317
Trademark, license, and royalty revenue	173,974	208,566
Affiliated entity revenue	195,411	185,527
Other sources		
Television revenue	38,151	37,798
Investment (loss) income ¹	21,490	(14,565)
Tournament revenue	12,717	14,151
Student athletics ticket revenue	7,635	5,726
Child care operations	4,497	3,906
Conference and seminar revenue	4,334	4,697
Miscellaneous revenue from affiliate	2,900	2,780
Other miscellaneous revenue	23,179	18,223
Total other sources	114,903	72,716
Total revenues and other support	\$ 1,926,127	\$ 1,748,072

¹Not considered revenue from contracts with customers.

¹ Not considered revenue from contracts with customers.
 ² Revenue from government sponsors includes contracts with customers of \$40.3 million and contributions of \$0.4 million in fiscal 2023 and contracts with customers of \$38.0 million and contributions of \$1.0 million in fiscal 2022.
 ³ Revenue from private sponsors includes contracts with customers of \$20.0 million in fiscal 2023 and contracts with customers of \$15.0 million in fiscal 2022.
 ⁴ Revenue from facilities and administrative costs recovery includes contracts with customers of \$27.0 million in fiscal 2023 and contracts with customers of \$25.0 million in fiscal 2022.

Vanderbilt's related revenue recognition policies are:

Tuition and educational fees, net—Vanderbilt recognizes student tuition and educational fees as performance obligations that are satisfied over time in the amount that reflects the consideration expected for providing academic services in the year those services occur. Vanderbilt reflects financial aid provided for tuition and educational fees as a reduction to the expected consideration. Financial aid does not include payments made to students for services provided to Vanderbilt or financial aid applied to undergraduate room and board. In addition, students who adjust their course load or withdraw completely within the first three weeks of the academic term may receive a full or partial refund in accordance with Vanderbilt's refund policy. Refunds issued reduce the amount of tuition recognized. Tuition payments from students are due approximately 30 days after the invoice date.

Grants and contracts—Vanderbilt records revenues related to grants and contracts in two portfolio categories based on the source of the funds:

Government Sponsors provide funding for research largely to advance knowledge for public or academic benefit in direct support of Vanderbilt's mission. Vanderbilt primarily considers these sponsored research agreements to be contributions (nonreciprocal transactions). Vanderbilt recognizes grant and contract revenue associated with contributions from government sponsors as earned when the conditions are met (allowable expenses have been incurred). Additionally, a small portion of government-sponsored awards qualifies as exchange (reciprocal) transactions. The transaction price for exchange transactions is the stated amount of the award. Vanderbilt recognizes grants and contracts revenue related to these exchange transactions as performance obligations that are satisfied based on the terms of the agreement.

Private Sponsors consist of private agencies, professional associations, private foundations, corporate foundations and corporations and may be either donors or sponsors depending on the nature, intent, and expectations of the funding they are providing. Vanderbilt recognizes revenue associated with contributions from private sponsors as the conditions are met. Additionally, some private sponsor awards qualify as exchange (reciprocal) transactions. The transaction price for exchange transactions is the stated amount of the award. Vanderbilt recognizes grants and contracts revenue related to these exchange transactions at the time services are provided.

Facilities and administrative (F&A) costs recovery is recognized by Vanderbilt as revenue. This activity represents reimbursement, primarily from the federal government, of F&A costs on sponsored activities. Vanderbilt's federal F&A cost recovery rate for oncampus research was 58.5% in fiscal 2023 and in fiscal 2022. Vanderbilt's federal F&A off-campus research remote cost recovery rate was 26.0% in fiscal 2023 and in fiscal 2022. Vanderbilt's federal F&A off-campus research adjacent cost recovery rate 29.5% in fiscal 2023 and in fiscal 2022.

Endowment distributions—Endowment distributions reported as operating revenue consist of endowment return (regardless of when such income arose) distributed to support operational needs in the current period. Vanderbilt's Board of Trust approves the distribution amount from the endowment pool on an annual basis, determined by applying a spending rate to an average of the previous three calendar yearend market values. The primary objective of the endowment distribution methodology is to reduce the impact of capital market fluctuations on operational programs.

Trademark, license, and royalty revenue—The Trademark License Agreement ("TML") between Vanderbilt and VUMC comprises the majority of trademark, license, and royalty revenue. Vanderbilt recognizes all trademark, license, and royalty revenues upon satisfaction of the performance obligation in accordance with the terms of the underlying agreements, which generally result in recognition of the revenue over the term of the agreement. In July 2018, Vanderbilt recorded \$1.43 billion related to the securitized trademark revenue stream as deferred revenue on the statement of financial position and recognizes related revenue upon satisfaction of the performance obligation in accordance with the 30-year term of the underlying agreement. In December 2019, Vanderbilt sold 30 years of a portion of the 1%-of-VUMC revenue TML payment stream in exchange for cash consideration of \$331.6 million. In February 2021, Vanderbilt sold 29 years of an additional portion of the 1%-of-VUMC revenue TML payment stream in exchange for cash consideration of \$277.2 million.

Affiliated entity revenue—Affiliated entity revenue represents amounts received from VUMC to support and ensure sustainability of the upstream research pipeline and other academic initiatives and to compensate Vanderbilt for the provision of operating and capital infrastructure services to VUMC, primarily in campus infrastructure, campus safety and security, and various support functions. Vanderbilt recognizes affiliated entity revenues upon satisfaction of the performance obligation in accordance with the terms of the underlying agreements.

Investment income—Investment income consists of distributions associated with working capital assets invested in long-term pooled investments managed in conjunction with endowment funds and dividends, interest, and gains/losses on other university investments. Vanderbilt reports any difference between total returns for pooled working capital assets and the aforementioned distributions as nonoperating activity. Investment income is included in "Other sources" on the consolidated statements of activities.

Other revenue—Vanderbilt recognizes revenue from other sources as the related services are provided and/or amounts are otherwise earned upon satisfaction of the performance obligation in accordance with the terms of the underlying agreements.

15. FUNCTIONAL CLASSIFICATION OF EXPENSES AND ALLOCATIONS

Vanderbilt presents functional classification of expenses in accordance with the mission of the university. Vanderbilt's primary programs are instruction and academic support, research and public services, and student services. Support activities are incurred in support of these primary programs.

For operating expenses that benefit multiple functional categories, Vanderbilt allocates these expenses to reflect the full cost of all activities. Based on the functional uses of space on its campus, Vanderbilt allocated operation and maintenance of facilities, depreciation, and interest on indebtedness across functional expense categories.

The following tables summarize operating expenses by natural and functional classification for the fiscal years ended June 30 (in thousands):

2023	In	struction & academic support	p	Research & oublic service	Student services	Total program expenses	Support activities	Total expenses
Salaries, wages, and benefits	\$	391,854	\$	146,145	\$ 76,383	\$ 614,382	\$ 218,230	\$ 832,612
Supplies, services, and other		237,738		89,200	74,794	401,732	228,490	630,222
Interest		2,513		1,435	1,620	5,568	15,252	20,820
Depreciation		22,713		18,114	10,537	51,364	49,991	101,355
Grants to affiliate		-		30,845	-	30,845	-	30,845
Total expenses	\$	654,818	\$	285,739	\$ 163,334	\$ 1,103,891	\$ 511,963	\$ 1,615,854

2022	In	struction & academic support	Research & ublic service	Student services	Total program expenses	Support activities	Total expenses
Salaries, wages, and benefits	\$	359,736	\$ 131,342	\$ 68,873	\$ 559,951	\$ 206,692	\$ 766,643
Supplies, services, and other		224,535	74,951	63,678	363,164	175,197	538,361
Interest		2,594	975	686	4,255	13,623	17,878
Depreciation		21,921	15,927	9,964	47,812	48,077	95,889
Grants to affiliate		-	28,100	-	28,100	-	28,100
Total expenses	\$	608,786	\$ 251,295	\$ 143,201	\$ 1,003,282	\$ 443,589	\$ 1,446,871

16. RETIREMENT PLANS

Vanderbilt's eligible faculty and staff members participate in a defined contribution retirement plan administered by a third-party investment firm. For these employees, this plan requires employee and matching employer contributions. The employee immediately vests in these contributions upon eligibility.

Vanderbilt funds the obligations under these plans through payroll transfers to the respective retirement plan administrators with the corresponding expenses recognized in the year incurred. Vanderbilt's retirement plan contributions for fiscal 2023 and 2022 were \$23.3 million and \$21.5 million, respectively.

17. COMMITMENTS AND CONTINGENCIES

(A) *Construction.* As of June 30, 2023, Vanderbilt had contractual commitments for approximately \$305.5 million of projects under construction and equipment purchases. The largest components of this commitment amount were for Highland plant and electrical substation for \$82.6 million, underground corridors for \$82.4 million, a new basketball practice facility for \$46.7 million, Residential College C for \$32.0 million, and ESB construction for \$11.7 million.

(B) *Litigation*. On May 17, 2016, a former Vanderbilt football player filed suit against the NCAA, the SEC, and Vanderbilt in the Middle District of Florida in Orlando seeking class action status for students who played football at Vanderbilt between 1952 and 2010. The suit is styled Walthour v. Vanderbilt University, et al., No. 16-cv-834 (M.D. Fl.). Walthour alleged he suffered "several" concussions and now has cognitive functioning problems, such as loss of memory, mood swings, sensitivity to light, and blackouts. The suit has been transferred to the Northern District of Illinois for pretrial purposes as a tag-along action to the multidistrict litigation styled In re: National Collegiate Athletic Association Student-Athlete Concussion Injury Litigation, MDL No. 2492.

Vanderbilt believes that the outcome of this action will not have a significant effect on its consolidated financial position. Vanderbilt is otherwise involved in various legal actions occurring in the normal course of activities, which will not have a material adverse effect on Vanderbilt's financial position.

(C) *Regulations*. Vanderbilt's compliance with regulations and laws is subject to future government reviews and interpretations, as well as regulatory actions unknown at this time. Vanderbilt believes that any potential liability from such reviews would not have a significant effect on Vanderbilt's consolidated financial position.

(D) Employee Health and Workers' Compensation Insurance. Vanderbilt is self-insured for employee health insurance and workers' compensation coverage. Vanderbilt bases estimated liabilities upon studies conducted by independent actuarial firms.

(E) *Federal and State Contracts and Other Requirements.* Expenditures related to federal and state grants and contracts are subject to adjustment based upon review by the granting agencies. Amounts of expenditures that granting agencies might disallow cannot be determined at this time. These amounts affect government grants and contract revenue as well as facilities and administrative cost recovery. Vanderbilt would not expect these costs to materially impact the consolidated financial position.

(F) *Partnership Investment Commitments*. Vanderbilt had \$1,396.8 million of commitments to venture capital, real estate, and private equity investments as of June 30, 2023. At the request of the general partners, Vanderbilt may be required to contribute funds over the next several years. Vanderbilt expects to finance these commitments with available cash and expected proceeds from the sales of securities. Included in these commitments is \$1.2 million of commitments for which Vanderbilt is a secondary guarantor for commitments in certain investment vehicles where minority limited partners in subsidiaries that Vanderbilt controls have the primary obligations.

18. RELATED PARTIES

Intermittently, members of Vanderbilt's Board of Trust or Vanderbilt employees may be directly or indirectly associated with companies engaged in business activities with the university. Accordingly, Vanderbilt has a written conflict of interest policy that requires, among other things, that members of the university community (including trustees) may not review, approve, or administratively control contracts or business relationships when (a) the contract or business relationship is between Vanderbilt and a business in which the individual or a family member has a material financial interest or (b) the individual or a family member is an employee of the business and is directly involved with activities pertaining to Vanderbilt.

Furthermore, Vanderbilt's conflict of interest policy extends beyond the foregoing business activities in that disclosure is required for any situation in which an applicable individual's financial, professional, or other personal activities may directly or indirectly affect, or have the appearance of affecting, an individual's professional judgment in exercising any university duty or responsibility, including the conduct or reporting of research.

The policy extends to all members of the university community (including trustees, university officials, and faculty and staff and their immediate family members). Each applicable person is required to certify compliance with the conflict of interest policy on an annual basis. This certification includes specifically disclosing whether Vanderbilt conducts business with an entity in which he or she (or an immediate family member) has a material financial interest as well as any other situation that could appear to present a conflict with Vanderbilt's best interests. When situations exist relative to the conflict of interest policy, Vanderbilt takes active measures to manage appropriately the actual or perceived conflict in the best interests of the university, including periodic reporting of the measures taken to the Audit Committee of the Vanderbilt University Board of Trust.

See Note 19 to the consolidated financial statements for discussion regarding the ongoing economic relationship between Vanderbilt and VUMC.

19. VANDERBILT UNIVERSITY MEDICAL CENTER

Vanderbilt has an ongoing economic relationship with VUMC in the form of an Academic Affiliation Agreement ("AAA"), a Trademark Licensing Agreement, a Ground Lease, and a Master Service Agreement ("MSA").

The AAA recognizes the ongoing academic, research, and clinical affiliation between the university and VUMC for all of the university's degree-granting, certificate, and research programs. The AAA serves to allocate responsibility between the university and VUMC for jointly administered academic programs, residency programs, and ongoing roles and rights of the university. The AAA will remain in effect until termination of the TML or Ground Lease.

Pursuant to the TML, the university grants, subject to certain consents and approvals, a perpetual license to VUMC to use various universityowned licensed marks in connection with VUMC's fundamental activities. The licensed marks, which VUMC will continue to use as the

primary brands of VUMC, include virtually all those currently in use by VUMC. The TML will remain in effect until termination of the AAA or Ground Lease.

In July 2018, Vanderbilt securitized 30 years of one of the university's trademark revenue streams and sold the remaining \$89.6 million balance of a promissory note receivable. This securitization occurred on a true-sale basis to a group of external investors in exchange for net cash consideration of \$1.43 billion and a special interest obligation equivalent to the remaining future promissory note interest stream. In December 2019, Vanderbilt securitized 30 years of a portion of the 1%-of-VUMC revenue TML payment stream in exchange for cash consideration of \$331.6 million. This securitization occurred on a true-sale basis. In February 2021, Vanderbilt securitized 29 years of a portion of the 1%-of-VUMC revenue TML payment stream in exchange for cash consideration of \$277.2 million. This securitization occurred on a true-sale basis.

The Ground Lease allows VUMC to use the land on which its campus and related buildings are located. The initial term of the Ground Lease ends June 30, 2114, with the option to extend for up to two additional terms of 50 to 99 years each upon mutual agreement by Vanderbilt and VUMC.

Vanderbilt and VUMC provide specified services to one another for agreed-upon consideration as outlined in the MSA. Vanderbilt continues to provide services to VUMC such as IT support, utilities, and law enforcement staffing. VUMC will continue to provide graduate medical education and training to Vanderbilt. The terms of these service agreements between Vanderbilt and VUMC are unique to each agreement.

20. SUBSEQUENT EVENTS

Vanderbilt evaluated events subsequent to June 30, 2023, through September 29, 2023, the date of issuance of the consolidated financial statements.

On August 4, 2023, Vanderbilt terminated the remaining \$25.0 million notional of the Lock described in Note 10. Vanderbilt received \$9.6 million in proceeds as a result of the termination.

Vanderbilt did not identify any other material subsequent events for recognition or disclosure.

Financial Responsibility Ratios

The Higher Education Act (HEA) allows for the establishment of ratios or other criteria for measuring whether an institution has sufficient financial responsibility. The current regulations establish a methodology based on three ratios that measure different aspects of financial health and are combined into a composite score to measure financial responsibility. All of the amounts appearing below agree to the similarly titled captions within our accompanying Consolidated Statement of Financial Position and Consolidated Statement of Activities, with the exception of net assets with donor restrictions: restricted in perpetuity, which agrees to the amount disclosed in Note 11 to the consolidated financial statements. The three ratios are as follows:

Primary Reserve Ratio Expendable Net Assets / Total Expenses Without Donor Restrictions and Losses Without Donor Restrictions

The *primary reserve ratio* is a reasonable measure of financial strength and a broad measure of liquidity. This ratio measures expendable resources within the context of operating size, and therefore provides a measure of relative wealth or wealth against commitments of the institution. Expendable net assets comprise unrestricted net assets controlled by Vanderbilt, net assets with donor restrictions on time and purpose, and net investment in plant. Expenses without donor restrictions and losses without donor restrictions from the Statement of Activities less any losses without donor restrictions on investments.

The following table presents Vanderbilt's primary reserve ratio calculation as of June 30, 2023 (in thousands):

Primary Reserve Ratio	2023	Calculation
Expendable net assets		
Net assets without donor restrictions, controlled by Vanderbilt	\$ 5,466,592	
Net assets with donor restrictions	4,233,544	
Less net assets with donor restrictions: restricted in perpetuity	(1,714,305)	
Less property, plant, and equipment, net	(1,817,056)	
Long-term debt	614,660	
Total expendable net assets		\$ 6,783,435
Total expenses without donor restrictions and losses without donor restrictions		
Total expenses	\$ 1,615,854	
Appreciation of endowment, net of distributions	366,394	
Nonoperating net asset reclassifications	248	
Total expenses without donor restrictions and losses without donor restrictions		\$ 1,982,496
Primary reserve ratio		3.42

Equity Ratio Modified Net Assets / Modified Assets

The *equity ratio* is a measure of an institution's ability to borrow and its capital resources. This ratio captures an institution's overall capitalization structure (resources) and by inference, its overall ability to borrow. This ratio provides insight into Vanderbilt's ability to access debt and capital in the marketplace. Modified net assets comprise total net assets excluding net assets related to noncontrolling interests. Modified assets excluding net assets excluding interests.

The following table presents Vanderbilt's equity ratio calculation as of June 30, 2023 (in thousands):

Equity Ratio	2023	Calculation
Modified net assets		
Total net assets	\$ 9,710,580	
Less net assets without donor restrictions, related to noncontrolling interests	(10,444)	
Total modified net assets		\$ 9,700,136
Modified Assets		
Total assets	\$ 13,181,123	
Less net assets without donor restrictions, related to noncontrolling interests	(10,444)	
Total modified assets		\$ 13,170,679
Equity ratio		0.74

Net Income Ratio Change in Net Assets Without Donor Restrictions / Total Revenue Without Donor Restrictions and Gains Without Donor Restrictions

The *net income ratio* provides a direct measure of an institution's profitability or ability to operate within its means. Profitability is one of the primary indicators of the underlying causes of a change in an institution's financial condition because of its direct effect on resources reflected in the Statement of Financial Position. This ratio provides insight into Vanderbilt's ability operate within its means in a given period. Change in net assets without donor restrictions comprise net results of operations. Total revenue without donor restrictions and gains without donor restrictions from the Statement of Activities.

The following table presents Vanderbilt's net income ratio calculation as of June 30, 2023 (in thousands):

Net Income Ratio	2023	Calculation
Change in net assets without donor restrictions		
Results of operations	\$ 175,958	
Total change in net assets without donor restrictions		\$ 175,958
Total unrestricted revenue without donor restrictions and gains without donor restrictions		
Total revenues without donor restrictions	\$ 1,791,812	
Appreciation of other investments, net of distributions	18,850	
Net assets released from restrictions for capital improvement	23,795	
Other nonoperating activity	31	
Total unrestricted revenue without donor restrictions and gains without donor restrictions		\$ 1,834,218
Net income ratio		0.10

Composite Score

The value of each of the ratios described above are then utilized to calculate a strength factor score for each using a defined algorithm. A weighted score is derived for each ratio by multiplying the strength factor score by its corresponding weighted percentage. The weighted scores are then added to arrive at the composite score. The calculation of Vanderbilt's composite score for financial responsibility as of June 30 was as follows:

2023	Calculation	Strength Factor	Weight	Composite
Primary Reserve Ratio	3.42	3.00	40%	1.20
Equity Ratio	0.74	3.00	40%	1.20
Net Income Ratio	0.10	3.00	20%	0.60
Total			100%	3.00

Part II – Schedule of Expenditures of Federal Awards

Assistance							Passed
Listing Cluster Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Through to Subrecipients
		Type	rass-fillough Grantor	Award Identifier		Expenditures	oublecipients
Research & Develop	ment Cluster US Department of Agriculture	Pass-Through	Research Corporation for Science Advancement	29013	Agricultural Research_Basic and Applied Research	17,362	
10.001	oo bepartment of Agriculture	1 ass-1110ugit		23013		17,362	
10.025	US Department of Agriculture	Pass-Through	TN Department of Agriculture	32505-01822	Plant and Animal Disease, Pest Control, and Animal Care	117,393	-
10.025	US Department of Agriculture	Pass-Through	TN Department of Agriculture	TBD	Plant and Animal Disease, Pest Control, and Animal Care	(20,766)	<u> </u>
						96,626	
	US Department of Agriculture US Department of Agriculture	Direct Pass-Through	Texas A & M University	2019-67021-29857 M1902795	Agriculture and Food Research Initiative (AFRI) Agriculture and Food Research Initiative (AFRI)	24,974 (24)	
	US Department of Agriculture	Pass-Through	University of Kentucky	3200004065-21-348	Agriculture and Food Research Initiative (AFRI)	106,844	
						131,793	-
	US Department of Commerce	Direct		70NAB21H164	Measurement and Engineering Research and Standards	92,136	-
11.609 11.609	US Department of Commerce	Direct Direct		70NANB20H020 70NANB22H181	Measurement and Engineering Research and Standards Measurement and Engineering Research and Standards	42,133 40,658	
	US Department of Commerce	Direct		70NANB22H181	Measurement and Engineering Research and Standards	120,288	
						295,215	
	Boeing Company	Direct		1527371	Department of Defense	219,201	-
	Defense Advanced Research Projects Agency Defense Advanced Research Projects Agency	Direct Direct		HR00112190135 HR00112290115	Department of Defense Department of Defense	591,648 149,094	331,088
	Defense Advanced Research Projects Agency	Direct		UNIV 61741	Department of Defense	51.787	-
12.RD	Defense Advanced Research Projects Agency	Pass-Through	SRI International Corporation	62392	Department of Defense	63,088	
12.RD	Defense Advanced Research Projects Agency	Pass-Through	SRI International Corporation	P030123_HR001118C0015	Department of Defense	(2,124)	-
	Defense Threat Reduction Agency Missile Defense Agency	Pass-Through Pass-Through	Penn State University Alphacore, Inc.	S003344-DTRA ISA00000060	Department of Defense Department of Defense	249,857 320	
	Missile Defense Agency	Pass-Through	Creare LLC	HQ014719C7158_S685_104352	Department of Defense	18,167	-
	National Defense Education Program	Pass-Through	Logistics Management Institute	2021-23372	Department of Defense	40,608	-
12.RD 12.RD	National Reconnaissance Office National Security Agency	Direct Direct		NRO000-20-C-0174 H98230-18-D-0010	Department of Defense Department of Defense	184,797 704,242	- 328,723
	National Security Agency	Direct		H98230-18-D-0010 Del Order #5	Department of Defense	190.728	190.728
12.RD	National Security Agency	Direct		H98230-18-D-0010 Del Order 6	Department of Defense	43,057	-
12.RD 12.RD	National Security Agency US Department of Air Force	Direct Direct		H98230-18-D-0010 Del Order 7 FA8750-20-C-0537	Department of Defense Department of Defense	173,251 1,923,843	- 352,007
	US Department of Air Force	Pass-Through	Alion Science & Technology	SUB1262315	Department of Defense	591,742	352,007
12.RD	US Department of Air Force	Pass-Through	Defense Advanced Research Projects Agency	FA8750-18-C-0089_HR0011832306	Department of Defense	1,508,689	
	US Department of Air Force	Pass-Through	Georgia Tech Research Institute	D9104-S21	Department of Defense	4,455	-
	US Department of Air Force US Department of Air Force	Pass-Through Pass-Through	KBR, Inc. Massachusetts Institute of Technology	LX08000066 FA8702-15-D-0001_7000437184	Department of Defense Department of Defense	228,304 25,704	
	US Department of Air Force	Pass-Through	RAEKOR	ISA00000049	Department of Defense	98,796	-
	US Department of Air Force	Pass-Through	Ragnarok Industries	2020-002	Department of Defense	23,252	-
	US Department of Air Force US Department of Air Force	Pass-Through Pass-Through	Securboration, Inc. Southwest Research Institute	FA8750-23-C-1007 P99023N	Department of Defense Department of Defense	9,441 190,319	-
	US Department of Air Force	Pass-Through	TallannQuest LLC dba Apogee Semiconductor	ISA00000297	Department of Defense	13,058	
	US Department of Air Force	Pass-Through	TallannQuest LLC dba Apogee Semiconductor	SBIR 19.1 TOPIC AF191-074	Department of Defense	8,675	-
	US Department of Army US Department of Army	Direct Direct		W52P1J1993008 W81XWH-20-2-0064	Department of Defense Department of Defense	2,796 439,253	- 60,970
12.RD	US Department of Army	Direct		W9132T23C0002	Department of Defense	439,233	
12.RD	US Department of Army	Pass-Through	CFD Research Corporation	2252	Department of Defense	61,000	-
	US Department of Army US Department of Army	Pass-Through Pass-Through	Civil-Military Innovation Institute Civil-Military Innovation Institute	2021-ARL-TRACA-PP-VANCMIIDY-00 2021-ARL-TRACA-PP-Vandy-001	Department of Defense Department of Defense	258,108 242,885	- 63,497
	US Department of Army	Pass-Through Pass-Through	Civil-Military Innovation Institute	2021-ARL-TRACA-PP-Vandy-001 2022-ARL-TRACA-PP-VANDY-001	Department of Defense	242,885	63,497
12.RD	US Department of Army	Pass-Through	Kent Optronics, Inc.	W911NF22P0019	Department of Defense	73,815	
	US Department of Army	Pass-Through	Purdue University QinetiQ Inc.	W52P1J2093009 60259	Department of Defense Department of Defense	417,313 423	-
	US Department of Army US Department of Army	Pass-Through Pass-Through	QinetiQ Inc. Texas Tech University	60259 21C003-01	Department of Defense Department of Defense	423 83,994	
12.RD	US Department of Army	Pass-Through	Third Floor Materials, Inc	ISA00000151	Department of Defense	79,163	
	US Department of Army US Department of Army	Pass-Through	Triton Systems, Inc	TSI-5037-21-20206974 S-001580	Department of Defense Department of Defense	80,343 37,405	-
	US Department of Army US Department of Army	Pass-Through Pass-Through	University of California Riverside VUMC	S-001580 VUMC111625	Department of Defense	37,405	
12.RD	US Department of Army	Pass-Through	VUMC	VUMC6338	Department of Defense	(75)	-
	US Department of Navy	Direct		B7A12568	Department of Defense	16,453	-
	US Department of Navy US Department of Navy	Direct Pass-Through	CFD Research Corporation	N66001-21-C-4021 2880	Department of Defense Department of Defense	1,066,689 57,000	500,596
	US Department of Navy	Pass-Through	Defense Advanced Research Projects Agency	N66001-18-C-4005	Department of Defense	116,090	80,528
12.RD	US Department of Navy	Pass-Through	Precise Systems, Inc	N00178-14-D-7875-M808	Department of Defense	812,857	
12.RD 12.RD	US Department of Navy US Department of Navy	Pass-Through Pass-Through	Texas Tech University The Collaborative Composite Solutions Corp.	21C045-01 020-900-002-06	Department of Defense Department of Defense	26,625 150,231	-
	US Department of Navy	Pass-Through	Triton Systems, Inc	TSI-5068-22-20209039	Department of Defense	46,108	-
	US Department of Navy	Pass-Through	University of Michigan	SUBK00017454	Department of Defense	114,718	<u> </u>
						11,781,079	1,908,138
12.225	US Department of Army	Pass-Through	PPG Industries, Inc.	2021016-142060	Commercial Technologies for Maintenance Activities Program	77,014	
						77,014	<u> </u>
	US Department of Navy	Direct		N00014-18-1-2964	Basic and Applied Scientific Research	(629)	-
	US Department of Navy US Department of Navy	Direct Direct		N00014-20-1-2719 N00014-21-1-2468	Basic and Applied Scientific Research Basic and Applied Scientific Research	115,717 279,209	108,701

	Assistance Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
Cluster	Number	Cluster Title/Federal Grantor/Program	туре	Pass- I nrough Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	12.300	US Department of Navy	Direct		N00014-21-1-2583	Basic and Applied Scientific Research	334,304	163,539
	12.300	US Department of Navy	Direct		N00014-22-1-2035	Basic and Applied Scientific Research	235,401	40,535
	12.300	US Department of Navy	Direct		N00014-22-1-2565	Basic and Applied Scientific Research	115,302	66,895
	12.300	US Department of Navy	Direct		N00014-23-1-2567	Basic and Applied Scientific Research	1,850	-
	12.300	US Department of Navy	Direct		N00173-19-1-G020	Basic and Applied Scientific Research	91,858	-
		US Department of Navy	Direct		N00173-22-1-G006	Basic and Applied Scientific Research	109,698	-
	12.300	US Department of Navy	Direct		N001742010013	Basic and Applied Scientific Research	164,622	-
	12.300	US Department of Navy	Pass-Through	Penn State University	N00014-19-1-2540 S000047-ONR	Basic and Applied Scientific Research	79,221	-
	12.300	US Department of Navy	Pass-Through	Precise Systems, Inc	N00178-14-D-7875-M807	Basic and Applied Scientific Research	508,610	<u> </u>
							2,035,163	379,670
	12.351	Defense Threat Reduction Agency	Direct		HDTRA1-17-1-0003	Scientific Research - Combating Weapons of Mass Destruction	107,111	8,247
	12.351	Defense Threat Reduction Agency	Direct		HDTRA11810002	Scientific Research - Combating Weapons of Mass Destruction	4,337	4,337
							111,449	12,584
	12.420	US Department of Air Force	Pass-Through	VUMC	VUMC61516/W81XWH-17-	Military Medical Research and Development	(2,255)	
	12.420	US Department of Army	Direct	VUNC	HT94252310064	Military Medical Research and Development	(2,255)	
	12.420	US Department of Army	Direct		W81XWH-18-1-0412	Military Medical Research and Development	2,325	
	12.420	US Department of Army	Direct		W81XWH-15-1-0438	Military Medical Research and Development	(4,333)	
	12.420	US Department of Army	Direct		W81XWH-17-1-0266	Military Medical Research and Development	(123)	
	12.420	US Department of Army	Direct		W81XWH-18-1-0234	Military Medical Research and Development	(365)	
	12.420	US Department of Army	Direct		W81XWH-18-1-0391	Military Medical Research and Development	10,695	
	12.420	US Department of Army	Direct		W81XWH-19-1-0089	Military Medical Research and Development	35,005	
	12.420	US Department of Army	Direct		W81XWH-19-1-0136	Military Medical Research and Development	6.455	
	12.420	US Department of Army	Direct		W81XWH-19-1-0355	Military Medical Research and Development	1,570,461	
	12,420	US Department of Army	Direct		W81XWH-20-1-0522	Military Medical Research and Development	72.804	10,146
	12,420	US Department of Army	Direct		W81XWH2010624	Military Medical Research and Development	188.258	
	12.420	US Department of Army	Direct		W81XWH2010938	Military Medical Research and Development	58,519	
	12,420	US Department of Army	Direct		W81XWH2110162	Military Medical Research and Development	113,313	
	12.420	US Department of Army	Direct		W81XWH2210308	Military Medical Research and Development	113,658	18,240
	12.420	US Department of Army	Direct		W81XWH2210661	Military Medical Research and Development	13,929	
	12.420	US Department of Army	Direct		W81XWH2211086	Military Medical Research and Development	145,482	
	12.420	US Department of Army	Direct		W81XWH2211121	Military Medical Research and Development	103,186	48,552
	12.420	US Department of Army	Direct		W81XWH2211122	Military Medical Research and Development	150,264	8,176
	12.420	US Department of Army	Direct		W912HQ20C0040	Military Medical Research and Development	748,381	465,290
	12.420	US Department of Army	Pass-Through	University of Michigan	n/a	Military Medical Research and Development	1,533	
	12.420	US Department of Army	Pass-Through	University of North Dakota	UND0026273-S1	Military Medical Research and Development	37,624	
	12.420	US Department of Army	Pass-Through	VUMC	112882	Military Medical Research and Development	7,961	-
	12.420	US Department of Army	Pass-Through	VUMC	VUMC 94472	Military Medical Research and Development	20,352	-
	12.420	US Department of Army	Pass-Through	VUMC	VUMC109713	Military Medical Research and Development	4,401	
	12.420	US Department of Army	Pass-Through	VUMC	VUMC66642	Military Medical Research and Development	100,762	<u> </u>
							3,544,242	550,405
	12.431	Defense Advanced Research Projects Agency	Direct		W911NF-14-2-0022	Basic Scientific Research	(56,890)	
	12.431	US Department of Army	Direct		W911NF-21-1-0161	Basic Scientific Research	140.108	
	12.431	US Department of Army	Direct		W911NF-23-1-0026	Basic Scientific Research	67.693	
	12.431	US Department of Army	Direct		W912CG2220001	Basic Scientific Research	247,728	
	12.431	US Department of Army	Pass-Through	Penn State University	S001715-USARL	Basic Scientific Research	81,992	
		. ,	÷				480.630	
	12.750	Uniformed Services University	Pass-Through	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc	5723	Uniformed Services University Medical Research Projects	2,711	
	12.750	Uniformed Services University	Pass-Through	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc	5871	Uniformed Services University Medical Research Projects	311,502	
	12.750	Uniformed Services University	Pass-Through	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc	65640_HU0001-18-2-0032	Uniformed Services University Medical Research Projects	(1,495)	
	12.750	Of indiffied dervices of inversity	r ass-rinough	Henry W. Sackson Foundation for the Advancement of Willitary Wedicine, inc	03040_1100001-10-2-0032		312.718	
								<u> </u>
		US Department of Air Force	Direct		FA8650-19-2-2214	Air Force Defense Research Sciences Program	114,839	-
	12.800	US Department of Air Force	Direct		FA88650-20-2-7018	Air Force Defense Research Sciences Program	293,021	-
	12.800	US Department of Air Force	Direct		FA9550-17-1-0046	Air Force Defense Research Sciences Program	60,385	
	12.800	US Department of Air Force	Direct		FA9550-20-1-0225	Air Force Defense Research Sciences Program	216,881	
	12.800	US Department of Air Force	Direct		FA9550-22-1-0012	Air Force Defense Research Sciences Program	1,158,873	339,758
	12.800	US Department of Air Force	Direct		FA9550-22-1-0019	Air Force Defense Research Sciences Program	72,367	-
	12.800	US Department of Air Force	Direct		FA9550-22-1-0471	Air Force Defense Research Sciences Program	490,690	
	12.800	US Department of Air Force	Direct		FA9550-23-1-0135	Air Force Defense Research Sciences Program	32,562	<u> </u>
							2,439,617	339,758
	12.901	National Security Agency	Direct		H98230-20-1-0022	Mathematical Sciences Grants Program	5,715	
							5,715	
	12.910	Defense Advanced Research Projects Agency	Direct		HR00112120011	Research and Technology Development	340,744	43,984
	12.910	Defense Advanced Research Projects Agency	Pass-Through	Loughborough University	HR00112120011 HR00112190132	Research and Technology Development	261.594	43,904
	12.910	US Department of Air Force	Pass-Through Pass-Through	Defense Advanced Research Projects Agency	FA8750-23-C-0518	Research and Technology Development Research and Technology Development	201,594 21,956	
	. 2.010		. add rinodyll					40.001
							624,294	43,984
	14.218	US Department of Housing and Urban Development	Pass-Through	Abt Associates, Inc.	53137	Community Development Block Grants/Entitlement Grants	9,495	<u> </u>
							9,495	-
	15.509	National Science Foundation	Pass-Through	University of Oregon	2007W0C	Title II, Colorado River Basin Salinity Control	52,992	
	13.309		. aaa- miluuyn	Chinesiony of Oregon	20071100		52,992	<u> </u>
								<u> </u>
	15.926	US Department of Interior	Direct		P21AP11015-00	American Battlefield Protection	60,538	2,499
							60,538	2,499

Cluster	Assistance Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
	16.560	US Department of Justice	Direct		2016-CK-BK-K002	National Institute of Justice Research, Evaluation, and Development Project Grants	745,236	547,596 547,596
	19.010	US Department of State	Pass-Through	Institute of International Education, Inc.	3000228613	Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	817	347,330
		US Department of State	Pass-Through Pass-Through	Institute of International Education, Inc.	3000228813 3000258868	Academic Exchange Programs - Hubert H. Humphrey Fellowship Program Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	249,052	
	10.010	oo boparanon or olato	r doo milougn	nondo of monutorial Education, no.	0000200000	Addenie Exerailige Fregrame Frederich Hampiney Felleweine Fregram	249,869	
		10.0			00000000000000000		249,009	<u> </u>
	19.040 19.040	US Department of State	Direct Direct		SCO20021GR3075 SCU04023GR0005	Public Diplomacy Programs Public Diplomacy Programs	1 32.500	-
	19.040	US Department of State	Direct		STU15022GR0038	Public Diplomacy Programs Public Diplomacy Programs	32,500	
	13.040	oo bepartment of otate	Direct		51015022610050	r doic Diplomacy r rograms	37,639	
								<u> </u>
	19.600	US Department of State	Pass-Through	American University of Iraq Baghdad	AUIB-DOS-001-2022	Bureau of Near Eastern Affairs	393,128	<u> </u>
							393,128	
	20.RD	US Department of Transportation	Pass-Through	University of Memphis	A23-0060-S002	Department of Transportation	4,359	<u> </u>
							4,359	
	20.215	US Department of Transportation	Direct		693JJ32245006	Highway Training and Education	2,680	
	20.215	US Department of Transportation	Direct		693JJ32245073	Highway Training and Education	2,333	
	20.215	US Department of Transportation	Direct		693JJ32345010	Highway Training and Education	16,563	
	20.215	US Department of Transportation	Direct		693JJ32145022	Highway Training and Education	3,264	-
	20.215	US Department of Transportation	Direct		693JJ32345023	Highway Training and Education	7,871	
	20.215	US Department of Transportation	Direct		693JJ32345026	Highway Training and Education	3,545	-
	20.215	US Department of Transportation	Direct		693JJ32345054	Highway Training and Education	4,018	<u> </u>
							40,274	<u> </u>
	20.530	US Department of Transportation	Pass-Through	Metropolitan Government of Nashville and Davidison County, Tennessee	TN-2021-015-00	Public Transportation Innovation	80,079	<u> </u>
							80,079	
	20.616	US Department of Transportation	Pass-Through	Tennessee Department of Safety & Homeland Security	Z23THS340	National Priority Safety Programs	11,421	
				· · · · · · · · · · · · · · · · · · ·			11.421	
		100						
	20.724	US Department of Transportation	Pass-Through	University of Nebraska Lincoln	25-1120-0020-002	Pipeline Safety Research Competitive Academic Agreement Program (CAAP)	16,243	<u> </u>
							16,243	
	20.820	US Department of Transportation	Pass-Through	University of Arkansas	69A3551747130 ARKANS	Maritime Studies and Innovations	233,259	-
							233,259	
	43.RD	NASA Goddard Space Flight Center	Pass-Through	Metrolaser, Inc.	METROLASER	National Aeronautics and Space Administration	(221)	
	43.RD	NASA Glenn Space Flight Center	Pass-Through	Space Telescope Science Institute	HST-GO-16765.001-A	National Aeronautics and Space Administration	60,053	
	43.RD	NASA Goddard Space Flight Center	Pass-Through	Alphacore, Inc	UNIV62044	National Aeronautics and Space Administration	132,011	-
	43.RD	NASA Goddard Space Flight Center	Pass-Through	CFD Research Corporation	20200741	National Aeronautics and Space Administration	16,301	-
	43.RD 43.RD	NASA Goddard Space Flight Center	Pass-Through	CFD Research Corporation	9269/NNX17CG10C	National Aeronautics and Space Administration	5,988 6.508	-
	43.RD 43.RD	NASA Goddard Space Flight Center NASA Shared Services Center	Pass-Through Pass-Through	Space Telescope Science Institute Kyma Technologies	HST-GO-16483.003-A	National Aeronautics and Space Administration National Aeronautics and Space Administration	6,508	
	43.KD	NASA Shaled Services Center	Fass-mough	Kyma reciniologies		National Aeronautics and Space Administration	238.640	<u> </u>
								<u> </u>
	43.001	NASA Glenn Space Flight Center	Direct		80NSSC23K0458	Science	36,728	-
	43.001 43.001	NASA Goddard Space Flight Center NASA Goddard Space Flight Center	Direct Direct		80NSSC18K0523 80NSSC18K1297	Science Science	86,096 35,222	-
	43.001	NASA Goddard Space Flight Center	Direct		80NSSC20K0447	Science	57,114	
	43.001	NASA Goddard Space Flight Center	Direct		80NSSC20K1450	Science	197,596	
	43.001	NASA Goddard Space Flight Center	Direct		80NSSC21K1003	Science	115,189	78,881
	43.001	NASA Goddard Space Flight Center	Direct		80NSSC21K1029	Science	888,526	401,731
	43.001	NASA Goddard Space Flight Center	Direct		80NSSC22K0748	Science	115,186	29,390
	43.001	NASA Goddard Space Flight Center	Direct		80NSSC23K0512	Science	97,486	-
	43.001 43.001	NASA Goddard Space Flight Center NASA Goddard Space Flight Center	Direct Pass-Through	University of Toledo	NNX17AJ09G GODDARD F-2021-50	Science Science	147,869 5,719	-
	43.001	NASA Goddard Space Flight Center	Fass-mough	University of Toledo	F=2021=50	Science	1,782,730	510,001
								510,001
	43.002	NASA Goddard Space Flight Center	Pass-Through	Arizona State University	17-265	Aeronautics	51,914	-
	43.002	NASA Langley Research Center	Pass-Through	George Washington University	21-S06	Aeronautics	314,324	<u> </u>
							366,238	<u> </u>
	43.003	NASA Goddard Space Flight Center	Direct		80NSSC20K1466	Exploration	50,193	<u> </u>
							50,193	<u> </u>
	43.008	NASA Langley Research Center	Direct		80NSSC20M0126	Education	694,419	336,317
	43.008	NASA Langley Research Center	Pass-Through	National Institute of Aerospace	C20-202035-VU	Education	1,807	
							696,226	336,317
	43.009	NASA Goddard Space Flight Center	Direct		80NSSC20K0424	Cross Agency Support	250,056	
	-10.000	The could be a set of the content	Billoc		0010002010424	cross rigerity explore	250,056	
	10.010							<u> </u>
	43.012 43.012	NASA Armstrong Flight Research Center	Direct Direct		80NSSC20K0108 80NSSC18K1165	Space Technology	3,606	
	43.012	NASA Goddard Space Flight Center NASA Goddard Space Flight Center	Direct		80NSSC18K1165 80NSSC20K0294	Space Technology Space Technology	(3,889) 140,095	
	43.012	NASA Goddard Space Flight Center	Direct		80NSSC20K0294 80NSSC21K0766	Space Technology Space Technology	835,084	377,317
	43.012	NASA Goddard Space Flight Center	Direct		80NSSC22K1201	Space Technology	58,165	-
						· ••	1,033,062	377,317
	45.024	National Endowment for the Arts	Direct		1863330-38-20	Promotion of the Arts_Grants to Organizations and Individuals	430	
		National Endowment for the Arts	Direct		1891792-38-22	Promotion of the Arts_Grants to Organizations and Individuals Promotion of the Arts_Grants to Organizations and Individuals	430 8,464	
							8,894	
							0,004	

Cluster	Assistance Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
	45.160 45.160	National Endowment for the Humanities National Endowment for the Humanities	Direct Direct		FEL-273525-21 FEL-282430-22	Promotion of the Humanities_Fellowships and Stipends Promotion of the Humanities_Fellowships and Stipends	2,499 6,251	
	45.162 45.162 45.162 45.162	National Endowment for the Humanities National Endowment for the Humanities National Endowment for the Humanities National Endowment for the Humanities	Direct Direct Direct Pass-Through	The Teagle Foundation	AKA-270097-20 AKB-270212-20 ZED-283644-22 2005505	Promotion of the Humanities_Teaching and Learning Resources and Curriculum Development Promotion of the Humanities_Teaching and Learning Resources and Curriculum Development Promotion of the Humanities_Teaching and Learning Resources and Curriculum Development Promotion of the Humanities_Teaching and Learning Resources and Curriculum Development	8,750 10,876 37,734 369,394 24,992 442,996	· · · · · · · · · · · · · · · · · · ·
	45.169 45.169 45.169 45.169 45.169	National Endowment for the Humanities National Endowment for the Humanities National Endowment for the Humanities National Endowment for the Humanities National Endowment for the Humanities	Direct Direct Direct Direct Direct		DR-290440-23 HAA-280775-21 HAA-284842-22 HAA-287475-22 HT-281157-21	Promotion of the Humanities_Office of Digital Humanities Promotion of the Humanities_Office of Digital Humanities	5,464 61,595 11,555 88,811 121,111 288,535	2,499 - - 56,328
	45.312	Institute of Museum Services	Pass-Through	Nashville Public Library Foundation	NAZA/NPL	National Leadership Grants	303	<u> </u>
	47.RD 47.RD 47.RD 47.RD 47.RD 47.RD 47.RD	American Educational Research Association National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through	American Educational Research Association American Educational Research Association American Sociological Association National Science Foundation	AERA Dissertation Grant IOS14040803 OIA2246337 NSF-DRL #1749275 1755530	National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation	(2,500) 36,269 92,800 55,040 20,216 2,700 17,509 222,035	
	47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct		2115392 2123722 2124002 2129083	Engineering Grants Engineering Grants Engineering Grants	79,521 77,024 177,324 47,312	50,248 - 114,016 15,019
	47.041 47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct Direct		2151392 2151571 2152450 2152928 2217621	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	23,527 87,242 73,572 180,031 636,595	- - 59,739 -
	47.041 47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct Direct		2222404 2237639 2239361 CBET1554623 CBET1554623	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	30,742 52,588 56,648 198,462 (1,595)	-
	47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct		CBET1805126 CBET1828299 CBET1903685 CBET1921320	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	83,974 321,231 85,608 111,492	-
	47.041 47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct Direct		CBET1944134 CBET2017998 CBET2033800 CBET2035085 CBET2052438	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	25,745 114,168 308,099 95,213 190,256	-
	47.041 47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct		CBET2114278 CMMI1734461 CMMI1846860 CMMI1903645	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	61,772 87,001 45,106 75,173	-
	47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct Direct		CMMI1944559 CMMI2029181 CMMI2050255 ECCS2028001 ECCS2037673	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	24,943 85,710 64,013 60,281 82,834	-
	47.041 47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct Direct		ECCS2143836 EEC1642895 EEC1916534 EEC1933109 EECS1809937	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	132,868 39,433 132,830 62,111 3,215	-
	47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct Direct		EECS1810088 EFMA1935278 IIP1735762 IIP2011066	Engineering Grants Engineering Grants Engineering Grants	31,987 418,915 211,100 6,744	187,434 -
	47.041 47.041 47.041 47.041	National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Pass-Through Pass-Through	Cornell University University of Maryland College Park	IIP2040558 IIP2114784 136009-20811 103696-Z3794205	Engineering Grants Engineering Grants Engineering Grants Engineering Grants	12,039 12,860 42,195 133,976	-
	47.041	National Science Foundation	Pass-Through	University of Utah	10061242-01-VAND	Engineering Grants	73,473 4,955,358	426,456

	Assistance							Passed
	Listing						Federal	Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	47.049	National Science Foundation	Direct		2104300	Mathematical and Physical Sciences	67.162	
	47.049	National Science Foundation	Direct		2111554	Mathematical and Physical Sciences	409,239	
	47.049	National Science Foundation	Direct		2119575	Mathematical and Physical Sciences	369,798	-
	47.049	National Science Foundation	Direct		2128240	Mathematical and Physical Sciences	136,062	
	47.049	National Science Foundation	Direct		2146016	Mathematical and Physical Sciences	18,577	-
	47.049	National Science Foundation	Direct		2149863	Mathematical and Physical Sciences	56,367	-
	47.049		Direct		2155144	Mathematical and Physical Sciences	156,247	
	47.049	National Science Foundation	Direct		2205719	Mathematical and Physical Sciences	11,438	
	47.049	National Science Foundation	Direct		2208030	Mathematical and Physical Sciences	108,036	-
	47.049	National Science Foundation	Direct		2210471	Mathematical and Physical Sciences	104,489	-
	47.049 47.049	National Science Foundation National Science Foundation	Direct Direct		2217759 2221646	Mathematical and Physical Sciences Mathematical and Physical Sciences	25,706 36,325	-
	47.049	National Science Foundation	Direct		2221646	Mathematical and Physical Sciences Mathematical and Physical Sciences	36,325	
	47.049	National Science Foundation	Direct		2230336	Mathematical and Physical Sciences	20.143	
	47.049	National Science Foundation	Direct		2244050	Mathematical and Physical Sciences	10.673	
	47.049		Direct		2245564	Mathematical and Physical Sciences	32,033	
	47.049	National Science Foundation	Direct		2305161	Mathematical and Physical Sciences	4,123	
	47.049	National Science Foundation	Direct		2314578	Mathematical and Physical Sciences	9,637	-
	47.049	National Science Foundation	Direct		AST1909631	Mathematical and Physical Sciences	27,870	-
	47.049	National Science Foundation	Direct		AST2007993	Mathematical and Physical Sciences	196,331	
	47.049	National Science Foundation	Direct		CHE1665327	Mathematical and Physical Sciences	(201)	
	47.049	National Science Foundation	Direct		CHE1847804	Mathematical and Physical Sciences	179,690	
	47.049	National Science Foundation	Direct		CHE1847813	Mathematical and Physical Sciences	75,910	
	47.049	National Science Foundation	Direct		CHE1905265	Mathematical and Physical Sciences	(1,569)	
	47.049	National Science Foundation	Direct		CHE200310	Mathematical and Physical Sciences	55,913	
	47.049	National Science Foundation	Direct		CHE2051011	Mathematical and Physical Sciences	140,059	
	47.049	National Science Foundation	Direct		DME2052849	Mathematical and Physical Sciences	33,330	-
	47.049	National Science Foundation	Direct		DMR1349604	Mathematical and Physical Sciences	(45,840)	-
	47.049	National Science Foundation	Direct		DMR1852157	Mathematical and Physical Sciences	138,292	-
	47.049	National Science Foundation	Direct		DMR1904793	Mathematical and Physical Sciences	3,811	-
	47.049		Direct		DMS 1914537	Mathematical and Physical Sciences	(2,220)	
	47.049	National Science Foundation	Direct		DMS1710534	Mathematical and Physical Sciences	898	-
	47.049	National Science Foundation	Direct		DMS1710970	Mathematical and Physical Sciences	21,712	-
	47.049	National Science Foundation	Direct		DMS1812601	Mathematical and Physical Sciences	4,886	-
	47.049	National Science Foundation	Direct		DMS1853989	Mathematical and Physical Sciences	181,868	-
	47.049	National Science Foundation	Direct		DMS1951393	Mathematical and Physical Sciences	3,954	-
	47.049	National Science Foundation	Direct		DMS2000214	Mathematical and Physical Sciences	30,232	-
	47.049	National Science Foundation	Direct		DMS2002974	Mathematical and Physical Sciences	(283)	-
	47.049 47.049	National Science Foundation	Direct Direct		DMS2005368 DMS2054184	Mathematical and Physical Sciences	40,550	
	47.049					Mathematical and Physical Sciences	71,031 54,593	
	47.049	National Science Foundation National Science Foundation	Direct Direct		DMS2107701 PHY1852158	Mathematical and Physical Sciences Mathematical and Physical Sciences	54,593 75.884	-
	47.049 47.049	National Science Foundation National Science Foundation	Direct		PHY1852158 PHY1945366	Mathematical and Physical Sciences Mathematical and Physical Sciences	75,884 51,306	-
	47.049	National Science Foundation	Pass-Through	Cornell University	79433-20671	Mathematical and Physical Sciences Mathematical and Physical Sciences	51,306	
	47.049		Pass-Through	Florida International University	800004776-058UG	Mathematical and Physical Sciences	53.720	
	47.049	National Science Foundation	Pass-Through	Oregon State University	S2270B-Q	Mathematical and Physical Sciences	108.643	
	47.049	National Science Foundation	Pass-Through	University of Nebraska Lincoln	25-0521-0244-019	Mathematical and Physical Sciences	21,938	
	47.049	National Science Foundation	Pass-Through	University of Notre Dame	QUARKNET 2020	Mathematical and Physical Sciences	4,727	
	47.040		r doo milougii				3,142,269	
								<u> </u>
	47.050	National Science Foundation	Direct		2102884	Geosciences	60,927	
	47.050	National Science Foundation	Direct		2202883	Geosciences	358	
	47.050	National Science Foundation	Direct		2221906	Geosciences	92,241	
	47.050	National Science Foundation	Direct		2232215	Geosciences	111,117	
	47.050	National Science Foundation	Direct		AGS1554998	Geosciences	235,208	
	47.050	National Science Foundation	Direct		EAR1735992	Geosciences	76,577	
	47.050 47.050	National Science Foundation National Science Foundation	Direct Direct		EAR1757545 EAR1830122	Geosciences	23,015 61,328	
	47.050 47.050	National Science Foundation National Science Foundation	Direct		EAR1830122 EAR1830172	Geosciences	61,328 119,244	58,612
	47.050	National Science Foundation National Science Foundation	Direct		EAR1830172 EAR2007928	Geosciences	119,244 141.264	38,012
	47.050	National Science Foundation	Direct		FAIN 1455198	Geosciences	8,115	
	47.050	National Science Foundation	Direct		ICER1801362	Geosciences	6,245	
	47.050	National Science Foundation	Direct		ICER 1901302	Geosciences	95,243	
	47.050	National Science Foundation	Direct		OCE1600319	Geosciences	(272)	
	47.050	National Science Foundation	Direct		OPP1842542	Geosciences	131,131	
	47.050	National Science Foundation	Direct		OPP1847173	Geosciences	41,356	
	47.050	National Science Foundation	Direct		PLR1445169	Geosciences	16.838	
							1,219,934	58,612
								20,012
	47.070	National Science Foundation	Direct		2106717	Computer and Information Science and Engineering	73,333	
	47.070		Direct		2122640	Computer and Information Science and Engineering	124,601	
	47.070	National Science Foundation	Direct		2127748	Computer and Information Science and Engineering	192,812	
	47.070	National Science Foundation	Direct		2135309	Computer and Information Science and Engineering	146,326	72,596
	47.070	National Science Foundation	Direct		2135579	Computer and Information Science and Engineering	260,002	106,555
	47.070	National Science Foundation	Direct		2144551	Computer and Information Science and Engineering	139,395	
	47.070	National Science Foundation	Direct		2151500	Computer and Information Science and Engineering	458,549	
	47.070 47.070	National Science Foundation National Science Foundation	Direct		2153232 2207891	Computer and Information Science and Engineering	90,579 159,327	
	47.070	National Science Foundation	Direct		2201031	Computer and Information Science and Engineering	159,327	

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	isting						Federal	Through to
Cluster No	umber	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
		National Science Foundation National Science Foundation	Direct		2208670 2211429	Computer and Information Science and Engineering	197,359 52.448	-
		National Science Foundation	Direct Direct		2220401	Computer and Information Science and Engineering Computer and Information Science and Engineering	52,448 46.406	
		National Science Foundation	Direct		2220401 2220426	Computer and Information Science and Engineering Computer and Information Science and Engineering	46,406	
		National Science Foundation	Direct		2225890	Computer and Information Science and Engineering	96.356	44,561
		National Science Foundation	Direct		2226971	Computer and Information Science and Engineering	71.308	44,501
		National Science Foundation	Direct		2228183	Computer and Information Science and Engineering	199,038	
		National Science Foundation	Direct		2228370	Computer and Information Science and Engineering	41,956	10,103
		National Science Foundation	Direct		2228864	Computer and Information Science and Engineering	421,551	10,100
		National Science Foundation	Direct		2231543	Computer and Information Science and Engineering	25,498	
		National Science Foundation	Direct		2238815	Computer and Information Science and Engineering	31,791	
		National Science Foundation	Direct		2243161	Computer and Information Science and Engineering	225,635	
		National Science Foundation	Direct		2312033	Computer and Information Science and Engineering	74,597	
		National Science Foundation	Direct		CCF1910017	Computer and Information Science and Engineering	90,698	-
		National Science Foundation	Direct		CNS1521617	Computer and Information Science and Engineering	142,433	43,705
4		National Science Foundation	Direct		CNS1818901	Computer and Information Science and Engineering	15,285	
4	7.070	National Science Foundation	Direct		CNS1837652	Computer and Information Science and Engineering	130,935	
		National Science Foundation	Direct		CNS1840052	Computer and Information Science and Engineering	33,333	
		National Science Foundation	Direct		CNS1923487	Computer and Information Science and Engineering	27,491	
4		National Science Foundation	Direct		CNS1931931	Computer and Information Science and Engineering	158.810	
4		National Science Foundation	Direct		CNS1933335	Computer and Information Science and Engineering	255,929	
		National Science Foundation	Direct		CNS1952011	Computer and Information Science and Engineering	653,355	396,913
		National Science Foundation	Direct		CNS1952029	Computer and Information Science and Engineering	516	
		National Science Foundation	Direct		CNS2052742	Computer and Information Science and Engineering	96,977	
		National Science Foundation	Direct		IIS1750994	Computer and Information Science and Engineering	57,477	
		National Science Foundation	Direct		IIS1763966	Computer and Information Science and Engineering	140,580	
		National Science Foundation	Direct		IIS1814958	Computer and Information Science and Engineering	614	
		National Science Foundation	Direct		IIS1940069	Computer and Information Science and Engineering	17,073	
		National Science Foundation	Direct		IIS2006616	Computer and Information Science and Engineering	9,947	
		National Science Foundation	Direct		IIS2007444	Computer and Information Science and Engineering	101.465	
		National Science Foundation	Direct		IIS201700	Computer and Information Science and Engineering	291,335	
		National Science Foundation	Direct		OAC 1835874	Computer and Information Science and Engineering	(16,480)	
		National Science Foundation	Pass-Through	Berry College	SUB61076-00	Computer and Information Science and Engineering	27,234	
		National Science Foundation	Pass-Through	Florida International University	321	Computer and Information Science and Engineering	55,185	
		National Science Foundation	Pass-Through	Georgia Institute of Technology	AWD-004128-G2	Computer and Information Science and Engineering	75.294	
	7.070	National Science Foundation	Pass-Through	University of California, Santa Cruz	A22-0123-S004	Computer and Information Science and Engineering	10,405	
		National Science Foundation	Pass-Through	University of Houston	R-22-0016	Computer and Information Science and Engineering	25,921	
		National Science Foundation	Pass-Through	University of Washington	UWSC13203	Computer and Information Science and Engineering	131,588	
		National Science Foundation	Pass-Through	Wayne State University	WSU20081 UNIV61638	Computer and Information Science and Engineering	64,938	
	1.010		r doo milougii	Traffic blace officially		computer and minimater colores and Engineering	5.734.204	674,433
								0/4,433
		National Science Foundation	Direct		DEB1753982	Biological Sciences	14	
		National Science Foundation	Direct		2110404	Biological Sciences	166,819	
		National Science Foundation	Direct		2114264	Biological Sciences	87,673	
		National Science Foundation	Direct		2117782	Biological Sciences	283,932	-
		National Science Foundation	Direct		2207891	Biological Sciences	159,327	-
		National Science Foundation	Direct		2224897	Biological Sciences	122,766	-
		National Science Foundation	Direct		DEB1442113	Biological Sciences	(1,985)	-
		National Science Foundation	Direct		IOS1936843	Biological Sciences	139,648	-
		National Science Foundation	Direct		IOS1949145	Biological Sciences	88,680	-
		National Science Foundation	Direct		MCB1818019	Biological Sciences	8,309	-
		National Science Foundation	Direct		MCB1928918	Biological Sciences	273,106	-
		National Science Foundation	Direct		MCB1942255	Biological Sciences	54,452	-
		National Science Foundation	Direct		MCB2018661	Biological Sciences	140,273	-
		National Science Foundation	Direct		MCB2036809	Biological Sciences	187,903	
		National Science Foundation	Pass-Through	Arizona State University	ASUB00000350	Biological Sciences	15,933	
		National Science Foundation	Pass-Through	Colorado State University	G-45144-04 UNIV61719	Biological Sciences	7,000	
4	7.074	National Science Foundation	Pass-Through	Tennessee State University		Biological Sciences	3,450	<u> </u>
							1,737,299	<u> </u>
4	7.075	National Science Foundation	Direct		221594	Social, Behavioral, and Economic Sciences	40,175	
4		National Science Foundation	Direct		1756417	Social, Behavioral, and Economic Sciences	(4,748)	
4	7.075	National Science Foundation	Direct		1829148	Social, Behavioral, and Economic Sciences	58,530	
4	7.075	National Science Foundation	Direct		2042285	Social, Behavioral, and Economic Sciences	198,207	
		National Science Foundation	Direct		2116778	Social, Behavioral, and Economic Sciences	47,954	
		National Science Foundation	Direct		2146969	Social, Behavioral, and Economic Sciences	162,506	
		National Science Foundation	Direct		2147017	Social, Behavioral, and Economic Sciences	129.685	
		National Science Foundation	Direct		2147064	Social, Behavioral, and Economic Sciences	105,173	
		National Science Foundation	Direct		2149224	Social, Behavioral, and Economic Sciences	59,164	
		National Science Foundation	Direct		2150143	Social, Behavioral, and Economic Sciences	52,464	
		National Science Foundation	Direct		2214299	Social, Behavioral, and Economic Sciences	3,181	
		National Science Foundation	Direct		2214309	Social, Behavioral, and Economic Sciences	126,580	
		National Science Foundation	Direct		2214992	Social, Behavioral, and Economic Sciences	346,651	185,996
		National Science Foundation	Direct		2215186	Social, Behavioral, and Economic Sciences	35,939	
4		National Science Foundation	Direct		2217478	Social, Behavioral, and Economic Sciences	59,487	

4	ssistance						-	Passed
Cluster	Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Through to Subrecipients
	47.075	National Science Foundation	Direct		2217889	Social, Behavioral, and Economic Sciences	93,893	
	47.075	National Science Foundation	Direct		2228607	Social, Behavioral, and Economic Sciences	41,844	
	47.075	National Science Foundation	Direct		2235572	Social, Behavioral, and Economic Sciences	126	
	47.075	National Science Foundation	Direct		BCS1716699	Social, Behavioral, and Economic Sciences	71,778	
		National Science Foundation	Direct		BCS1840896	Social, Behavioral, and Economic Sciences	94,867	
	47.075	National Science Foundation	Direct		BCS1846764	Social, Behavioral, and Economic Sciences	29,058	
	47.075	National Science Foundation	Direct		BCS1918824	Social, Behavioral, and Economic Sciences	100,413	
		National Science Foundation	Direct		BCS1921492	Social, Behavioral, and Economic Sciences	35,252	
	47.075	National Science Foundation	Direct		BCS2024316	Social, Behavioral, and Economic Sciences	2,268	
	47.075	National Science Foundation	Direct		BCS2034013	Social, Behavioral, and Economic Sciences	18,377	
		National Science Foundation	Direct		BCS2039136	Social, Behavioral, and Economic Sciences	84,507	
	47.075	National Science Foundation	Direct		BCS2142090	Social, Behavioral, and Economic Sciences	77,331	45,817
		National Science Foundation	Direct		SES 1851690	Social, Behavioral, and Economic Sciences	28,012	29,226
		National Science Foundation	Direct		SES2017162	Social, Behavioral, and Economic Sciences	95,306	-
		National Science Foundation	Direct		SES2049808	Social, Behavioral, and Economic Sciences	4,951	-
		National Science Foundation	Pass-Through	Florida State University	R000002842	Social, Behavioral, and Economic Sciences	(133)	-
	47.075	National Science Foundation	Pass-Through	Hamilton College	2021-001	Social, Behavioral, and Economic Sciences	14,915	
	47.075	National Science Foundation	Pass-Through	Penn State University	S001619-NSF	Social, Behavioral, and Economic Sciences	(56)	-
		National Science Foundation	Pass-Through	University of Colorado Boulder	1555794 UCB	Social, Behavioral, and Economic Sciences	353	
	47.075	National Science Foundation	Pass-Through	UNIVERSITY OF GEORGIA	SUB00002962	Social, Behavioral, and Economic Sciences	9,058	<u> </u>
							2,223,069	261,039
		National Science Foundation	Direct		2100328	Education and Human Resources	308,696	70,253
	47.076	National Science Foundation	Direct		2101356	Education and Human Resources	611,493	106,558
	47.076	National Science Foundation	Direct		2125764	Education and Human Resources	311,540	-
		National Science Foundation	Direct		2145260	Education and Human Resources	16,659	-
	47.076	National Science Foundation	Direct		2150600	Education and Human Resources	9,959	-
	47.076	National Science Foundation	Direct		2213168	Education and Human Resources	46,238	-
	47.076	National Science Foundation	Direct		DGE1652825	Education and Human Resources	89,316	
		National Science Foundation	Direct		DGE1922697	Education and Human Resources	591,011	31,077
		National Science Foundation	Direct		DGE1937391	Education and Human Resources	114,666	-
		National Science Foundation	Direct		DGE1937963	Education and Human Resources	2,340,589	
		National Science Foundation	Direct		DRL1620863	Education and Human Resources	27,806	
	47.076	National Science Foundation	Direct		DRL1621088	Education and Human Resources	128,607	
	47.076	National Science Foundation	Direct		DRL1660816	Education and Human Resources	(4,711)	-
		National Science Foundation	Direct		DRL1742257	Education and Human Resources	70,159	8,793
		National Science Foundation	Direct		DRL1750213	Education and Human Resources	69	
		National Science Foundation National Science Foundation	Direct Direct		DRL1760225 DRI 1813008	Education and Human Resources	17,368 439,061	-
	47.076				DRI 1908791			131,324
		National Science Foundation National Science Foundation	Direct		DRL1908791 DRL1949472	Education and Human Resources Education and Human Resources	555,806 199,735	
		National Science Foundation	Direct Direct		DRL1949472 DRL2010207	Education and Human Resources	230,001	
		National Science Foundation	Direct		DRL2010207 DRL2010237	Education and Human Resources	62,255	
		National Science Foundation	Direct		DRI 2055597	Education and Human Resources	153.622	
	47.076	National Science Foundation	Direct		DRL20033397 DRL2100784	Education and Human Resources	770,620	232,577
		National Science Foundation	Direct		DUE1852875	Education and Human Resources	258.411	10,445
		National Science Foundation	Direct		DUE1032075	Education and Human Resources	120.639	10,445
	47.076	National Science Foundation	Direct		HRD1647196	Education and Human Resources	120,039	101,555
		National Science Foundation	Pass-Through	Education Development Center, Inc	12434 2019-0302	Education and Human Resources	60.255	101,555
	47.076	National Science Foundation	Pass-Through	Fisk University	HRD1826755	Education and Human Resources	23,876	
		National Science Foundation	Pass-Through	Looking Glass Ventures, LLC.	LGV2113803-01	Education and Human Resources	39,593	
		National Science Foundation	Pass-Through	New York University	E0394-02NYU	Education and Human Resources	62,711	56,521
		National Science Foundation	Pass-Through	North Carolina State University	2021-1592-03	Education and Human Resources	525,008	00,021
		National Science Foundation	Pass-Through	Rutgers, The State University of New Jersey		Education and Human Resources	20.858	
	47.076	National Science Foundation	Pass-Through	Sonoma State University	119960	Education and Human Resources	103,816	
	47.076	National Science Foundation	Pass-Through	Tennessee State University	332.77-19.0887	Education and Human Resources	37,997	
	47.076	National Science Foundation	Pass-Through	Tennessee State University	HRD1826954	Education and Human Resources	78.228	
	47.076	National Science Foundation	Pass-Through	University of Florida	SUB00003201	Education and Human Resources	11.290	
	47.076	National Science Foundation	Pass-Through	University of Missouri	C00068139-1	Education and Human Resources	120,494	
	47.076	National Science Foundation	Pass-Through	University of Washington	UWSC12923	Education and Human Resources	99,763	
	47.076	National Science Foundation	Pass-Through	VUMC	VUMC95818	Education and Human Resources	32,652	<u> </u>
							8,806,319	749,102
	47.079 47.079	National Science Foundation National Science Foundation	Direct Direct		2207891 OISE1743772	Office of International Science and Engineering	159,327 1,173,107	- 669,041
						Office of International Science and Engineering		669,041
	47.079	National Science Foundation	Direct		OISE182617	Office of International Science and Engineering	63,131	669.041
	47.083	National Science Foundation	Direct		2134862	Office of Integrative Activities		
	47.083 47.083	National Science Foundation National Science Foundation	Direct			Office of Integrative Activities	1,700,188	1,029,613
	47.083	National Science Foundation	Direct Direct		OIA1936970 OIA2020814	Office of Integrative Activities Office of Integrative Activities	(2,808) 43,002	
	47.083	National Science Foundation National Science Foundation			OIA2020814 OIA2040462		43,002	
	47.083	National Science Foundation National Science Foundation	Direct Direct		OIA2040462 OIA2040688	Office of Integrative Activities Office of Integrative Activities	22,306	22,306
	+1.083		DIRPI		0172040000	Onico or integrative Activities	1,778,236	1,051,918
	47.084	National Science Foundation	Direct		2229521	National Science Foundation Technology Innovation and Partnerships	394,554	110,323
	47.084	National Science Foundation	Direct		2230331	National Science Foundation Technology Innovation and Partnerships	4,011	-
	47.084	National Science Foundation	Pass-Through	BlueWonder Creative	OTH00000052	National Science Foundation Technology Innovation and Partnerships	76,786	<u> </u>
							475,351	110,323

Cluster	Assistance Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Jessalvn Balion	Interagency Personnel Agreement	2.229	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Roland Stein	Interagency Personnel Agreement	2,229	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Fiona Yull_Turner Walsh	Interagency Personnel Agreement	13,641	-
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Alexandria Oviatt	Interagency Personnel Agreement	16,506 49,670	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Andrew McNeil	Interagency Personnel Agreement	49,670 61,259	-
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Bohan Jiang	Interagency Personnel Agreement	61,259 18,153	-
	64.RD	Department of Veteran Affairs	Direct		VA IPA - David Samuels	Interagency Personnel Agreement	18,153 8,765	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Dawant Benoit	Interagency Personnel Agreement	8,765	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Fiona Yull	Interagency Personnel Agreement	23,591 21,379 21,379	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Jennifer Pilat	Interagency Personnel Agreement	36,292	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Logan Northcutt	Interagency Personnel Agreement	36,292	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Mark Does	Interagency Personnel Agreement	24,571 12,688 12,688	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Meghan Corriere	Interagency Personnel Agreement	22,453	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Natalie Bennett	Interagency Personnel Agreement	38,304 38,304	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Olubunmi Olatunji	Interagency Personnel Agreement	12,083	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Shannon Townsend	Interagency Personnel Agreement	48,114 48,114	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Tyra Silaphet	Interagency Personnel Agreement	866	<u> </u>
	64.RD		Direct		VA IPA - Jin Ming Yang_Anne Richmond		45,849 45,849	-
	64.RD	Department of Veteran Affairs	Direct		. –	Interagency Personnel Agreement	62,278 62,278	-
	64.RD	Department of Veteran Affairs	Direct			Interagency Personnel Agreement	34,594 34,594	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Erik Beadle	Interagency Personnel Agreement	4,264	<u> </u>
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Erik Beadle	Interagency Personnel Agreement	27,747	<u> </u>
	64.RD	Department of Veteran Affairs Department of Veteran Affairs	Direct		VA IPA - Mukesh Gupta VA IPA - Weifeng Luo	Interagency Personnel Agreement	2,255 2,255 15,595	-
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Weileng Luo VA IPA - Rebecca Shattuck-Brandt_Anne	Interagency Personnel Agreement	15,595	
	64.RD	Department of Veteran Affairs	Direct		VA IPA - Kennady Bullock	Interagency Tersonnel Agreement	47,189 32,801	
	66.RD	Environmental Protection Agency	Pass-Through	Jacobs Technology Inc		Environmental Protection Agency	32,801 591,681	
	66,509	Environmental Protection Agency	Direct		83950401	Science To Achieve Results (STAR) Research Program	591,681 8,212	8,470
	66.509 66.509	Environmental Protection Agency Environmental Protection Agency	Direct Pass-Through	VUMC	84003101 VUMC 75597	Science To Achieve Results (STAR) Research Program Science To Achieve Results (STAR) Research Program	160,751 22,744	-
		• •	-				191,706	8,470
	81.RD 81.RD	Advanced Research Project Agency - Energy US Department of Energy Chicago	Pass-Through Direct	North Carolina State University	2022-1921-01 DE-SC0022237	Department of Energy Department of Energy	584,185 149,917	
	81.RD	US Department of Energy Chicago	Pass-Through	Argonne National Labs	3F-60047	Department of Energy	45,144	-
	81.RD	US Department of Energy Chicago	Pass-Through	Fermi National Accelerator Laboratory	690057	Department of Energy	71,563	
	81.RD	US Department of Energy Chicago	Pass-Through	Fermi National Accelerator Laboratory	US CMS Group	Department of Energy	9,209	
	81.RD	US Department of Energy Chicago	Pass-Through	Lawrence Berkley National Laboratory	7603622	Department of Energy	208,388	
	81.RD	US Department of Energy Chicago	Pass-Through	Los Alamos Laboratories	487709	Department of Energy	72,855	
	81.RD	US Department of Energy Chicago	Pass-Through	Pacific Northwest National Laboratory		Department of Energy	28,303	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	1988281	Department of Energy	(6,169)	-
	81.RD 81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories Sandia National Laboratories	2170670 2208537	Department of Energy	23,485 168,279	-
		US Department of Energy Chicago	Pass-Through			Department of Energy		-
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	2342719	Department of Energy	63,481	-
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories		Department of Energy	38,449	-
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	2444426	Department of Energy	30,584	-

	Assistance							Passed
	Listing						Federal	Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	2452918	Department of Energy	12,120	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	2454590	Department of Energy	64,844	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	2474334	Department of Energy	12,095	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	PO 2125099	Department of Energy	60,054	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	PO 2297537	Department of Energy	90,712	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	PO2185860	Department of Energy	139,737	
	81.RD	US Department of Energy Chicago	Pass-Through	Sandia National Laboratories	UNIV62058 PO220549	Department of Energy	39,133	
	81.RD	US Department of Energy Chicago	Pass-Through	UT-Battelle, LLC	4000101604	Department of Energy	7,556	
	81.RD	US Department of Energy Chicago	Pass-Through	UT-Battelle, LLC	4000150803	Department of Energy	146,952	
	81.RD	US Department of Energy Golden	Pass-Through	National Renewable Energy Laboratory	SUB-2022-10428	Department of Energy	35,061	
	81.RD	US Department of Energy Idaho	Pass-Through	Electric Power Research Institute	10015331	Department of Energy	219,879	
	81.RD	US Department of Energy Idaho	Pass-Through	Idaho National Laboratory	281284	Department of Energy	18,101	
	81.RD	US Department of Energy National Energy Technology Laboratory	Pass-Through	Chattanooga Area Regional Transportation Authority	2197-2092 UNIV61952	Department of Energy	154,724	
	81.RD	US Department of Energy National Nuclear Security Administration	Pass-Through	Honeywell Federal Manufacturing & Technologies, LLC	N000416669	Department of Energy	99,397	
	81.RD	US Department of Energy National Nuclear Security Administration	Pass-Through	Honeywell Federal Manufacturing & Technologies, LLC	N000466636	Department of Energy	8,193	
	81.RD	US Department of Energy National Nuclear Security Administration	Pass-Through	Jefferson Science Associates, LLC	23-D0741	Department of Energy	8,252	
	81.RD	US Department of Energy National Nuclear Security Administration	Pass-Through	Lawrence Livermore National Security, LLC	B655969	Department of Energy	33,922	
		US Department of Energy National Nuclear Security Administration	Pass-Through	Los Alamos Laboratories	580557	Department of Energy	53,147	
	81.RD	US Department of Energy National Nuclear Security Administration	Pass-Through	Triad National Security, LLC	17296	Department of Energy	28,022	
	81.RD	US Department of Energy Nuclear Energy	Pass-Through	Jefferson Science Associates, LLC	23-P0934	Department of Energy	4,062	<u> </u>
							2,723,635	
		US Department of Energy Chicago	Pass-Through	Rutgers, The State University of New Jersey	738	Office of Science Financial Assistance Program	(101)	
		US Department of Energy Chicago	Direct		DEFG0592ER40712	Office of Science Financial Assistance Program	811,974	
		US Department of Energy Chicago	Direct		DE-FOA-0000995	Office of Science Financial Assistance Program	118,696	
	81.049	US Department of Energy Chicago	Direct		DE-SC0005220	Office of Science Financial Assistance Program	946,289	
	81.049	US Department of Energy Chicago	Direct		DE-SC0019404	Office of Science Financial Assistance Program	131,891	19,426
	81.049 81.049	US Department of Energy Chicago US Department of Energy Chicago	Direct		DE-SC0022207 DE-SC0022915	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	447,199 12,558	245,663
	81.049	US Department of Energy Chicago	Direct		DE-SC0022915 DE-SC0023320	Office of Science Financial Assistance Program	29.418	
	81.049	US Department of Energy Chicago	Direct		ER46554	Office of Science Financial Assistance Program	29,418	
	81.049	US Department of Energy Chicago	Pass-Through	J. Craig Venter Institute	ICVI-17-013	Office of Science Financial Assistance Program	272.531	
		US Department of Energy Chicago	Pass-Through	Johns Hopkins University	2004007094	Office of Science Financial Assistance Program	56.826	
		US Department of Energy Chicago	Pass-Through	Oregon State University	G0211A-C	Office of Science Financial Assistance Program	69,687	
	81.049	US Department of Energy Chicago	Pass-Through	University of New Mexico	25406A-870A	Office of Science Financial Assistance Program	92,346	
		US Department of Energy Germantown	Direct	Chiversity of New Wexico	DE-FC01-06EW07053	Office of Science Financial Assistance Program	5,293,344	1,319,530
	01.043	oo bepartment of Energy Cermanown	Direct		DE-1 COT-ODE WO7033	Once of Science Financial Assistance Frogram	8,384,148	1,584,619
							425,446	
	81.086	US Department of Energy National Energy Technology Laboratory	Pass-Through	University of California Berkeley	#10315	Conservation Research and Development		85
							425,446	85
	81.087	US Department of Energy Golden	Direct		DE-EE0008418	Renewable Energy Research and Development	993	928
							993	928
	81.089	US Department of Energy National Energy Technology Laboratory	Pass-Through	University of Kentucky	3200004445-22-150	Fossil Energy Research and Development	128,466	
	81.089	US Department of Energy National Energy Technology Laboratory	Pass-Through	University of Kentucky Research Foundation	3200003651-23-221	Fossil Energy Research and Development	18,271	
							146,736	
	81.121	US Department of Energy Nuclear Energy	Direct		DE-NE0000646	Nuclear Energy Research, Development and Demonstration	5.833	
	81.121	US Department of Energy Nuclear Energy	Direct		DE-NE0008905	Nuclear Energy Research, Development and Demonstration	170,692	34,667
		US Department of Energy Nuclear Energy	Direct		DE-NE0009086	Nuclear Energy Research, Development and Demonstration	61,813	-
							238,338	34,667
			Direct		DE_AR0001035		188,084	01,001
	81.135 81.135	Advanced Research Project Agency - Energy Advanced Research Project Agency - Energy		Georgia Institute of Technology	AWD-001312-G1	Advanced Research Projects Agency - Energy Advanced Research Projects Agency - Energy	242.367	
	81.135	Advanced Research Project Agency - Energy	Pass-Through	Georgia institute of Technology	AWD-001312-G1	Advanced Research Projects Agency - Energy		<u> </u>
							430,451	<u> </u>
		US Department of Education	Pass-Through	Mathematica Policy Research, Inc.	40346S05916_EDIES14C0001	Department of Education	134,740	
	84.RD	US Department of Education	Pass-Through	Metropolitan Government of Nashville and Davidison County, Tennessee	2-218740-26 METRO/ED	Department of Education	178,947	<u> </u>
							313,688	
	84.015	US Department of Education	Direct		P015A180040	National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and		
	84.015	US Department of Education	Direct		P015A220155	International Studies Program and Foreign Language and Area Studies Fellowship Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and	185,418	
	04.015	03 Department of Education	Direct		P015A220155	International Studies Program and Foreign Language and Area Studies of Poreign Language and	113,887	
	84.015	US Department of Education	Direct		P015B180040	National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and		
	84.015	US Department of Education	Direct		D015D000110	International Studies Program and Foreign Language and Area Studies Fellowship Program	68,135	
	84.015	US Department of Education	Direct		P015B220149	National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship Program	77.137	
						······································	444,576	
	84.022	US Department of Education	Direct		P022A200059	Overseas Programs - Doctoral Dissertation Research Abroad	12,842	<u> </u>
							12,842	<u> </u>
	84.126	US Department of Education	Pass-Through	TN Department of Human Services	34570-91018	Rehabilitation Services_Vocational Rehabilitation Grants to States	673,180	14,439
						=	673,180	14,439
		US Dependence of Education	Deve T		24404 00040 1105	Occurrent Entropy County for Infecto and Encoling		(17,750
		US Department of Education	Pass-Through	State of Tennessee, Department of Intellectual and Developmental Disabilities (DIDD)	34401-99243-HCB	Special Education-Grants for Infants and Families	645,623	-
	84.181	US Department of Education	Pass-Through	TN Department of Education	33195-00117 ED#48116	Special Education-Grants for Infants and Families	(10,232)	<u> </u>
							635,390	<u> </u>
	84.206	US Department of Education	Pass-Through	Purdue University	19100104-003	Javits Gifted and Talented Students Education	14,481	
			-					

Assistance Listing Cluster Number Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
					14,481	
84.305 US Department of Education	Direct		R305A180511	Education Research, Development and Dissemination	3,106	3,106
84.305 US Department of Education	Direct		R305A210130	Education Research, Development and Dissemination	439,324	
84.305 US Department of Education	Direct		R305A210347	Education Research, Development and Dissemination	605.771	
84.305 US Department of Education	Direct		R305A220054	Education Research, Development and Dissemination	310,970	148 435
84.305 US Department of Education	Pass-Through	American Institute for Research	0467100003_R305N180005	Education Research, Development and Dissemination	105,307	19,937
84.305 US Department of Education	Pass-Through Pass-Through	Harvard University	108164-5110834 R305A190034	Education Research, Development and Dissemination Education Research, Development and Dissemination	21.749	19,937
84.305 US Department of Education	Pass-Through	National Opinion Research Center	R305A190298	Education Research, Development and Dissemination	87,735	-
84.305 US Department of Education	Pass-Through	New York University	R305A170498-18_F0253-03	Education Research, Development and Dissemination	18,860	
84.305 US Department of Education	Pass-Through	Teachers College, Columbia University	511148-02	Education Research, Development and Dissemination	86,934	
84.305 US Department of Education	Pass-Through	University of Florida	SUB00001829_R305A190079	Education Research, Development and Dissemination	27,469	
84.305 US Department of Education	Pass-Through	University of Texas at Austin	R305A160026	Education Research, Development and Dissemination	8,970	
84.305 US Department of Education	Pass-Through	University of Texas at Austin	UTAUS-SUB00000572	Education Research, Development and Dissemination	68.521	
84.305 US Department of Education	Pass-Through	US Department of Education	B305A230061	Education Research, Development and Dissemination	157,413	75.355
84.305 US Department of Education	Pass-Through	Virginia Commonwealth University	FP00006869_SA002	Education Research, Development and Dissemination	2.614	15,555
84.305 US Department of Education	Pass-Through	Virginia Commonwealth University	FP00015845_SA001	Education Research, Development and Dissemination	37,385	246,833
84.324 US Department of Education	Direct		R324A180004	Research in Special Education	(20,856)	240,033
84.324 US Department of Education 84.324 US Department of Education	Direct		R324A180004 R324A180171	Research in Special Education Research in Special Education	(20,856)	-
						-
84.324 US Department of Education	Direct		R324A190177	Research in Special Education	645,937	
84.324 US Department of Education	Direct		R324A200101	Research in Special Education	555,517	212,526
84.324 US Department of Education	Direct		R324A200193	Research in Special Education	335,191	138,705
84.324 US Department of Education	Direct		R324A210021	Research in Special Education	808,891	295,058
84.324 US Department of Education	Direct		R324B210004	Research in Special Education	146,939	
84.324 US Department of Education	Direct		B324B220003	Research in Special Education	2,280	
84.324 US Department of Education	Direct		R324D130003	Research in Special Education	48,949	
84.324 US Department of Education	Direct		R324R200003	Research in Special Education	527.707	-
	Pass-Through	Lehigh University	R324A160096	Research in Special Education	24,666	
84.324 US Department of Education	Pass-Through	Stanford University	R324A180004	Research in Special Education	475,121	
84.324 US Department of Education	Pass-Through	University of Kansas	R324A170118	Research in Special Education	(15,174)	-
84.324 US Department of Education	Pass-Through	University of Kansas Center for Research, Inc.	FY2021-010	Research in Special Education	156,759	
84.324 US Department of Education	Pass-Through	University of Pennsylvania	581066	Research in Special Education	17,461	
84.324 US Department of Education	Pass-Through	University of Texas at Austin	UTA19-000645_R324A190072	Research in Special Education	218,215	
84.324 US Department of Education	Pass-Through	University of Texas at Austin	UTAUS-SUB00000678AM1	Research in Special Education	31,285	
84.324 US Department of Education	Pass-Through	Virginia Commonwealth University	FP00013506_SA002	Research in Special Education	2,766	
84.324 US Department of Education	Pass-Through	WestEd	S-00017659	Research in Special Education	19,460	-
84.324 US Department of Education	Pass-Through	Wested	5-00017659	Research in Special Education	4.025.528	646.289
84.325 US Department of Education	Direct		H325D140087	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	(510)	
84.325 US Department of Education	Direct		H325D140073	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	5.126	
84.325 US Department of Education	Direct		H325D170004	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	107,088	
84.325 US Department of Education	Direct		H325D170005	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	156,447	
84.325 US Department of Education	Direct		H325D180086	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	194,212	-
84.325 US Department of Education	Direct		H325D180095	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	223,240	
84.325 US Department of Education	Direct		H325D190005	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	197,491	
84.325 US Department of Education	Direct		H325D220040	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	6,092	
84.325 US Department of Education	Direct		H325D220055	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	65,173	
84.325 US Department of Education	Direct		H325D220072	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	136	
84.325 US Department of Education	Direct		H325E170001	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	1,191,070	100,969
84.325 US Department of Education 84.325 US Department of Education	Direct		H325E220001	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	393,491	100,309
						-
84.325 US Department of Education	Direct		H325H140001	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	167,846	87,448
84.325 US Department of Education	Direct		H325H190003	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	1,543,512	1,085,113
84.325 US Department of Education	Direct		H325K140110	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	(13,197)	-
84.325 US Department of Education	Direct		H325K170014	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	92,343	-
84.325 US Department of Education	Direct		H325K180148	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	307,176	-
84.325 US Department of Education	Direct		H325K180175	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	307.094	
84.325 US Department of Education	Direct		H325K190020	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	337.040	
84.325 US Department of Education	Direct		H325K190020	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	263.913	
84.325 US Department of Education	Direct		H325K190049 H325K190056	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	197,990	-
						-
84.325 US Department of Education	Direct		H325K200036	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	363,610	-
84.325 US Department of Education	Direct		H325K210014	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	274,998	-
84.325 US Department of Education	Pass-Through	University of Connecticut Health Center	H325H190004_UCHC7-127394347	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	58,311	-
84.325 US Department of Education	Pass-Through	University of Washington	UWSC14107	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	856	-
84.325 US Department of Education	Pass-Through	VUMC	VUMC 79059	Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	31.579	
04.020 00 Department of Education	1 dob 1 modgin	volito -	100010000		6,472,128	1,273,530
84.326 US Department of Education	Direct		H326M180002	Special Education_Technical Assistance and Dissemination to		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Improve Services and Results for Children with Disabilities	(15,510)	-
84.326 US Department of Education	Pass-Through	Stanford University	62387740-173161	Special Education_Technical Assistance and Dissemination to		
84.326 US Department of Education	Pass-Through	University of Florida	SUB00002470	Improve Services and Results for Children with Disabilities Special Education, Technical Assistance and Dissemination to	285,845	-
o+.320 US Department or Education	Pass-Infough	University of Plottda	50B00002470	Special Education_I echnical Assistance and Dissemination to Improve Services and Results for Children with Disabilities	144.108	
84.326 US Department of Education	Pass-Through	University of South Florida	5830-1649-00-A	Improve Services and Results for Children with Disabilities Special Education_Technical Assistance and Dissemination to	144,108	-
04.020 00 Department of Education	r ass- mough	childen of court fonde	3030-1048-00-A	Improve Services and Results for Children with Disabilities	106,926	
84.326 US Department of Education	Pass-Through	University of South Florida	H326B170003	Special Education_Technical Assistance and Dissemination to		
				Improve Services and Results for Children with Disabilities	122,513	<u> </u>
					643,882	

sistance .isting lumber Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through Subrecipie
34.407 US Department of Education	Direct		P407A150058	Transition Programs for Students with Intellectual Disabilities into Higher Education	(98,714)	
					(98,714)	
34.411 US Department of Education	Direct		S411A220005	Investing in Innovation (i3) Fund	88.547	26
84.411 US Department of Education	Pass-Through	Florida State University	FLORIDA STATE	Investing in Innovation (i3) Fund	691	20
		·······		······································	89.238	26
						20.
93.RD Agency for Healthcare Research and Quality	Pass-Through	VUMC	VUMC93554	Department of Health and Human Services	57,844	
93.RD Centers for Disease Control and Prevention	Direct		21IPA2116232	Department of Health and Human Services	7,222	
93.RD National Institutes of Health	Direct		75N95020P00369	Department of Health and Human Services	144,644	
93.RD National Institutes of Health	Direct		75N95021P00632	Department of Health and Human Services	148,448	
93.RD National Institutes of Health	Pass-Through	Johns Hopkins University Applied Physics Laboratory	181557 16X117	Department of Health and Human Services	4,694	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through Pass-Through	Leidos Biomedical Research, Inc.	16X117 16X117 (HHSN261200800001E)	Department of Health and Human Services Department of Health and Human Services	87,804 17,462	
93.RD National Institutes of Health 93.RD National Institutes of Health		Leidos Biomedical Research, Inc.	22X093	Department of Health and Human Services	1,389,772	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through Pass-Through	Leidos Biomedical Research, Inc.	22X093 22X099	Department of Health and Human Services	2,311,643	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through Pass-Through	Leidos Biomedical Research, Inc.	PROTACs UNIV	Department of Health and Human Services	(10,629)	
93.RD National Institutes of Health	Pass-Through	Leidos Biomedical Research, Inc.	UNIV55070 Wnt A4	Department of Health and Human Services	(40,095)	
93.RD National Institutes of Health	Pass-Through	Leidos Biomedical Research, Inc.	UNIV55070-A8	Department of Health and Human Services	(40,093) 209.341	
93.RD National Institutes of Health 93.RD National Institutes of Health		Leidos Biomedical Research, Inc.	UNIV55070-A8 UNIV61254-A3	Department of Health and Human Services	(7.979)	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through	Leidos Biomedical Research, Inc.	UNIV61254-A3 UNIV61254-A8	Department of Health and Human Services	(7,979) 61.367	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through Pass-Through	Leidos Biomedical Research, Inc.	UNIV61254-A8 UNIV61790-A2	Department of Health and Human Services	186,585	
93.RD National Institutes of Health	Pass-Through Pass-Through	Leidos Biomedical Research, Inc. Lynntech. Inc.	n/a	Department of Health and Human Services	180,585	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through Pass-Through	Lynntech, Inc. University of California San Francisco	n/a n/a	Department of Health and Human Services Department of Health and Human Services	19,085 34,598	
93.RD National Institutes of Health 93.RD National Institutes of Health	Pass-Through Pass-Through	University of California San Francisco	R35GM127087	Department of Health and Human Services	34,598	
93.RD National Institutes of Health	Pass-Through	VUMC	103753	Department of Health and Human Services	72,077	
93.RD National Institutes of Health	Pass-Through	VUMC	75N93019C00074	Department of Health and Human Services	57.693	
93.RD National Institutes of Health	Pass-Through	VUMC	DK020593	Department of Health and Human Services	(4.585)	
93.RD National Institutes of Health	Pass-Through	VUMC	n/a	Department of Health and Human Services	9,488	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC 59340	Department of Health and Human Services	9,400 11 408	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC100486	Department of Health and Human Services	1,500	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC102326	Department of Health and Human Services	2,996	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC102526	Department of Health and Human Services	2,990	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC102040	Department of Health and Human Services	3,432	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC76468	Department of Health and Human Services	18,775	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC84487	Department of Health and Human Services	12,375	
93 RD National Institutes of Health	Pass-Through	VUMC	VUMC94634	Department of Health and Human Services	(29)	
93.RD National Institutes of Health	Pass-Through	VUMC	VUMC98350	Department of Health and Human Services	10,467	
55.KD National institutes of Health	Pass- Mough	VONIC	V0MC98330	Department of Health and Human Services	4.893.883	
					4,893,883	
93.110 Health Resources and Services Administration	Pass-Through	VUMC	VUMC106915	Maternal and Child Health Federal Consolidated Programs	10,000	
33.110 Health Resources and Services Administration	Pass-Through	VUMC	VUMC59924	Maternal and Child Health Federal Consolidated Programs	17,697	
					27.697	
33.113 National Institutes of Health	Direct		1 R01 ES026955-01A1	Environmental Health	(169,370)	-
33.113 National Institutes of Health	Direct		1F31ES032334-01	Environmental Health	(169,370) 3,505	
33.113 National Institutes of Health	Direct		1F31ES032334-01 1F31ES034957-01	Environmental Health	3,505	
			1K99ES034957-01			
Association and the second secon	Direct		1R99ES034058-01 1R01ES030575-01A1	Environmental Health Environmental Health	96,696 437,706	
33.113 National Institutes of Health	Direct		1R01ES030575-01A1	Environmental Health	437,706 184,496	
33.113 National Institutes of Health	Direct		2 R01 ES010546-16	Environmental Health	5.139	
33.113 National Institutes of Health	Direct		2T32ES007028-45-49	Environmental Health	440,204	
33.113 National Institutes of Health	Direct		4K22ES028048-02	Environmental Health		
33.113 National Institutes of Health	Direct		4K22ES028048-02 R01ES029357	Environmental Health	(28,772) 413,202	2
33.113 National Institutes of Health	Pass-Through	University of Arizona	1R35ES031575-01	Environmental Health	413,202	2
33.113 National Institutes of Health	Pass-Through	University of North Carolina Chapel Hill	1R01ES028269-01A1	Environmental Health	51.072	
33.113 National Institutes of Health	Pass-Through	University of North Carolina Chapel Hill	TRUTE 5028269-01A1	Environmental Health		· .
					1,456,922	24
33.121 National Institutes of Health	Direct		1F31DE028467	Oral Diseases and Disorders Research	(348)	
33.121 National Institutes of Health	Direct		1F31DE030007-01	Oral Diseases and Disorders Research	24,608	
33.121 National Institutes of Health	Pass-Through	University of Buffalo	R1136496, UNIV 60392	Oral Diseases and Disorders Research	94,788	
33.121 National Institutes of Health	Pass-Through	VUMC	VUMC66698	Oral Diseases and Disorders Research	(4.520)	
	5				114.528	
33.136 Centers for Disease Control	Pass-Through	University of Louisville	ULRF15-1357C-03A	Injury Prevention and Control Research and State and Community Based Programs	5,787	
					5,787	
33.145 Health Resources and Services Administration	Pass-Through	VUMC	VUMC87063	HIV-Related Training and Technical Assistance	17,163	-
55.145 Treater resources and bervices Administration	Tasa-Tillougii	Voline	1011007003	The related training and recrimear Assistance		
					17,163	
93.172 National Institutes of Health	Direct		1U01HG009086-01	Human Genome Research	8,386	
93.172 National Institutes of Health	Direct		F30HG011200	Human Genome Research	47,957	
93.172 National Institutes of Health	Direct		RHG011018A	Human Genome Research	92,377	
93.172 National Institutes of Health	Pass-Through	Bioventures, Inc.	R24HG009470-01A1	Human Genome Research	8,742	
93.172 National Institutes of Health	Pass-Through	VUMC	VUMC 60003	Human Genome Research	325,310	
33.172 National Institutes of Health	Pass-Through	VUMC	VUMC95886	Human Genome Research	54,467	
					537.240	
			150050010510			
33.173 National Institutes of Health	Direct		1F30DC019510 1F30DC020917-01	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	30,924 27,457	
93.173 National Institutes of Health						

Assist						Federal	Passed Through to
Cluster Num		Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	
93.1	70 Medianel Institutes of Lenkin	Direct		1E31DC019823-01	Ad Descent Deletedas Desferes and Osmania	ation Disorders 10.608	
93.1				1F31DC019823-01			
93.1		Direct		1F31DC020112-01 1F31DC020129-01			
93.1 93.1		Direct		1F31DC020129-01 1F31DC020388-01			
93.1		Direct		1F31DC020388-01 1F31DC021108-01			
93.1		Direct		1F32DC019817	Research Related to Deafness and Communic		
93.1		Direct		1R01DC014462	Research Related to Deafness and Communic		
93.1		Direct		1R01DC018171-01			
93.1		Direct		1R01DC019787-01			
93.1		Direct		1U01DC017135	Research Related to Deafness and Communic		
93.1		Direct		2R01DC014037-06			
93.1	73 National Institutes of Health	Pass-Through	Drexel University	800198	Research Related to Deafness and Communic	ation Disorders (19,208	s) -
93.1	73 National Institutes of Health	Pass-Through	Medical University of South Carolina	A22-0327-S001	Research Related to Deafness and Communic	ation Disorders 100,055	· ·
93.1	73 National Institutes of Health	Pass-Through	Ohio State University	GR124427/PO#SP	C-1000005377 Research Related to Deafness and Communic	ation Disorders 6,031	
93.1	73 National Institutes of Health	Pass-Through	University of Maryland College Park	116124-Z0503201	Research Related to Deafness and Communic	ation Disorders 12,096	· ·
93.1	173 National Institutes of Health	Pass-Through	University of Pittsburgh	0062738(132446-1) Research Related to Deafness and Communic	ation Disorders 106,601	
93.1	73 National Institutes of Health	Pass-Through	VUMC	VUMC 64648	Research Related to Deafness and Communic		
93.1	73 National Institutes of Health	Pass-Through	VUMC	VUMC 72178	Research Related to Deafness and Communic	ation Disorders 47.314	
93.1	73 National Institutes of Health	Pass-Through	VUMC	VUMC 84912	Research Related to Deafness and Communic		
93.1	73 National Institutes of Health	Pass-Through	VUMC	VUMC107017	Research Related to Deafness and Communic		
93.1		Pass-Through	VUMC	VUMC107022	Research Related to Deafness and Communic		
93.1		Pass-Through	VUMC	VUMC107022	Research Related to Dealness and Communic		
93.1		Pass-Through	VUMC	VUMC64813	Research Related to Dealness and Communic		
93.1		Pass-Through	VUMC	VUMC79562	Research Related to Dealness and Communic		
93.1	73 National Institutes of Health	Pass-Through	VUMC	VUMC95679	Research Related to Deafness and Communic		
						4,040,020	1,118,483
93.2	213 National Institutes of Health	Direct		1R21AT011813-01	Research and Training in Complementary and	Integrative Health 162,444	
00.1		Direct		112111010101	recording and realing in complementary and	162,444	
						162,444	<u> </u>
93.2	226 Agency for Healthcare Research and Quality	Pass-Through	VUMC	VUMC 78121	Research on Healthcare Costs, Quality and Or	tcomes 30,630) -
93.2	226 Agency for Healthcare Research and Quality	Pass-Through	VUMC	VUMC101017	Research on Healthcare Costs, Quality and O		
93.2	226 Agency for Healthcare Research and Quality	Pass-Through	VUMC	VUMC77177	Research on Healthcare Costs, Quality and Or	tcomes 10.529	
93.2		Pass-Through	VUMC	VUMC 68739	Research on Healthcare Costs, Quality and Or		
93.2		Pass-Through	VUMC	VUMC 73417	Research on Healthcare Costs, Quality and O		
					,,,	189.903	
93.2	233 National Institutes of Health	Direct		1F30HL168976-01	National Center on Sleep Disorders Research	2,262	<u> </u>
						2,262	
93.2		Direct		1F30MH122064-01		70,221	
93.2		Direct		1F30MH123219-01		45,879	
93.2		Direct		1F30MH125507-01		47,304	
93.2		Direct		1F30MH127808-01		28,854	
93.2		Direct		1F30MH132165-01		15,711	
93.2	242 National Institutes of Health	Direct		1F31MH126460-01	IA1 Mental Health Research Grants	29,613	- 1
93.2	242 National Institutes of Health	Direct		1F31MH127863-01		33,666	· ·
93.2	242 National Institutes of Health	Direct		1F31MH132197-01	IA1 Mental Health Research Grants	2,262	· ·
93.2	242 National Institutes of Health	Direct		1K01MH115811-01	1A1 Mental Health Research Grants	164,235	40,000
93.2	242 National Institutes of Health	Direct		1K01MH125073-01	1A1 Mental Health Research Grants	161,374	
93.2	242 National Institutes of Health	Direct		1K01MH129760-01	1A1 Mental Health Research Grants	73.208	
93.2	242 National Institutes of Health	Direct		1K23MH131753-01	1A1 Mental Health Research Grants	7,670	
93.2		Direct		1R01MH110378-0		26.297	
93.2	National Institutes of Health	Direct		1R01MH113543-0		(368	
93.2		Direct		1R01MH122545-0		15.311	
93.2		Direct		1R01MH123474-0		365,133	
93.2		Direct		1R01MH123687-0		613.665	
93.2		Direct		1R01MH128967-0		149.03	
93.2		Direct		1R01MH129634-0		531,973	
93.2		Direct		1R01MH129634-0 1R01MH129641-0		703,926	
93.2		Direct		1R01MH129641-0 1R01MH130364-0		32.640	
93.2		Direct		1R01MH130364-0 1R01MH132686-0		24,34	
93.2		Direct		1R03MH128649-0		75,350	
93.2		Direct		1R21MH122781-0		33,550	
93.2		Direct		1R21MH127563-0		126,983	
93.2		Direct		1R21MH132052-0		15,160	
93.2		Direct		1R34MH118028-0		117,327	
93.2		Direct		1R61MH119270-0		756,599	
93.2		Direct		1RF1MH123971-0		688,216	
93.2		Direct		1RF1MH125931-0		433,646	
93.2		Direct		1RF1MH125933-0		343,503	
93.2	242 National Institutes of Health	Direct		2R01MH062646-1	7-21 Mental Health Research Grants	(2,606	i) -
93.2	242 National Institutes of Health	Direct		2R01MH062646-22	2A1 Mental Health Research Grants	441,609	- (
93.2		Direct		2R01MH066198	Mental Health Research Grants	383,544	
93.2		Direct		2R01MH070727-12	7A1 Mental Health Research Grants	373,171	-
93.2		Direct		2R01MH073676-10		493.995	
93.2		Direct		2R01MH084989-08		130,756	
93.2		Direct		2R56MH081060-12		249.466	
93.2		Direct		2T32 MH064913-1		368.131	
93.2		Direct		2T32MH018921-31		332.436	
33.2		Bilde		2102111010021101		332,430	

Cluster	Assistance Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to
Cluster	Number	Cluster merederal Granton Program	туре	rass-mough diantor	Award Identifier	Assistance Listing Program The	Experiatures	Subrecipients
	93.242	National Institutes of Health	Direct		2T32MH065215-16A1	Mental Health Research Grants	312,492	
		National Institutes of Health	Direct		4R00MH113764	Mental Health Research Grants	53,499	
		National Institutes of Health	Direct		4R00MH116100-03	Mental Health Research Grants	271,643	
		National Institutes of Health	Direct		4R00MH117235-03	Mental Health Research Grants	339,305	
		National Institutes of Health	Direct		4R33MH106748	Mental Health Research Grants	301,650	
		National Institutes of Health	Direct		4R33MH115125-03	Mental Health Research Grants	199,120	-
		National Institutes of Health	Direct		5 R01 MH073676 -11	Mental Health Research Grants	(794)	-
		National Institutes of Health	Direct		7R01MH107254	Mental Health Research Grants	128,312	-
		National Institutes of Health	Direct		7R01MH116675-04	Mental Health Research Grants	575,772	268,355
		National Institutes of Health	Direct		7R01MH117996-04	Mental Health Research Grants	341,180	144,296
		National Institutes of Health	Direct		F31MH127817	Mental Health Research Grants	33,173	-
		National Institutes of Health	Direct		R00MH117274	Mental Health Research Grants	110,928	-
		National Institutes of Health	Direct		R01MH108562-01A1	Mental Health Research Grants	473	-
		National Institutes of Health	Direct		R01MH119673	Mental Health Research Grants	576,385	
		National Institutes of Health	Direct		R01MH124671	Mental Health Research Grants	761,513	56,768
	93.242	National Institutes of Health	Pass-Through	California Institute of Technology (Caltech)	CALTECH - \$468313	Mental Health Research Grants	(35,978)	
		National Institutes of Health	Pass-Through	Columbia University	1(GG014615-01)	Mental Health Research Grants	44,691	-
		National Institutes of Health	Pass-Through	Harvard University	151260.5114598.0006	Mental Health Research Grants	32,411	-
		National Institutes of Health	Pass-Through	National Institutes of Health	2R56MH084989-13A1	Mental Health Research Grants	198,320	-
		National Institutes of Health	Pass-Through	Oregon Health & Science University	104372	Mental Health Research Grants	35,733	-
		National Institutes of Health	Pass-Through	Penn State University	VANMH124027	Mental Health Research Grants	23,630	-
		National Institutes of Health	Pass-Through	Penn State University	VANMH125052	Mental Health Research Grants	43,300	-
		National Institutes of Health	Pass-Through	Stanford University	62409648-165854	Mental Health Research Grants	6,738	
		National Institutes of Health	Pass-Through	University of Maryland College Park	85338-Z0264207	Mental Health Research Grants	23,905	-
		National Institutes of Health	Pass-Through	University of Massachusetts Amherst	015746 A00	Mental Health Research Grants	17,293	
		National Institutes of Health	Pass-Through	University of Miami	SPC-001199	Mental Health Research Grants	36,319	
		National Institutes of Health	Pass-Through	University of Nebraska Lincoln	34-5507-2036-001	Mental Health Research Grants	(75,116)	
	93.242	National Institutes of Health	Pass-Through	University of North Texas Health Science Center	RF00052-2021-0125	Mental Health Research Grants	18,799	
		National Institutes of Health	Pass-Through	VUMC	1R01MH121620-01	Mental Health Research Grants	43,612	-
		National Institutes of Health	Pass-Through	VUMC	VUMC - 1RF1MH123201-01A1	Mental Health Research Grants	323,033	
		National Institutes of Health	Pass-Through	VUMC	VUMC 84680	Mental Health Research Grants	24,230	
	93.242	National Institutes of Health	Pass-Through	VUMC	VUMC 86293	Mental Health Research Grants	23,784	
		National Institutes of Health	Pass-Through	VUMC	VUMC105990	Mental Health Research Grants	14,847	
	93.242	National Institutes of Health	Pass-Through	VUMC	VUMC107921	Mental Health Research Grants	8,780	
	93.242	National Institutes of Health	Pass-Through	VUMC	VUMC88756	Mental Health Research Grants	43,998	<u> </u>
							13,359,775	1,672,272
	93.247	Health Resources and Services Administration	Direct		1T14HP33119-01-00	Advanced Nursing Education Grant Program	688,964	612,899
	93.247	Health Resources and Services Administration	Direct		1T94HP32909-01-00	Advanced Nursing Education Grant Program	611,430	
	93.247	Health Resources and Services Administration	Direct		2T96HP32512-04-00	Advanced Nursing Education Grant Program	467,131	-
							1,767,525	612,899
	93,273	National Institutes of Health	Direct		1F30AA029599-01A1	Alcohol Research Programs	32.007	
		National Institutes of Health	Direct		1F31AA029526-01A1	Alcohol Research Programs	31,680	
		National Institutes of Health	Direct		1E31AA030916-01	Alcohol Research Programs	2.262	
		National Institutes of Health	Direct		1F31AA030910-01	Alcohol Research Programs	67,687	
		National Institutes of Health	Direct		1K99AA027806-01A1	Alcohol Research Programs	(61)	
		National Institutes of Health	Direct		1K99AA029467-01	Alcohol Research Programs	47.096	
		National Institutes of Health	Direct		1R01AA030115-01	Alcohol Research Programs	596,408	
		National Institutes of Health	Direct		1U01AA029971-01	Alcohol Research Programs	323,196	
	93.273	National Institutes of Health	Direct		4R00AA028306-03	Alcohol Research Programs	25,316	
		National Institutes of Health	Direct		4R37AA019455-11	Alcohol Research Programs	439,406	
		National Institutes of Health	Pass-Through	Board of Recents of the University of Nebraska DBA	34-5507-2040-001	Alcohol Research Programs	25,550	
		National Institutes of Health	Pass-Through Pass-Through	VUMC	VUMC108169	Alcohol Research Programs	10,085	
	93.273	National institutes of Health	Fass-Iniough	VUNIC	V0MIC 108 109	Alconor Research Frograms		<u> </u>
							1,600,632	<u> </u>
	93.279	National Institutes of Health	Direct		1F32DA051136-01	Drug Abuse and Addiction Research Programs	22,819	
		National Institutes of Health	Direct		1DP1DA048931-01	Drug Abuse and Addiction Research Programs	539,306	
	93.279	National Institutes of Health	Direct		1DP1DA056667-01	Drug Abuse and Addiction Research Programs	255,389	
		National Institutes of Health	Direct		1F30DA054764-01A1	Drug Abuse and Addiction Research Programs	31,486	
	93.279	National Institutes of Health	Direct		1F31DA050410-01	Drug Abuse and Addiction Research Programs	29,173	
		National Institutes of Health	Direct		1F31DA051153-01A	Drug Abuse and Addiction Research Programs	27,171	
		National Institutes of Health	Direct		1F31DA054774-01	Drug Abuse and Addiction Research Programs	32,226	
		National Institutes of Health	Direct		1F31DA056202-01	Drug Abuse and Addiction Research Programs	38,437	
	93.279	National Institutes of Health	Direct		1F31DA056221-01A1	Drug Abuse and Addiction Research Programs	25,920	
		National Institutes of Health	Direct		1K99DA052641	Drug Abuse and Addiction Research Programs	82,496	
		National Institutes of Health	Direct		1R01DA046138-01A1	Drug Abuse and Addiction Research Programs	395,462	
		National Institutes of Health	Direct		1R01DA052317-01A1	Drug Abuse and Addiction Research Programs	644,657	
		National Institutes of Health	Direct		1U01DA055347-01	Drug Abuse and Addiction Research Programs	1,028,201	469,616
		National Institutes of Health	Direct		2R01DA042475-06A1	Drug Abuse and Addiction Research Programs	381,642	
	93.279	National Institutes of Health	Direct		4R00DA045103	Drug Abuse and Addiction Research Programs	226,205	
	93.279	National Institutes of Health	Direct		8K00DA059288-02	Drug Abuse and Addiction Research Programs	13,927	
		National Institutes of Health	Pass-Through	Base Pair Biotechnologies, Inc	4R44DA047866-02	Drug Abuse and Addiction Research Programs	101,774	
		National Institutes of Health	Pass-Through	DeNovx, LLC		Drug Abuse and Addiction Research Programs	179,727	
		National Institutes of Health	Pass-Through	Florida International University	441	Drug Abuse and Addiction Research Programs	10,446	
	93.279	National Institutes of Health	Pass-Through	University of California Irvine	UCI 2017-3476	Drug Abuse and Addiction Research Programs	(68)	
	93.279	National Institutes of Health	Pass-Through	University of California San Diego	KR705140	Drug Abuse and Addiction Research Programs	47,375	
	93.279	National Institutes of Health	Pass-Through	VUMC	VUMC96254	Drug Abuse and Addiction Research Programs	24,423	
		National Institutes of Health	Pass-Through	VUMC	VUMC97931	Drug Abuse and Addiction Research Programs	17,294	
	93.279	National Institutes of Health	Pass-Through	WAKE FOREST UNIVERSITY HEALTH SCIENCES	1217-45120-11000000220	Drug Abuse and Addiction Research Programs	15,861	<u> </u>
							4,171,349	469,616

Δ	ssistance							Passed
	Listing		_				Federal	Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	93.283	Centers for Disease Control	Pass-Through	VUMC	VUMC102786	Centers for Disease Control and Prevention_Investigations and Technical Assistance	28,163	
							28,163	<u> </u>
	93.286	National Institutes of Health	Direct		1R01EB019409 01/04	Discovery and Applied Research for Technological Innovations to Improve Human Health	(7,821)	
	93.286	National Institutes of Health	Direct		1R01EB026901-01A1	Discovery and Applied Research for Technological Innovations to Improve Human Health	353,696	43,075
	93.286	National Institutes of Health	Direct		1R01EB027498-01A1	Discovery and Applied Research for Technological Innovations to Improve Human Health	574.325	110,723
	93.286	National Institutes of Health	Direct		1R01EB028105-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	(8,756)	
	93,286	National Institutes of Health	Direct		1R01EB028161-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	139,205	
	93.286	National Institutes of Health	Direct		1R01EB028690-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	444,291	11,579
		National Institutes of Health	Direct		1R01EB030414-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	133,637	14,573
	93.286	National Institutes of Health	Direct		1R01EB032382-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	158,106	49,948
	93.286	National Institutes of Health	Direct		1R01EB033385-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	315,388	232,673
	93.286	National Institutes of Health	Direct		1R01EB033822-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	122,513	12,970
	93.286	National Institutes of Health	Direct		1R21EB027881-01A1	Discovery and Applied Research for Technological Innovations to Improve Human Health	41,841	
	93.286	National Institutes of Health			1R01EB020040 1-4			0
	93.286	National Institutes of Health	Direct		1T32EB020040 1-4	Discovery and Applied Research for Technological Innovations to Improve Human Health	(1,763) (2,190)	
			Direct			Discovery and Applied Research for Technological Innovations to Improve Human Health		
	93.286 93.286	National Institutes of Health National Institutes of Health	Direct		2R01EB014308-05A1 2R01EB016695-05	Discovery and Applied Research for Technological Innovations to Improve Human Health	31,191 114,040	- 383
			Direct			Discovery and Applied Research for Technological Innovations to Improve Human Health		
	93.286	National Institutes of Health	Direct		2R01EB017230-05A1	Discovery and Applied Research for Technological Innovations to Improve Human Health	544,389	204,580
	93.286	National Institutes of Health	Direct		2T32EB021937-06	Discovery and Applied Research for Technological Innovations to Improve Human Health	177,590	-
	93.286	National Institutes of Health	Pass-Through	Case Western Reserve University	RES517309	Discovery and Applied Research for Technological Innovations to Improve Human Health	38,038	-
	93.286	National Institutes of Health	Pass-Through	Massachusetts General Hospital	MASSGEN - 236792	Discovery and Applied Research for Technological Innovations to Improve Human Health	91,089	-
	93.286	National Institutes of Health	Pass-Through	University of California Berkeley	9722	Discovery and Applied Research for Technological Innovations to Improve Human Health	11,893	-
	93.286	National Institutes of Health	Pass-Through	University of California Davis	A21-0684-S001	Discovery and Applied Research for Technological Innovations to Improve Human Health	177,439	
	93.286	National Institutes of Health	Pass-Through	University of Illinois at Urbana-Champaign	1R01EB028615-01	Discovery and Applied Research for Technological Innovations to Improve Human Health	295,194	59,707
	93.286	National Institutes of Health	Pass-Through	University of North Carolina Chapel Hill	5108995	Discovery and Applied Research for Technological Innovations to Improve Human Health	22,023	-
	93.286	National Institutes of Health	Pass-Through	University of Tennessee Knoxville	A23-0012-S002	Discovery and Applied Research for Technological Innovations to Improve Human Health	71,743	
	93.286	National Institutes of Health	Pass-Through	University of Tennessee Space Institute	UTSI 1R15EB027449	Discovery and Applied Research for Technological Innovations to Improve Human Health	4,373	
	93.286	National Institutes of Health	Pass-Through	University of Virginia	Univ of Virgina - GB10884	Discovery and Applied Research for Technological Innovations to Improve Human Health	76,884	-
	93.286	National Institutes of Health	Pass-Through	VUMC	1R01EB026991	Discovery and Applied Research for Technological Innovations to Improve Human Health	9,726	
	93.286	National Institutes of Health	Pass-Through	VUMC	VUMC 77171	Discovery and Applied Research for Technological Innovations to Improve Human Health	124,770	
	93.286	National Institutes of Health	Pass-Through	VUMC	VUMC 81912	Discovery and Applied Research for Technological Innovations to Improve Human Health	18,468	
	93.286	National Institutes of Health	Pass-Through	VUMC	VUMC103759	Discovery and Applied Research for Technological Innovations to Improve Human Health	72.222	
	93.286	National Institutes of Health	Pass-Through	VUMC	VUMC104934	Discovery and Applied Research for Technological Innovations to Improve Human Health	15.035	
	93.286	National Institutes of Health	Pass-Through	VUMC	VUMC96309	Discovery and Applied Research for Technological Innovations to Improve Human Health	34,011	
	93.286	National Institutes of Health	Pass-Through	VUMC	VUMC97863	Discovery and Applied Research for Technological Innovations to Improve Human Health	12,122	
	93.286	National Institutes of Health	Pass-Through	Yava Scientific, LLC	POD001-22-001	Discovery and Applied Research for Technological Innovations to Improve Human Health	56,939	
		National Institutes of Health	Pass-Through	Yaya Scientific, LLC	YAYA 1R41EB029888-01A1	Discovery and Applied Research for Technological Innovations to Improve Human Health	(485)	
							4.261.165	740.211
	93.307	National Institutes of Health	Direct		1R21MD015159-01A	Minority Health and Health Disparities Research	191,460	43,612
	93.307	National Institutes of Health	Direct		1R21MD017332-01	Minority Health and Health Disparities Research	136,988	
	93.307	National Institutes of Health	Pass-Through	Meharry Medical College	Meharry - 170406MFL060-06	Minority Health and Health Disparities Research	11,306	
	93.307	National Institutes of Health	Pass-Through	Meharry Medical College	Meharry - 170406ML060 08	Minority Health and Health Disparities Research	45	
	93.307	National Institutes of Health	Pass-Through	VUMC	VUMC97555	Minority Health and Health Disparities Research	36,108	
							375,907	43,612
								45,012
	93.310	National Institutes of Health	Direct		1DP2GM146255-01	Trans-NIH Research Support	423,497	-
	93.310	National Institutes of Health	Direct		1DP2GM146321-01	Trans-NIH Research Support	429,060	-
	93.310	National Institutes of Health	Direct		1DP50D031843-01	Trans-NIH Research Support	399,719	-
		National Institutes of Health	Direct		1R03TR004196-01	Trans-NIH Research Support	124,164	
	93.310	National Institutes of Health	Direct		1U01CA235508-01	Trans-NIH Research Support	260,332	90,112
	93.310	National Institutes of Health	Direct		1U54DK120058	Trans-NIH Research Support	23,106	123,241
	93.310	National Institutes of Health	Direct		1U54DK134302-01	Trans-NIH Research Support	1,593,660	170,633
	93.310	National Institutes of Health	Pass-Through	Case Western Reserve University	OT2OD025307-01	Trans-NIH Research Support	(1,935)	
	93.310	National Institutes of Health	Pass-Through	Tennessee State University	1U010D33244-01	Trans-NIH Research Support	122,789	
	93.310	National Institutes of Health	Pass-Through	University of California San Francisco	11603sc	Trans-NIH Research Support	(12)	-
	93.310	National Institutes of Health	Pass-Through	VUMC	VUMC 68757	Trans-NIH Research Support	24,299	
							3,398,679	383,986
	93.323	Centers for Disease Control	Pass-Through	TN Department of Health	34349-92919	Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	7,942	<u> </u>
							7,942	
	93,350	National Institutes of Health	Direct		3UH3TR000491-04S2	National Center for Advancing Translational Sciences	7,225	
	93.350	National Institutes of Health	Direct		3UH3TR002097-04S1	National Center for Advancing Translational Sciences	269.323	187,801
	93.350	National Institutes of Health	Direct		4UH3TR002097-0431	National Center for Advancing Translational Sciences	187.519	82.649
	93.350	National Institutes of Health	Direct		5U01TR002383-04	National Center for Advancing Translational Sciences	1 497 700	1,056,061
	93.350	National Institutes of Health		Poston University	U01TR002625		66.584	1,050,001
		National Institutes of Health	Pass-Through Pass-Through	Boston University	VUMC 63366	National Center for Advancing Translational Sciences	(3.549)	-
	93.350 93.350	National Institutes of Health		VUMC	VUMC 63366 VUMC101101	National Center for Advancing Translational Sciences	(3,549) 88,705	-
			Pass-Through			National Center for Advancing Translational Sciences		-
	93.350	National Institutes of Health	Pass-Through	VUMC	VUMC63366	National Center for Advancing Translational Sciences	192,270	<u> </u>
							2,305,777	1,326,512
	93.351	National Institutes of Health	Direct		1 R25 OD021883-01	Research Infrastructure Programs	(7,394)	
	93.351	National Institutes of Health	Direct		1S100D028704-01A1	Research Infrastructure Programs	1,634,474	
	93.351	National Institutes of Health	Direct		1S100D032234-01	Research Infrastructure Programs	599.454	
	93.351	National Institutes of Health	Direct		1S100D034244-01	Research Infrastructure Programs	781,147	
		National Institutes of Health	Pass-Through	Oregon Health & Science University	1014252-026_VANDERBILT	Research Infrastructure Programs	75.575	
				· · · · · · · · · · · · · · · · · · ·			3.083.257	
								<u> </u>
	93.353	National Institutes of Health	Pass-Through	VUMC	VUMC 69193	21st Century Cures Act - Beau Biden Cancer Moonshot	791,714	<u> </u>
							791,714	-

	Assistance							Passed
	Listing						Federal	Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	93.361 93.361	National Institutes of Health National Institutes of Health	Direct Pass-Through	East Carolina University	1K23NR020512-01 AWD-21-0749-S001	Nursing Research Nursing Research	105,834 37,671	-
	93.301	National institutes of Health	Pass-Through	East Carolina University	AWD-21-0749-5001	Nursing Research	143 505	<u> </u>
	93,393	National Institutes of Health	Direct		1R01CA218315-01A1	Cancer Cause and Prevention Research	193,505	36.628
	93.393	National Institutes of Health	Direct		1R01CA239161-01	Cancer Cause and Prevention Research	465,794	30,028
	93.393	National Institutes of Health	Direct		1R01CA240274-01A1	Cancer Cause and Prevention Research	189,530	25,402
	93.393	National Institutes of Health	Direct		1R01CA247833-01	Cancer Cause and Prevention Research	351,913	135.356
	93.393	National Institutes of Health	Direct		1R03CA270451-01A1	Cancer Cause and Prevention Research	58,272	
	93.393	National Institutes of Health	Direct		1U01CA224276	Cancer Cause and Prevention Research	196,952	52,073
	93.393	National Institutes of Health	Direct		2P01CA160032-26A1	Cancer Cause and Prevention Research	1,403,434	467,727
	93.393	National Institutes of Health	Direct		2R01CA164605	Cancer Cause and Prevention Research	351,627	24,641
	93.393	National Institutes of Health	Direct		2R01CA200709-06A1	Cancer Cause and Prevention Research	400,617	35,034
	93.393 93.393	National Institutes of Health National Institutes of Health	Direct Pass-Through	Lawrence Berkley National Laboratory	2R50CA211206-06 7615713	Cancer Cause and Prevention Research Cancer Cause and Prevention Research	224,609 213,184	
	93.393	National Institutes of Health	Pass-Through	University of California Berkelev	2 P01 CA092584-16	Cancer Cause and Prevention Research	(119)	
	93.393	National Institutes of Health	Pass-Through	University of Kentucky	3200003835-21-261	Cancer Cause and Prevention Research	5,665	
	93.393	National Institutes of Health	Pass-Through	VUMC	CA249863	Cancer Cause and Prevention Research	39,591	
	93.393	National Institutes of Health	Pass-Through	VUMC	VUMC 59163	Cancer Cause and Prevention Research	91,066	
	93.393	National Institutes of Health	Pass-Through	VUMC	VUMC 82376	Cancer Cause and Prevention Research	27,493	
	93.393	National Institutes of Health	Pass-Through	VUMC	VUMC67580	Cancer Cause and Prevention Research	(2,488)	
	93.393	National Institutes of Health	Pass-Through	VUMC	VUMC68022	Cancer Cause and Prevention Research	9,421	-
	93.393	National Institutes of Health	Pass-Through	VUMC	VUMC94135	Cancer Cause and Prevention Research	16,310	<u> </u>
							4,236,395	776,860
	93.394	National Institutes of Health	Direct		1 R01 CA186193-01	Cancer Detection and Diagnosis Research	1	
	93.394	National Institutes of Health	Direct		1R01CA212147-01A1	Cancer Detection and Diagnosis Research	320,990	71,009
	93.394 93.394	National Institutes of Health National Institutes of Health	Direct Pass-Through	Thomas Jefferson University	1R01CA245134-01A1 080-27000-S45801	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research	307,092 17,243	12,518
	93.394	National Institutes of Health	Pass-Through	VUMC	VUMC105998	Cancer Detection and Diagnosis Research	8,960	
	93.394	National Institutes of Health	Pass-Through	VUMC	VUMC89520	Cancer Detection and Diagnosis Research	229,664	
	93.394	National Institutes of Health	Pass-Through	VUMC	VUMC91511	Cancer Detection and Diagnosis Research	21,380	
						·····	905,329	83,526
	93.395	National Institutes of Health	Direct		1R01CA214043	Cancer Treatment Research	109.197	32,934
	93.395	National Institutes of Health	Direct		1R01CA224241-01A1	Cancer Treatment Research	252.054	32,934
	93,395	National Institutes of Health	Direct		1R01CA243326-01A1	Cancer Treatment Research	332,620	50,425
	93.395	National Institutes of Health	Direct		1R01CA266767-01A1	Cancer Treatment Research	524,438	
	93.395	National Institutes of Health	Direct		1R01CA274675-01	Cancer Treatment Research	400,473	63,130
	93.395	National Institutes of Health	Direct		2R01CA116021-16	Cancer Treatment Research	441,740	33,659
	93.395	National Institutes of Health	Direct		7R01CA203991-02	Cancer Treatment Research	1,676	-
	93.395	National Institutes of Health	Direct		R01CA260958	Cancer Treatment Research	611,055	59,390
	93.395	National Institutes of Health	Pass-Through	Georgetown University Medical Center	425126_GR424862_VU	Cancer Treatment Research	12,565	
	93.395 93.395	National Institutes of Health National Institutes of Health	Pass-Through Pass-Through	University of Texas at Austin University of Texas Southwestern Medical Center	UTAUS-SUB00000618 GMO 190908 PO#0000001594	Cancer Treatment Research Cancer Treatment Research	82,423 100,751	
	93.395	National Institutes of Health	Pass-Through	VUMC	VUMC103965	Cancer Treatment Research	6,871	
	93.395	National Institutes of Health	Pass-Through	VUMC	VUMC66321	Cancer Treatment Research	201.096	
							3,076,959	239,538
	93.396	National Institutes of Health	Direct		1R21CA227483-01A1	Cancer Biology Research	1,708	
	93,396	National Institutes of Health	Direct		1 R35 CA197571-01	Cancer Biology Research	218,964	
	93.396	National Institutes of Health	Direct		1P01CA229123-01A1	Cancer Biology Research	1,994,314	907,704
	93.396	National Institutes of Health	Direct		1R01CA206458-01	Cancer Biology Research	(10,357)	
	93.396	National Institutes of Health	Direct		1R01CA226833-01A1	Cancer Biology Research	349,396	
	93.396	National Institutes of Health	Direct		1R01CA249684-01A1	Cancer Biology Research	450,764	
	93.396	National Institutes of Health	Direct		1R01CA255446-01A1	Cancer Biology Research	422,739	10,128
	93.396	National Institutes of Health	Direct		1R01CA256054-01A1	Cancer Biology Research	326,896	21,374
	93.396 93.396	National Institutes of Health National Institutes of Health	Direct Direct		1R21CA249770-01A1 1R21CA271715-01	Cancer Biology Research Cancer Biology Research	122,337 66,250	-
	93.396	National Institutes of Health	Direct		1R50CA243783	Cancer Biology Research	161,880	
	93,396	National Institutes of Health	Direct		1U01CA202229-01	Cancer Biology Research	87,938	18,352
	93,396	National Institutes of Health	Direct		1U01CA215845-01	Cancer Biology Research	117.487	
	93.396	National Institutes of Health	Direct		2R01CA206458-06	Cancer Biology Research	577,569	159,303
	93.396	National Institutes of Health	Direct		4R00CA201304-03	Cancer Biology Research	(13,721)	
	93.396	National Institutes of Health	Pass-Through	Dartmouth College	1R01CA244188-01A1	Cancer Biology Research	162,948	
	93.396	National Institutes of Health	Pass-Through	Dartmouth College	R1729	Cancer Biology Research	55,258	-
	93.396	National Institutes of Health	Pass-Through	Massachusetts Institute of Technology	5U01CA215798	Cancer Biology Research	(1,687)	-
	93.396 93.396	National Institutes of Health National Institutes of Health	Pass-Through	Salk Institute for Biological Studies University of Texas Southwestern Medical Center	1R01 CA240909 1 R35 CA220449	Cancer Biology Research Cancer Biology Research	23,042 30,518	-
	93.396	National Institutes of Health	Pass-Through Pass-Through	University of Texas Southwestern Medical Center	1 R35 CA220449 1 U01 CA196405-01a	Cancer Biology Research Cancer Biology Research	30,518	-
	93.396	National Institutes of Health	Pass-Through	VUMC	R01CA249424-01	Cancer Biology Research	149.859	
	93.396	National Institutes of Health	Pass-Through	VUMC	TBD	Cancer Biology Research	3.419	
	93.396	National Institutes of Health	Pass-Through	VUMC	VUMC 65678	Cancer Biology Research	9,031	
	93.396	National Institutes of Health	Pass-Through	VUMC	VUMC 74729	Cancer Biology Research	5,042	
	93.396	National Institutes of Health	Pass-Through	VUMC	VUMC 77087	Cancer Biology Research	19,157	
	93.396	National Institutes of Health	Pass-Through	VUMC	VUMC 79040/VUMC 106934	Cancer Biology Research	136,093	-
	93.396	National Institutes of Health	Pass-Through	VUMC	VUMC107555	Cancer Biology Research	14,377	<u> </u>
							5,508,439	1,116,862

	Assistance							Passed
Cluster	Listing	Cluster Title/Federal Grantor/Program	Time	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Through to Subrecipients
Cluster	Number	Cluster Title/Federal Granto//Program	Туре	Pass-Inrough Grantor	Award Identifier	Assistance Listing Program Little	Expenditures	Subrecipients
	93.397	National Institutes of Health	Direct		1 U54 CA217450-01A1	Cancer Centers Support Grants	1,236,850	329,552
	93.397	National Institutes of Health	Pass-Through	VUMC	VUMC 59469	Cancer Centers Support Grants	75,446	
	93.397	National Institutes of Health	Pass-Through	VUMC	VUMC 59496	Cancer Centers Support Grants	1,078,430	
	93,397	National Institutes of Health	Pass-Through	VUMC	VUMC 77006	Cancer Centers Support Grants	541.029	
	93.397	National Institutes of Health	Pass-Through	VUMC	VUMC106128	Cancer Centers Support Grants	57,788	
		National Institutes of Health	Pass-Through	VUMC	VUMC108705	Cancer Centers Support Grants	38,156	
	93.397	National Institutes of Health	Pass-Through	VUMC	VUMC59466	Cancer Centers Support Grants	212.595	-
	93.397	National Institutes of Health		VUMC	VUMC86404	Cancer Centers Support Grants	(2.465)	
	93.397	National Institutes of Health	Pass-Through Pass-Through	VUMC	VUMC92816	Cancer Centers Support Grants	(2,465) 72,250	
		National Institutes of Health	Pass-Through	VUMC	VUMC94993	Cancer Centers Support Grants	2,426	
	93.397	National Institutes of Health	Pass-Through	VUMC	VUMC95409	Cancer Centers Support Grants	15,398	
							3,327,903	329,552
	93.398	National Institutes of Health	Direct		1 F30 CA239367-01A1	Cancer Research Manpower	48,311	
	93.398	National Institutes of Health	Direct		1F30CA236131	Cancer Research Manpower	135	
	93.398	National Institutes of Health	Direct		1F30CA236157	Cancer Research Manpower	66,334	
	93.398	National Institutes of Health	Direct		1F30CA247078-01	Cancer Research Manpower	31,101	
	93.398	National Institutes of Health	Direct		1F31CA243148-01	Cancer Research Manpower	2.638	
		National Institutes of Health	Direct		1F31CA243353	Cancer Research Manpower	14,743	
	93.398	National Institutes of Health	Direct		1F31CA247131-01A1	Cancer Research Manpower	(150)	
	93.398	National Institutes of Health	Direct		1F31CA247256-01A1	Cancer Research Manpower	1,878	
	93.398	National Institutes of Health	Direct		1F31CA254311-01A1	Cancer Research Manpower	28,175	
		National Institutes of Health	Direct		1F31CA257275-01	Cancer Research Manpower	29,573	
	93.398	National Institutes of Health	Direct		1F31CA261049-01A1	Cancer Research Manpower	32.278	
	93.398	National Institutes of Health	Direct		1F31CA271790-01A1	Cancer Research Manpower	2,262	
	93.398	National Institutes of Health	Direct		1F32CA250258-01	Cancer Research Manpower	(11,861)	
	93.398	National Institutes of Health	Direct		1F99CA274695-01	Cancer Research Manpower	29.053	
		National Institutes of Health	Direct		2T32CA009582-36	Cancer Research Manpower	10.962	-
	93.398	National Institutes of Health	Direct		2T32CA009592-30 2T32CA009592-31	Cancer Research Manpower	406,214	9,514
		National Institutes of Health	Direct		2T32CA009592-31 2T32CA119925-11-15	Cancer Research Manpower Cancer Research Manpower	406,214	9,514
	93.398	National Institutes of Health	Direct		4K00CA264734-03	Cancer Research Manpower	49,317	-
	93.398	National Institutes of Health	Direct		F30CA247202	Cancer Research Manpower	45,971	-
	93.398	National Institutes of Health	Direct		F31CA265070	Cancer Research Manpower	31,579	-
	93.398	National Institutes of Health	Direct		T32CA009582-31-35	Cancer Research Manpower	316,199	<u> </u>
							1,591,419	9,514
	93,433	Administration for Community Living	Pass-Through	Virginia Commonwealth University	FP00010584 SA001	ACL National Institute on Disability, Independent Living, and Rehabilitation Research	277 469	28,493
	93,433	Administration for Community Living	Pass-Through	Virginia Commonwealth University	FP00010656_SA002	ACL National Institute on Disability, Independent Living, and Rehabilitation Research	208,515	20,100
	33.435	Administration for Community Envirg	r ass-rillough	Virginia Commonwealch Chiversity	1100010000_0A002	Act National Institute on Disability, independent Living, and Kenabilitation Research		
							485,984	28,493
	93.516	Health Resources and Services Administration	Direct		1T29HP46749-01-00	Public Health Training Centers Program	182,648	53,846
							182.648	53.846
								33,040
	93.547	National Institutes of Health	Pass-Through	VUMC	VUMC 77779	National Health Service Corps	27,690	<u> </u>
							27,690	
	93,564	US Department of Justice	Pass-Through	University of Texas at Austin	UTAUS-SUB00000419	Child Support Enforcement Research	42.927	
	93.304	03 Department of Justice	Fass-mough	University of Texas at Austin	01A03-30B0000419			<u> </u>
							42,927	<u> </u>
	93.590	Administration for Children and Families	Pass-Through	University of Texas at Austin	UTAUS-SUB00000444	Community-Based Child Abuse Prevention Grants	224,723	
							224,723	
		National Institutes of Health	Pass-Through	TN Council on Developmental Disabilities	31614-81221 / 67351	Developmental Disabilities Basic Support and Advocacy Grants	(1,335)	-
	93.630	National Institutes of Health	Pass-Through	VUMC	VUMC 82989	Developmental Disabilities Basic Support and Advocacy Grants	48,035	<u> </u>
							46,700	
	93.632	Administration for Community Living	Pass-Through	VUMC	90DDUC077-01-00	University Centers for Excellence in Developmental Disabilities Education, Research, and Service	163,026	
	ag.032	A service and the contributive living	. aaa- muuyn		335500077-01-00	Chirology Controls for Excellence in Developmental Diadolitities Education, Research, and Service		<u> </u>
							163,026	<u> </u>
	93.732	Health Resources and Services Administration	Direct		2M01HP31387-05-00	Mental and Behavioral Health Education and Training Grants	647,490	
	93.732	Health Resources and Services Administration	Direct		HRSA M01HP31387	Mental and Behavioral Health Education and Training Grants	(1,140)	
							646,350	
	93.837	National Institutes of Health	Direct		1 F31 HL149168-01	Cardiovascular Diseases Research	185	-
	93.837	National Institutes of Health	Direct		1F30HL145917	Cardiovascular Diseases Research	57,822	
	93.837	National Institutes of Health	Direct		1F30HL145919-01A1	Cardiovascular Diseases Research	26,501	-
	93.837	National Institutes of Health	Direct		1F30HL151069 YR 1-5	Cardiovascular Diseases Research	30,891	-
		National Institutes of Health	Direct		1F30HL163923-01	Cardiovascular Diseases Research	30,935	-
		National Institutes of Health	Direct		1F31HL149168-01	Cardiovascular Diseases Research	(500)	-
	93.837	National Institutes of Health	Direct		1F31HL151115-01	Cardiovascular Diseases Research	(29)	
	93.837	National Institutes of Health	Direct		1F31HL154569-01	Cardiovascular Diseases Research	31,280	
	93.837	National Institutes of Health	Direct		1F31HL154727-01	Cardiovascular Diseases Research	31,221	
	93.837	National Institutes of Health	Direct		1F31HL162476-01A1	Cardiovascular Diseases Research	44,613	
	93.837	National Institutes of Health	Direct		1F31HL167471-01	Cardiovascular Diseases Research	18,846	
	93.837	National Institutes of Health	Direct		1F32HL154596-01	Cardiovascular Diseases Research	4,218	
		National Institutes of Health	Direct		1R01HL122347 01/04	Cardiovascular Diseases Research	(9,243)	
	93.837	National Institutes of Health	Direct		1R01HL151223-01	Cardiovascular Diseases Research	724,071	277,295
	93.837	National Institutes of Health	Direct		1R01HL156034-01A1	Cardiovascular Diseases Research	367,410	19,911
	93.837	National Institutes of Health	Direct		1R25HL145330-01	Cardiovascular Diseases Research	106,548	
	93.837	National Institutes of Health	Direct		1T32HL144446	Cardiovascular Diseases Research	278,784	6,399
	93.837	National Institutes of Health	Direct		5T32HL007411-37	Cardiovascular Diseases Research	16,024	
	93.837	National Institutes of Health	Pass-Through	Northwestern University	2R01HL122010-05	Cardiovascular Diseases Research	47,498	
	93.837	National Institutes of Health	Pass-Through	Northwestern University	60062687 VU	Cardiovascular Diseases Research	584,718	

,	Assistance Listing						Federal	Passed Through to
Cluster		Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	93,837	National Institutes of Health	Dava Thanah	University of Virginia	7R01HI 144131-02	Cardiovascular Diseases Research	(395)	
	93.837	National Institutes of Health	Pass-Through		2R44HL140709-02/UNIV61426	Cardiovascular Diseases Research	(395) 48,212	22,705
	93.837	National Institutes of Health	Pass-Through Pass-Through	Virtuoso Surgical, Inc VUMC	2P01HL116263-06A1	Cardiovascular Diseases Research		22,705
	93.837 93.837	National Institutes of Health	Pass-Through Pass-Through	VUMC	2P01HL116263-06A1 VUMC 63572	Cardiovascular Diseases Research Cardiovascular Diseases Research	508,401 (3)	-
	93.837	National Institutes of Health	Pass-Through	VUMC	VUMC 63572 VUMC 65119	Cardiovascular Diseases Research	(3)	
								-
	93.837 93.837	National Institutes of Health	Pass-Through	VUMC	VUMC103886 VUMC105831	Cardiovascular Diseases Research	50,921 18,806	-
		National Institutes of Health	Pass-Through			Cardiovascular Diseases Research		-
	93.837	National Institutes of Health	Pass-Through	VUMC	VUMC93385	Cardiovascular Diseases Research	20,318	-
	93.837	National Institutes of Health	Pass-Through	VUMC	VUMC97224	Cardiovascular Diseases Research	2,573	<u> </u>
							3,055,199	326,310
	93.838	National Institutes of Health	Direct		1F31HL151033-01A1	Lung Diseases Research	4.306	
	93.838	National Institutes of Health	Direct		1F30HL159941-01A1	Lung Diseases Research	26,433	
	93.838	National Institutes of Health	Direct		1F31HL162483-01A1	Lung Diseases Research	26.013	
	93.838	National Institutes of Health	Direct		1R35HL135790	Lung Diseases Research	522,784	
	93.838	National Institutes of Health	Pass-Through	University of North Carolina Chapel Hill	5118208	Lung Diseases Research	37,289	
	93,838	National Institutes of Health	Pass-Through	University of Texas Medical Branch at Galveston	R01HL145477	Lung Diseases Research	5,246	
	93.838	National Institutes of Health	Pass-Through	VUMC	R35 HL150783	Lung Diseases Research	12,155	
	93.838	National Institutes of Health	Pass-Through	VUMC	TBD	Lung Diseases Research	6,170	
	93.838	National Institutes of Health	Pass-Through	VUMC	VUMC - 5T32HL087738-15	Lung Diseases Research	586	
	93.838	National Institutes of Health	Pass-Through	VUMC	VUMC 85302	Lung Diseases Research	(88)	
	93.838	National Institutes of Health	Pass-Through	VUMC	VUMC103868	Lung Diseases Research	38,379	
	93.838	National Institutes of Health	Pass-Through	VUMC	VUMC104906	Lung Diseases Research	28,447	
							707,721	
	93.839	National Institutes of Health	Direct		1F31HL152529-01	Blood Diseases and Resources Research	23.850	
	93,839	National Institutes of Health	Direct		1R01HL133923	Blood Diseases and Resources Research	20,000	
	93.839	National Institutes of Health	Direct		F31HL156565	Blood Diseases and Resources Research	31,254	
	93.839	National Institutes of Health	Pass-Through	Augusta University	33737-19	Blood Diseases and Resources Research	(102)	
	93.839	National Institutes of Health	Pass-Through	Vasowatch, LLC	n/a	Blood Diseases and Resources Research	30.819	
	33.033		r ass-mough	vasowatch, EEO	1va	biolog biologist and resolution resolution	85,906	
	93.840	National Institutes of Health	Pass-Through	VUMC	VUMC97349	Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	12,903	
							12,903	
	93,846	National Institutes of Health	Direct		1F31AR077386-01	Arthritis, Musculoskeletal and Skin Diseases Research	(161)	
	93.846 93.846	National Institutes of Health	Direct		1F31AR082662-01	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	9,048	
	93.846	National Institutes of Health	Direct		1R01AR064772-01A1	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research		
	93.846 93.846	National Institutes of Health			1R01AR064772-01A1 1R01AR072679-01A1	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	(1,729) 220.664	40.004
	93.846	National Institutes of Health	Direct		1R01AR072679-01A1	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	220,064 410.987	46,801
	93.846 93.846	National Institutes of Health	Direct		1R01AR078686-01A1 1R21AR078636	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	410,987 105,056	13,163
	93.846	National Institutes of Health	Direct		1R21AR078636 1R21AR079683-01	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	215,944	10.215
	93.846 93.846	National Institutes of Health	Direct		2T32AR059039	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	215,944 140,311	9,831
	93.846	National Institutes of Health	Direct		5T32AR059039	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	(4.293)	9,831
	93.846 93.846	National Institutes of Health			R21AR079245	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	(4,293)	
	93.846	National Institutes of Health	Direct Pass-Through	Carle Foundation Hospital	CFH - 1R0AR073831	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	82.012	
	93.846	National Institutes of Health	Pass-Through	Emory University	Emory Univ - A436983	Arthritis, Musculoskeletal and Skin Diseases Research	27.597	
	93.846	National Institutes of Health	Pass-Through	Finally, LLC	ISA00000206	Arthritis, Musculoskeletal and Skin Diseases Research	33,316	
	93.846	National Institutes of Health	Pass-Through	Memorial Sloan Kettering Cancer Center	SLOANKETT - BD528065	Arthritis, Musculoskeletal and Skin Diseases Research	61,177	
	93.846	National Institutes of Health	Pass-Through	University of Arizona	631693	Arthritis, Musculoskeletal and Skin Diseases Research	18.923	
	93.846	National Institutes of Health	Pass-Through	University of Michigan	SUBK00016577	Arthritis, Musculoskeletal and Skin Diseases Research	13,534	
	93.846	National Institutes of Health	Pass-Through	VUMC	VUMC 74537	Arthritis, Musculoskeletal and Skin Diseases Research	(9,590)	
	93.846	National Institutes of Health	Pass-Through	VUMC	VUMC98307	Arthritis, Musculoskeletal and Skin Diseases Research	9,340	
	33.040		r ass-mough	VOMO	V0MIC30307	Artifitias, Musculoskeletar and Skill Diseases Research		
							1,437,819	80,010
	93.847	National Institutes of Health	Direct		1 R01 DK103831-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	185	-
	93.847	National Institutes of Health	Direct		1R03DK127484-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	111,615	
	93.847	National Institutes of Health	Direct		1 R01 DK106228-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	(448)	
	93.847	National Institutes of Health	Direct		1 R01 DK111949-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	(25,666)	
	93.847	National Institutes of Health	Direct		1F30DK120114	Diabetes, Digestive, and Kidney Diseases Extramural Research	55,571	-
	93.847	National Institutes of Health	Direct		1F30DK120149	Diabetes, Digestive, and Kidney Diseases Extramural Research	48,992	
	93.847	National Institutes of Health	Direct		1F30DK121438	Diabetes, Digestive, and Kidney Diseases Extramural Research	64,979	
	93.847	National Institutes of Health	Direct		1F30DK127699	Diabetes, Digestive, and Kidney Diseases Extramural Research	31,038	-
	93.847	National Institutes of Health	Direct		1F30DK134041-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	16,028	-
	93.847	National Institutes of Health	Direct		1F30DK134046-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	26,732	-
	93.847	National Institutes of Health	Direct		1F31DK122650-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	601	-
	93.847	National Institutes of Health	Direct		1F31DK122692-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	865	-
	93.847	National Institutes of Health	Direct		1F31DK123881-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	(2,689)	-
	93.847	National Institutes of Health	Direct		1F31DK127687-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	34,768	
	93.847	National Institutes of Health	Direct		1F31DK130599-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,092	
	93.847	National Institutes of Health	Direct		1F31DK131902-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	24,495	-
	93.847	National Institutes of Health	Direct		1F31DK135164-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	11,618	
	93.847	National Institutes of Health	Direct		1F31DK136344-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	2,906	
	93.847	National Institutes of Health	Direct		1F32DK123879-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	52,874	
	93.847	National Institutes of Health	Direct		1F32DK128887-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	586	
	93.847	National Institutes of Health	Direct		1K01DK135924-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	8,210	
	93.847	National Institutes of Health	Direct		1R01DK106476-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	(55)	
	93.847	National Institutes of Health	Direct		1R01DK117147	Diabetes, Digestive, and Kidney Diseases Extramural Research	439,841	208,781
	93.847	National Institutes of Health	Direct		1R01DK117158-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	455,339	
	93.847	National Institutes of Health	Direct		1R01DK119508	Diabetes, Digestive, and Kidney Diseases Extramural Research	306,505	16,161
	93.847	National Institutes of Health	Direct		1R01DK125546-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	635,701	34,111

	Assistance							Passed
Cluster	Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Through to Subrecipients
	93.847	National Institutes of Health	Direct		1R01DK125696-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	609,572	
	93.847	National Institutes of Health	Direct		1R01DK128710-01	Diabetes, Digestive, and Kidney Diseases Extramutal Research	579,966	
	93.847	National Institutes of Health	Direct		1R01DK129340-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	612,593	
	93.847	National Institutes of Health	Direct		1R01DK131082-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	654,633	
	93.847	National Institutes of Health	Direct		1R01DK132259-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	128,659	
	93.847	National Institutes of Health	Direct		1R01DK132338-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	218,406	5,130
	93.847	National Institutes of Health	Direct		1R01DK132852-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	271,469	
	93.847	National Institutes of Health	Direct		1R01DK135597-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,723	
	93.847	National Institutes of Health	Direct		1R25DK111362	Diabetes, Digestive, and Kidney Diseases Extramural Research	120,642	38,783
	93.847	National Institutes of Health	Direct		1R56DK132629-01A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	50,928	
	93.847	National Institutes of Health	Direct		1U01DK133766-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	300,484	31,557
	93.847	National Institutes of Health	Direct		1U2CDK135073-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	278,143	
	93.847	National Institutes of Health	Direct		2 R01 DK097392-06A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	383,793	
	93.847	National Institutes of Health	Direct		2R01 DK106228-06	Diabetes, Digestive, and Kidney Diseases Extramural Research	739,375	58,692
	93.847	National Institutes of Health	Direct		2R01DK018243-43A1	Diabetes, Digestive, and Kidney Diseases Extramural Research	538,302	-
	93.847 93.847	National Institutes of Health National Institutes of Health	Direct		2R01DK050277-24 2R01DK090570	Diabetes, Digestive, and Kidney Diseases Extramural Research	679,116 586,896	119,954 213.913
	93.847 93.847	National Institutes of Health	Direct		2R01DK090570 2R01DK103831-06	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	537,334	91,982
	93.847	National Institutes of Health	Direct		2R01DK106476-06A1	Diabetes, Digestive, and Kidney Diseases Extramulal Research	632,751	91,902
	93.847	National Institutes of Health	Direct		2R01DK1104476-06A1	Diabetes, Digestive, and Kidney Diseases Extramulal Research	415.600	
	93.847	National Institutes of Health	Direct		2T32DK007563-31	Diabetes, Digestive, and Kidney Diseases Extramulal Research	699.529	
	93.847	National Institutes of Health	Direct		2T32DK101003-06	Diabetes, Digestive, and Kidney Diseases Extranural Research	369.523	
	93.847	National Institutes of Health	Direct		2U2CDK059637-16 thru 21	Diabetes, Digestive, and Kidney Diseases Extramural Research	79.332	1.031
	93.847	National Institutes of Health	Direct		DK050203	Diabetes, Digestive, and Kidney Diseases Extramural Research	5.695	1,749
	93.847	National Institutes of Health	Direct		F31DK127728	Diabetes, Digestive, and Kidney Diseases Extramural Research	34.322	.,
	93.847	National Institutes of Health	Direct		R01DK106348 1/5	Diabetes, Digestive, and Kidney Diseases Extramural Research	19,129	
	93.847	National Institutes of Health	Direct		R01DK115620	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,504	
	93.847	National Institutes of Health	Direct		R01DK121520	Diabetes, Digestive, and Kidney Diseases Extramural Research	526,713	
	93.847	National Institutes of Health	Direct		R01DK124870	Diabetes, Digestive, and Kidney Diseases Extramural Research	59,293	
	93.847	National Institutes of Health	Pass-Through	Augusta University	32307-56	Diabetes, Digestive, and Kidney Diseases Extramural Research	(5,653)	
	93.847	National Institutes of Health	Pass-Through	Augusta University	35235-8	Diabetes, Digestive, and Kidney Diseases Extramural Research	105	-
	93.847	National Institutes of Health	Pass-Through	Cincinnati Children's Hospital Medical Center	R01DK123181	Diabetes, Digestive, and Kidney Diseases Extramural Research	63,330	
	93.847	National Institutes of Health	Pass-Through	Columbia University	1(GG016489-01)	Diabetes, Digestive, and Kidney Diseases Extramural Research	112,320	
	93.847	National Institutes of Health	Pass-Through	Endo Theia, Inc	R44DK126606	Diabetes, Digestive, and Kidney Diseases Extramural Research	81,859	-
	93.847	National Institutes of Health	Pass-Through	Howard University, Inc	GRT000333 -10010792	Diabetes, Digestive, and Kidney Diseases Extramural Research	8,353	
	93.847	National Institutes of Health	Pass-Through	Indiana University	2R01DK040949	Diabetes, Digestive, and Kidney Diseases Extramural Research	50,679	
	93.847	National Institutes of Health	Pass-Through	Indiana University	IN4684797VU	Diabetes, Digestive, and Kidney Diseases Extramural Research	128,386	
	93.847 93.847	National Institutes of Health National Institutes of Health	Pass-Through Pass-Through	Massachusetts General Hospital Stanford University	5R01DK117236-MASSGEN 62628788-199245	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	31,860 53,883	
	93.847	National Institutes of Health	Pass-Through	Stanford University Stanford University	R01DK126482		222,182	
	93.847	National Institutes of Health	Pass-Through	University of Alabama at Birmingham	000531644-SC001	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	145,799	
	93.847	National Institutes of Health	Pass-Through	University of Alberta	RES0041098 S011	Diabetes, Digestive, and Kidney Diseases Extramulal Research	129.745	22.817
	93.847	National Institutes of Health	Pass-Through	University of California San Diego	KR704667	Diabetes, Digestive, and Kidney Diseases Extramutal Research	72.063	22,017
	93.847	National Institutes of Health	Pass-Through	University of Ellinois at Chicago	17584	Diabetes, Digestive, and Kidney Diseases Extranural Research	5.984	
	93.847	National Institutes of Health	Pass-Through	University of Michigan	1R01DK126715-01	Diabetes, Digestive, and Kidney Diseases Extramural Research	128,162	
	93.847	National Institutes of Health	Pass-Through	University of Texas Southwestern Medical Center	GMO 201024 PO#0000001887	Diabetes, Digestive, and Kidney Diseases Extramural Research	225,753	
	93.847	National Institutes of Health	Pass-Through	VUMC	DK106755-VUMC 60122	Diabetes, Digestive, and Kidney Diseases Extramural Research	(4,231)	
	93.847	National Institutes of Health	Pass-Through	VUMC	TBD	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,354	
	93.847	National Institutes of Health	Pass-Through	VUMC	UNIV58624	Diabetes, Digestive, and Kidney Diseases Extramural Research	(28,167)	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC 59472	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,393	-
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC 71719	Diabetes, Digestive, and Kidney Diseases Extramural Research	8,066	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC 77479	Diabetes, Digestive, and Kidney Diseases Extramural Research	7,459	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC 82317	Diabetes, Digestive, and Kidney Diseases Extramural Research	31,087	-
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC 84206	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,398	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC100632	Diabetes, Digestive, and Kidney Diseases Extramural Research	35,743	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC100878	Diabetes, Digestive, and Kidney Diseases Extramural Research	9,948	-
	93.847 93.847	National Institutes of Health	Pass-Through	VUMC	VUMC104665 VUMC107810	Diabetes, Digestive, and Kidney Diseases Extramural Research	62,731	-
	93.847 93.847	National Institutes of Health National Institutes of Health	Pass-Through	VUMC	VUMC107810 VUMC111636	Diabetes, Digestive, and Kidney Diseases Extramural Research	38,303 17.021	-
	93.847 93.847	National Institutes of Health National Institutes of Health	Pass-Through Pass-Through	VUMC	VUMC111636 VUMC59165	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	17,021 200.613	-
	93.847 93.847	National Institutes of Health	Pass-Through Pass-Through	VUMC	VUMC59472	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	530,266	-
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC78181	Diabetes, Digestive, and Kidney Diseases Extramutal Research	19,982	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC91436	Diabetes, Digestive, and Kidney Diseases Extranural Research	49,499	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC92750	Diabetes, Digestive, and Kidney Diseases Extramural Research	20.015	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC93219	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,977	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC94882	Diabetes, Digestive, and Kidney Diseases Extramural Research	154,446	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC96978	Diabetes, Digestive, and Kidney Diseases Extramural Research	15,286	-
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC97487	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,102	
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC99890	Diabetes, Digestive, and Kidney Diseases Extramural Research	84,421	-
	93.847	National Institutes of Health	Pass-Through	VUMC	VUMC99988	Diabetes, Digestive, and Kidney Diseases Extramural Research	12,923	
	93.847	National Institutes of Health	Pass-Through	Washington University In St. Louis	WU-22-0230	Diabetes, Digestive, and Kidney Diseases Extramural Research	49,868	
							15,354,425	844,663
	93.853	National Institutes of Health	Direct		1 F31 NS113510-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders	2.331	
	93.853	National Institutes of Health	Direct		1 R01 NS096899-01A1	Extramulal Research Programs in the Neurosciences and Neurological Disorders	(1.198)	
	93.853	National Institutes of Health	Direct		1F31NS120401-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders	22,893	
	93.853	National Institutes of Health	Direct		1F31NS120608-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders	31.875	
	93.853	National Institutes of Health	Direct		1F31NS125911-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	31,801	-
	93.853	National Institutes of Health	Direct		1F32NS117787-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders	75,810	
	93.853	National Institutes of Health	Direct		1F99NS125829-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	32,149	-

	Assistance	a						Passed
	Listing						Federal	Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	93.853	National Institutes of Health	Direct		1R01NS096238-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	(6,314)	
	93.853	National Institutes of Health	Direct		1R01NS102365	Extramural Research Programs in the Neurosciences and Neurological Disorders	204,595	
	93.853	National Institutes of Health	Direct		1R01NS104497	Extramural Research Programs in the Neurosciences and Neurological Disorders	(46)	
	93.853	National Institutes of Health	Direct		1R01NS106951-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	320,175	37,145
	93.853 93.853	National Institutes of Health	Direct		1R01NS107456	Extramural Research Programs in the Neurosciences and Neurological Disorders	552,475	228,788
	93.853 93.853	National Institutes of Health National Institutes of Health	Direct Direct		1R01NS110665-01A1 1R01NS111749	Extramural Research Programs in the Neurosciences and Neurological Disorders	487,984 498,559	7,154
	93.853	National Institutes of Health	Direct		1R01NS111749 1R01NS113559-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	381,816	263,185
	93.853	National Institutes of Health	Direct		1R01NS118580-01	Extramulal Research Programs in the Neurosciences and Neurological Disorders	586,701	235,070
	93.853	National Institutes of Health	Direct		1R01NS120518-01	Extramutal Research Programs in the Neurosciences and Neurological Disorders	533,431	30,806
	93.853	National Institutes of Health	Direct		1R01NS129982-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	144,743	
	93.853	National Institutes of Health	Direct		1R03NS125243-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	74,159	16,048
	93.853	National Institutes of Health	Direct		1R21NS106510-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	(750)	
	93.853	National Institutes of Health	Direct		1R21NS116257-1	Extramural Research Programs in the Neurosciences and Neurological Disorders	77,882	
	93.853	National Institutes of Health	Direct		1R21NS117160-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	(50)	
	93.853	National Institutes of Health	Direct		1R21NS119889-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	214,893	
	93.853	National Institutes of Health	Direct		1R34NS127100-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	289,505	66,762
	93.853	National Institutes of Health	Direct		1R56NS131495-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	45,752	
	93.853	National Institutes of Health	Direct		1R61NS112445-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders	366,979	164,688
	93.853	National Institutes of Health	Direct		1RF1NS127128-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	694,450 191,190	263,362
	93.853 93.853	National Institutes of Health National Institutes of Health	Direct Direct		1RF1NS129735-01 1RF1NS130334-01	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	130,128	
	93.853	National Institutes of Health	Direct		2R01NS031373 YR 27-31	Extramural Research Programs in the Neurosciences and Neurological Disorders	478.271	
	93.853	National Institutes of Health	Direct		2R01NS049251-08/12	Extramural Research Programs in the Neurosciences and Neurological Disorders	(17,000)	
	93.853	National Institutes of Health	Direct		4 R33 NS109521-02	Extramural Research Programs in the Neurosciences and Neurological Disorders	52 464	52,963
	93.853	National Institutes of Health	Direct		4R00NS114179-03	Extramural Research Programs in the Neurosciences and Neurological Disorders	365.921	52,505
	93.853	National Institutes of Health	Direct		4UH3NS116218-02	Extramural Research Programs in the Neurosciences and Neurological Disorders	257.307	46,779
	93.853	National Institutes of Health	Direct		8K00HD112280-03	Extramural Research Programs in the Neurosciences and Neurological Disorders	61,126	
	93.853	National Institutes of Health	Direct		F99NS120599	Extramural Research Programs in the Neurosciences and Neurological Disorders	8,240	
	93.853	National Institutes of Health	Direct		R01NS095989	Extramural Research Programs in the Neurosciences and Neurological Disorders	168,563	
	93.853	National Institutes of Health	Pass-Through	Children's Hospital of Philadelphia	CHOP_3201870620	Extramural Research Programs in the Neurosciences and Neurological Disorders	89,770	
	93.853	National Institutes of Health	Pass-Through	Emory University	A488325	Extramural Research Programs in the Neurosciences and Neurological Disorders	(348)	-
	93.853	National Institutes of Health	Pass-Through	Emory University	UNIV/EMORY	Extramural Research Programs in the Neurosciences and Neurological Disorders	(4,795)	-
	93.853	National Institutes of Health	Pass-Through	Loyola University Chicago	RG LU 213423-1vu	Extramural Research Programs in the Neurosciences and Neurological Disorders	13,477	
	93.853	National Institutes of Health	Pass-Through	National Institutes of Health	1F31NS129296-01	Extramural Research Programs in the Neurosciences and Neurological Disorders	19,019	
	93.853	National Institutes of Health	Pass-Through	University of Chicago	1R21NS108505-01A1	Extramural Research Programs in the Neurosciences and Neurological Disorders	89	
	93.853 93.853	National Institutes of Health National Institutes of Health	Pass-Through	University of Chicago	AWD101175 (SUB00000282) ULRF 17-1118-02	Extramural Research Programs in the Neurosciences and Neurological Disorders	(63) 319	-
	93.853	National Institutes of Health	Pass-Through Pass-Through	University of Louisville University of Nebraska Medical Center	34-2005-2113-201	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	47,862	
	93.853	National Institutes of Health	Pass-Through Pass-Through	VUMC	5R01NS108445-02	Extramural Research Programs in the Neurosciences and Neurological Disorders	47,862 4,848	
	93.853	National Institutes of Health	Pass-Through	VUMC	5T32NS007491-VUMC	Extramural Research Programs in the Neurosciences and Neurological Disorders	4,040	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 69141	Extramural Research Programs in the Neurosciences and Neurological Disorders	35.895	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 69232	Extramutal Research Programs in the Neurosciences and Neurological Disorders	(1,322)	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 69235	Extramural Research Programs in the Neurosciences and Neurological Disorders	21.520	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 72234	Extramural Research Programs in the Neurosciences and Neurological Disorders	4,183	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 75785	Extramural Research Programs in the Neurosciences and Neurological Disorders	282,087	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 80403	Extramural Research Programs in the Neurosciences and Neurological Disorders	140,372	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 84387	Extramural Research Programs in the Neurosciences and Neurological Disorders	5,692	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 89757	Extramural Research Programs in the Neurosciences and Neurological Disorders	9,013	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 91592	Extramural Research Programs in the Neurosciences and Neurological Disorders	7,748	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC 91760	Extramural Research Programs in the Neurosciences and Neurological Disorders	3,364	
	93.853	National Institutes of Health	Pass-Through	VUMC	VUMC103717	Extramural Research Programs in the Neurosciences and Neurological Disorders	8,937	-
	93.853 93.853	National Institutes of Health National Institutes of Health	Pass-Through	Yale University Yale University	n/a UNIV59887	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	181,364 33,667	
	93.853	National Institutes of Health	Pass-Through	raie University	UNIV59887	Extramutal Research Programs in the Neurosciences and Neurological Disorders		<u> </u>
							8,261,510	1,412,751
	93.855	National Institutes of Health	Direct		1 T32 AI138932-01A1	Allergy and Infectious Diseases Research	307,138	
	93.855	National Institutes of Health	Direct		1F30AI169748-01A1	Allergy and Infectious Diseases Research	16,028	-
	93.855	National Institutes of Health	Direct		1F31AI161882-01A1	Allergy and Infectious Diseases Research	34,294	
	93.855	National Institutes of Health	Direct		1F31Al167541-01	Allergy and Infectious Diseases Research	26,732	
	93.855 93.855	National Institutes of Health	Direct		1F31AI169971-01	Allergy and Infectious Diseases Research	31,124	
		National Institutes of Health	Direct		1R01AI127422-02	Allergy and Infectious Diseases Research	(63,971)	
	93.855 93.855	National Institutes of Health	Direct		1R01AI132581-01	Allergy and Infectious Diseases Research	38,417	-
	93.855 93.855	National Institutes of Health National Institutes of Health	Direct Direct		1R01AI136301-01A1 1R01AI140400-01A1	Allergy and Infectious Diseases Research	592,266 324,907	360,123
	93.855	National Institutes of Health	Direct		1R01AI140400-01A1	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	12,508	
	93.855	National Institutes of Health	Direct		1R01AI143725-01A1	Allergy and Infectious Diseases Research	780.827	342.264
	93.855	National Institutes of Health	Direct		1R01AI157827-01	Allergy and Infectious Diseases Research	812,338	341,804
	93.855	National Institutes of Health	Direct		1R01AI163472-01	Allergy and Infectious Diseases Research	613,039	103,506
	93.855	National Institutes of Health	Direct		1R01AI170546-01A1	Allergy and Infectious Diseases Research	132,831	
	93.855	National Institutes of Health	Direct		1R01AI173025-01A1	Allergy and Infectious Diseases Research	5,236	
	93.855	National Institutes of Health	Direct		1R03AI164095-01	Allergy and Infectious Diseases Research	75,610	
	93.855	National Institutes of Health	Direct		1R21AI138157-01	Allergy and Infectious Diseases Research	(4,439)	
	93.855	National Institutes of Health	Direct		1R21AI150828	Allergy and Infectious Diseases Research	156,053	
	93.855	National Institutes of Health	Direct		1R21AI152497-01A1	Allergy and Infectious Diseases Research	153,838	
	93.855	National Institutes of Health	Direct		1R21AI156693	Allergy and Infectious Diseases Research	137,306	
	93.855	National Institutes of Health	Direct		1R21AI170977-01	Allergy and Infectious Diseases Research	154,830	27,955
	93.855	National Institutes of Health	Direct		1R56Al146096-01A1	Allergy and Infectious Diseases Research	72,568	11,877
	93.855	National Institutes of Health	Direct		2T32Al112541	Allergy and Infectious Diseases Research	373,967	4,615
	93.855	National Institutes of Health	Direct		AI35937	Allergy and Infectious Diseases Research	147,334	56,588

	Assistance							Passed
	Listing						Federal	Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	93.855	National Institutes of Health	Direct		F30AI150077	Allergy and Infectious Diseases Research	65,917	
	93.855	National Institutes of Health	Direct		F30AI157036	Allergy and Infectious Diseases Research	32,293	
	93.855	National Institutes of Health	Direct		GRAEPEL-1F30AI129229	Allergy and Infectious Diseases Research	(326)	
	93.855	National Institutes of Health	Pass-Through	Dana Farber Cancer Institute	Dana Farber - 1313601	Allergy and Infectious Diseases Research	192,001	
	93.855	National Institutes of Health	Pass-Through	Dana Farber Cancer Institute	Dana Farber - 1313801	Allergy and Infectious Diseases Research	3,046	
	93.855 93.855	National Institutes of Health National Institutes of Health	Pass-Through	Dana Farber Cancer Institute Desmond Tutu HIV Foundation	Dana Farber 1313501 1R01AI150485	Allergy and Infectious Diseases Research	279,556 113.892	
	93.855	National Institutes of Health	Pass-Through Pass-Through	Georgia State University	R01AI120793	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	56,891	-
	93.855	National Institutes of Health	Pass-Through	Georgia State University	SP00015689-02	Allergy and Infectious Diseases Research	58,496	
	93.855	National Institutes of Health	Pass-Through	Indiana University	9341-VU	Allergy and Infectious Diseases Research	7,160	
	93.855	National Institutes of Health	Pass-Through	Meharry Medical College	200930FV156	Allergy and Infectious Diseases Research	82,044	
	93.855	National Institutes of Health	Pass-Through	Oak Crest Institute of Science	22-397-Vanderbilt	Allergy and Infectious Diseases Research	38,283	
	93.855	National Institutes of Health	Pass-Through	Oak Crest Institute of Science	R01 AI154561	Allergy and Infectious Diseases Research	28,641	-
	93.855	National Institutes of Health	Pass-Through	PragmaDX, Inc.	PragmaDX - 1	Allergy and Infectious Diseases Research	706	-
	93.855	National Institutes of Health	Pass-Through	Regents Of The University Of Minnesota	P010354801	Allergy and Infectious Diseases Research	19,326	
	93.855 93.855	National Institutes of Health National Institutes of Health	Pass-Through Pass-Through	Seattle Children's Hospital and Regional Medical Center University of California San Francisco	14379sc	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	17,737 8.693	
	93.855	National Institutes of Health	Pass-Through	University of California San Francisco	143795C	Allergy and Infectious Diseases Research	10.476	
	93,855	National Institutes of Health	Pass-Through	University of Idaho	R01Al084918	Allergy and Infectious Diseases Research	13,856	
	93.855	National Institutes of Health	Pass-Through	University of North Carolina Chapel Hill	5125061	Allergy and Infectious Diseases Research	752,341	
	93.855	National Institutes of Health	Pass-Through	University of Texas MD Anderson Cancer Center	1P01 AI139449-01A1	Allergy and Infectious Diseases Research	91,525	
	93.855	National Institutes of Health	Pass-Through	University of Texas Medical Branch at Galveston	19-84547	Allergy and Infectious Diseases Research	178,613	
	93.855	National Institutes of Health	Pass-Through	University of Virginia	5U01AI125056	Allergy and Infectious Diseases Research	91	
	93.855	National Institutes of Health	Pass-Through	University of Washington	1R01AI145848-01A1	Allergy and Infectious Diseases Research	5,052	
	93.855 93.855	National Institutes of Health	Pass-Through	VUMC	1U19AI142764 AI101171	Allergy and Infectious Diseases Research	57,819	
	93.855	National Institutes of Health National Institutes of Health	Pass-Through Pass-Through	VUMC	R01Al149722	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	124,093 (464)	
	93.855	National Institutes of Health	Pass-Through	VUMC	R01AI155668	Allergy and Infectious Diseases Research	338,836	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC 68219	Allergy and Infectious Diseases Research	320,543	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC 81171	Allergy and Infectious Diseases Research	27,028	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC 81252	Allergy and Infectious Diseases Research	250,988	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC 91493	Allergy and Infectious Diseases Research	7,406	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC 94055	Allergy and Infectious Diseases Research	15,099	-
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC103383	Allergy and Infectious Diseases Research	12,475	
	93.855 93.855	National Institutes of Health	Pass-Through	VUMC	VUMC105283	Allergy and Infectious Diseases Research	15,651	-
	93.855	National Institutes of Health National Institutes of Health	Pass-Through Pass-Through	VUMC	VUMC112088 VUMC63571 UNIV59819	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	20,830 (7,153)	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC81649	Allergy and Infectious Diseases Research	337,887	
	93.855	National Institutes of Health	Pass-Through	VUMC	VUMC99752	Allergy and Infectious Diseases Research	17,419	
							8,525,546	1,248,730
	93,859	National Institutes of Health	Direct		1 R01 GM118491-01	Biomedical Research and Research Training	5	
	93.859	National Institutes of Health	Direct		1 R01 GM117899-01	Biomedical Research and Research Training	(58)	
	93.859	National Institutes of Health	Direct		1 R01 GM120569-01	Biomedical Research and Research Training	(193)	
	93.859	National Institutes of Health	Direct		1 R01 GM128087-01A1	Biomedical Research and Research Training	330,129	
	93.859	National Institutes of Health	Direct		1 R35 GM118089-01	Biomedical Research and Research Training	(3)	
	93.859	National Institutes of Health	Direct		1 R35 GM119552-01	Biomedical Research and Research Training	(10,547)	-
	93.859 93.859	National Institutes of Health	Direct Direct		1 R35 GM119569-01	Biomedical Research and Research Training	2,007	
	93.859 93.859	National Institutes of Health National Institutes of Health	Direct		1F31GM142286-01 1F31GM143909-01	Biomedical Research and Research Training Biomedical Research and Research Training	22,477 31,081	
	93,859	National Institutes of Health	Direct		1F31GM143909-01	Biomedical Research and Research Training	24,498	
	93,859	National Institutes of Health	Direct		1F31GM150247-01	Biomedical Research and Research Training	4.524	
	93.859	National Institutes of Health	Direct		1F32GM148024-01	Biomedical Research and Research Training	50,388	
	93.859	National Institutes of Health	Direct		1K99GM141414-01A1	Biomedical Research and Research Training	98,870	
	93.859	National Institutes of Health	Direct		1R01GM123260-01	Biomedical Research and Research Training	38,882	
	93.859	National Institutes of Health	Direct		1R01GM123292-01	Biomedical Research and Research Training	176,924	
	93.859 93.859	National Institutes of Health National Institutes of Health	Direct Direct		1R01GM124404-01 1R01GM126363-01	Biomedical Research and Research Training Biomedical Research and Research Training	1,708 (171)	
	93.859	National Institutes of Health National Institutes of Health	Direct		1R01GM126363-01 1R01GM128191-01	Biomedical Research and Research Training Biomedical Research and Research Training	(171) (61,935)	
	93.859	National Institutes of Health	Direct		1R01GM128336-01	Biomedical Research and Research Training	267.033	
	93.859	National Institutes of Health	Direct		1R01GM130130	Biomedical Research and Research Training	4,346	
	93.859	National Institutes of Health	Direct		1R01GM131178-01	Biomedical Research and Research Training	124,651	5,978
	93.859	National Institutes of Health	Direct		1R01GM134548-01A	Biomedical Research and Research Training	493,027	-
	93.859	National Institutes of Health	Direct		1R01GM137458-01A1	Biomedical Research and Research Training	385,348	176,593
	93.859	National Institutes of Health	Direct		1R01GM137595-01	Biomedical Research and Research Training	388,512	
	93.859	National Institutes of Health	Direct		1R01GM140240	Biomedical Research and Research Training	427,060	
	93.859 93.859	National Institutes of Health National Institutes of Health	Direct Direct		1R01GM141251-01A1 1R01GM141604-01A1	Biomedical Research and Research Training Biomedical Research and Research Training	369,654 274,641	
	93.859	National Institutes of Health	Direct		1R01GM141604-01A1 1R01GM144512-01A1	Biomedical Research and Research Training Biomedical Research and Research Training	35,251	
	93.859	National Institutes of Health	Direct		1R01GM144012-01A1	Biomedical Research and Research Training	374,824	
	93.859	National Institutes of Health	Direct		1R25GM134979	Biomedical Research and Research Training	169,796	3,570
	93.859	National Institutes of Health	Direct		1R25GM147296-01	Biomedical Research and Research Training	109,916	2,380
	93.859	National Institutes of Health	Direct		1R35GM122491-01	Biomedical Research and Research Training	124,075	-
	93.859	National Institutes of Health	Direct		1R35GM122516-01	Biomedical Research and Research Training	(258)	
	93.859	National Institutes of Health	Direct		1R35GM125028-01	Biomedical Research and Research Training	38,262	-
	93.859 93.859	National Institutes of Health National Institutes of Health	Direct Direct		1R35GM127098 1R35GM128650-01	Biomedical Research and Research Training	359,569 375,023	
	93.859 93.859	National Institutes of Health National Institutes of Health	Direct		1R35GM128650-01 1R35GM128696-01	Biomedical Research and Research Training Biomedical Research and Research Training	375,023 405,946	
	93.859	National Institutes of Health	Direct		1R35GM128890-01	Biomedical Research and Research Training	545,941	
	93.859	National Institutes of Health	Direct		1R35GM131799	Biomedical Research and Research Training	728,691	-

Assistance Listing Number	9 Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
93.859	National Institutes of Health	Direct		1R35GM133552-01	Biomedical Research and Research Training	745,469	
93.859	National Institutes of Health	Direct		1R35GM133602	Biomedical Research and Research Training	358,997	
93.859	National Institutes of Health	Direct		1R35GM136401-01	Biomedical Research and Research Training	627,680	
93.859	National Institutes of Health	Direct		1R35GM138007-01	Biomedical Research and Research Training	572,161	
93.859	National Institutes of Health	Direct		1R35GM142709-01	Biomedical Research and Research Training	589,399	
93.859 93.859	National Institutes of Health	Direct Direct		1R35GM144091-01 1R35GM144112-01	Biomedical Research and Research Training Biomedical Research and Research Training	245,061 427,529	
93.859 93.859	National Institutes of Health National Institutes of Health	Direct		1R35GM144112-01 1R35GM144123-01	Biomedical Research and Research Training Biomedical Research and Research Training	427,529	
93.859	National Institutes of Health	Direct		1R35GM144123-01	Biomedical Research and Research Training	405.109	
93.859	National Institutes of Health	Direct		1R35GM146960-01	Biomedical Research and Research Training	247.441	
93.859	National Institutes of Health	Direct		1R35GM146982-01	Biomedical Research and Research Training	368,287	
93.859	National Institutes of Health	Direct		1R35GM146987-01	Biomedical Research and Research Training	341,809	
93.859	National Institutes of Health	Direct		1R35GM147267-01	Biomedical Research and Research Training	282,137	
93.859	National Institutes of Health	Direct		1R35GM147697-01	Biomedical Research and Research Training	245,707	
93.859	National Institutes of Health	Direct		1T32GM137793	Biomedical Research and Research Training	361,375	
93.859	National Institutes of Health	Direct		1T32GM139800	Biomedical Research and Research Training	728,060	24,924
93.859 93.859	National Institutes of Health National Institutes of Health	Direct Direct		1T32GM145734-01 1T34GM136451-01	Biomedical Research and Research Training	250,911 409,727	
93.859 93.859	National Institutes of Health National Institutes of Health	Direct		2 P41 GM103391-06	Biomedical Research and Research Training Biomedical Research and Research Training	409,727 (55,983)	
93.859	National Institutes of Health	Direct		2R01DK095811-05A1	Biomedical Research and Research Training	(33,983)	
93,859	National Institutes of Health	Direct		2R01GM063557-13	Biomedical Research and Research Training	108,965	
93.859	National Institutes of Health	Direct		2R01GM067871-17	Biomedical Research and Research Training	421,725	
93.859	National Institutes of Health	Direct		2R01GM070902-13A1	Biomedical Research and Research Training	357,284	
93.859	National Institutes of Health	Direct		2R01GM076592-10 THUR 13	Biomedical Research and Research Training	58,623	
93.859	National Institutes of Health	Direct		2R01GM077659-13	Biomedical Research and Research Training	201,992	-
93.859	National Institutes of Health	Direct		2R01GM080403-06A1	Biomedical Research and Research Training	(17,411)	
93.859	National Institutes of Health	Direct		2R01GM107434	Biomedical Research and Research Training	(145)	
93.859	National Institutes of Health	Direct		2R01GM107434-09	Biomedical Research and Research Training	351,319	-
93.859 93.859	National Institutes of Health National Institutes of Health	Direct Direct		2R01GM114250-06 2R01GM116616-05	Biomedical Research and Research Training Biomedical Research and Research Training	497,515 357,995	232,327 48,242
93.859	National Institutes of Health	Direct		2R01GM117650-05A1	Biomedical Research and Research Training	157.623	40,242
93.859	National Institutes of Health	Direct		2R01GM118122-20	Biomedical Research and Research Training	627,575	
93.859	National Institutes of Health	Direct		2R01GM126363-05	Biomedical Research and Research Training	370,862	
93.859	National Institutes of Health	Direct		2R01GM130130-05	Biomedical Research and Research Training	279,233	
93.859	National Institutes of Health	Direct		2R35GM118089-06	Biomedical Research and Research Training	438,811	
93.859	National Institutes of Health	Direct		2R35GM119525-06	Biomedical Research and Research Training	532,078	-
93.859	National Institutes of Health	Direct		2R35GM119552-06	Biomedical Research and Research Training	423,865	
93.859	National Institutes of Health	Direct		2R35GM119569-06	Biomedical Research and Research Training	557,219	
93.859 93.859	National Institutes of Health National Institutes of Health	Direct		2R35GM122516-06 2R35GM125028-06	Biomedical Research and Research Training	576,575 187,390	
93.859 93.859	National Institutes of Health National Institutes of Health	Direct Direct		2R35GM125028-06 2R35GM127098-06	Biomedical Research and Research Training Biomedical Research and Research Training	187,390 32,197	
93.859 93.859	National Institutes of Health	Direct		2T32GM007347-41-45	Biomedical Research and Research Training Biomedical Research and Research Training	1,380,511	
93.859	National Institutes of Health	Direct		2T32GM007628-41-45	Biomedical Research and Research Training	467.867	47.809
93.859	National Institutes of Health	Direct		2T32GM008320	Biomedical Research and Research Training	463,163	
93.859	National Institutes of Health	Direct		2T32GM065086-16-20	Biomedical Research and Research Training	475,789	
93.859	National Institutes of Health	Direct		4R37GM067152-18	Biomedical Research and Research Training	499,224	
93.859	National Institutes of Health	Direct		R01GM107978-05	Biomedical Research and Research Training	58,257	
93.859	National Institutes of Health	Direct		R35GM119525-01	Biomedical Research and Research Training	(4,288)	
93.859	National Institutes of Health	Direct		R35GM133743	Biomedical Research and Research Training	414,006	-
93.859	National Institutes of Health	Pass-Through	Brown University	BrownU - 00001400	Biomedical Research and Research Training	31,223	
93.859 93.859	National Institutes of Health National Institutes of Health	Pass-Through	Fisk University Indiana University	2R25GM107754-06A1 - UNIV61142 BL-4624936-VU	Biomedical Research and Research Training Biomedical Research and Research Training	30,282 62.827	
93.859 93.859	National Institutes of Health	Pass-Through Pass-Through	Meru Biotechnologies	UNIV62232	Biomedical Research and Research Training Biomedical Research and Research Training	18.514	
93.859	National Institutes of Health	Pass-Through	Northern California Institute for Research and Education	2R01GM061606-17	Biomedical Research and Research Training	141,516	
93.859	National Institutes of Health	Pass-Through	Stanford University	1R01GM113195-05	Biomedical Research and Research Training	17.249	
93.859	National Institutes of Health	Pass-Through	University of Arkansas	UA2023-362	Biomedical Research and Research Training	2,918	
93.859	National Institutes of Health	Pass-Through	University of California Los Angeles	2120 G WA478	Biomedical Research and Research Training	6,139	
93.859	National Institutes of Health	Pass-Through	University of Colorado Boulder	1562027	Biomedical Research and Research Training	111,347	
93.859	National Institutes of Health	Pass-Through	University of Colorado Boulder	Univ of Colorada - 1560008	Biomedical Research and Research Training	2,633	
93.859	National Institutes of Health	Pass-Through	University of Pittsburgh	AWD00005223 (137340-1)	Biomedical Research and Research Training	66,843	
93.859	National Institutes of Health	Pass-Through	University of Pittsburgh	Univ of Pittsburgh - AWD000026 1R01GM138493-01	Biomedical Research and Research Training	13,669 239,939	
93.859 93.859	National Institutes of Health National Institutes of Health	Pass-Through	University of Virginia	GB10658	Biomedical Research and Research Training Biomedical Research and Research Training	239,939 38,782	
93.859	National Institutes of Health	Pass-Through Pass-Through	University of Virginia University of Wisconsin	1436	Biomedical Research and Research Training	38,782	
93.859	National Institutes of Health	Pass-Through	VUMC	R01GM120484 VMC62142	Biomedical Research and Research Training	(11,981)	
93,859	National Institutes of Health	Pass-Through	VUMC	VUMC104058	Biomedical Research and Research Training	18,280	
93.859	National Institutes of Health	Pass-Through	VUMC	VUMC104187	Biomedical Research and Research Training	14,982	
93.859	National Institutes of Health	Pass-Through	VUMC	VUMC107035	Biomedical Research and Research Training	17,509	
93.859	National Institutes of Health	Pass-Through	VUMC	VUMC93587	Biomedical Research and Research Training	12,748	<u> </u>
						25,559,471	541,825
93.865	National Institutes of Health	Direct		1 R0 HD089474-01	Child Health and Human Development Extramural Research	502,098	23,542
93.865	National Institutes of Health	Direct		1 R01 HD097772-01A1	Child Health and Human Development Extramural Research	573,623	-
93.865	National Institutes of Health	Direct		1F30HD094345-01	Child Health and Human Development Extramural Research	(677)	-
93.865	National Institutes of Health	Direct		1F31HD106890-01A1	Child Health and Human Development Extramural Research	31,199	-
93.865	National Institutes of Health	Direct		1R01HD088959-01A1	Child Health and Human Development Extramural Research	195,135	7 00 -
93.865 93.865	National Institutes of Health National Institutes of Health	Direct Direct		1R01HD091232-01A1 1R01HD098652-01A1	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	7,229 727,392	7,234 25,953
93.865	National Institutes of Health National Institutes of Health	Direct		1R01HD098652-01A1 1R01HD102752-01	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	727,392 628.014	25,953 234,980
93.865	National Institutes of Health	Direct		1R01HD102752-01 1R01HD104188-01A1	Child Health and Human Development Extramural Research	608,684	306,172
20.000						000,004	000,112
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	Assistance	3						Passed
Cluster	Listing Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Through to Subrecipients
	93.865	National Institutes of Health	Direct		1R01HD109151-01	Child Health and Human Development Extramural Research	104,560	
	93.865	National Institutes of Health	Direct		1R01HD109739-01	Child Health and Human Development Extramural Research	198,669	82,326
	93.865	National Institutes of Health	Direct		1R03HD099445-01A1	Child Health and Human Development Extramural Research	66,674	
	93.865	National Institutes of Health	Direct		1R21HD097757-01A1	Child Health and Human Development Extramural Research	111,066	530
	93.865	National Institutes of Health	Direct		1R21HD098454-01A1	Child Health and Human Development Extramural Research	(41,597)	
	93.865	National Institutes of Health	Direct		1R37HD095519	Child Health and Human Development Extramural Research	696,318	2,802
	93.865	National Institutes of Health	Direct		2 P20 HD075443-05	Child Health and Human Development Extramural Research	120,728	-
	93.865	National Institutes of Health	Direct		2T32HD007502-21-25	Child Health and Human Development Extramural Research	228,908	
	93.865	National Institutes of Health	Direct		5 R01 HD044073-13	Child Health and Human Development Extramural Research	(2,774)	
	93.865	National Institutes of Health	Direct		F31HD104385	Child Health and Human Development Extramural Research	15,697	-
	93.865	National Institutes of Health	Direct		RHD064727B	Child Health and Human Development Extramural Research	17,054	-
	93.865	National Institutes of Health	Pass-Through	New York University	F0998-25	Child Health and Human Development Extramural Research	3,218	-
	93.865	National Institutes of Health	Pass-Through	Penn State University	VANHD088448	Child Health and Human Development Extramural Research	30,335	
	93.865	National Institutes of Health	Pass-Through	Synchro Motion LLC	2R44HD096967-02A1	Child Health and Human Development Extramural Research	86,465	-
	93.865	National Institutes of Health	Pass-Through	University of California Irvine	2018-3599	Child Health and Human Development Extramural Research	12,821	-
	93.865 93.865	National Institutes of Health	Pass-Through	University of California San Francisco	n/a 1555885	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	1,400 17,384	-
	93.865 93.865	National Institutes of Health National Institutes of Health	Pass-Through	University of Colorado Boulder University of Delaware	1555885 UDR0000026	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	17,384 9,823	
	93.865	National Institutes of Health	Pass-Through Pass-Through	VUMC	1 P50 HD103537-01	Child Health and Human Development Extramural Research	9,823 301.226	
	93.865	National Institutes of Health	Pass-Through	VUMC	VUMC 86265	Child Health and Human Development Extramural Research	132.206	
	93.865	National Institutes of Health	Pass-Through	VUMC	VUMC87891	Child Health and Human Development Extramural Research	20.712	
	93.865	National Institutes of Health	Pass-Through	VUMC	VUMC95639	Child Health and Human Development Extramutal Research	26.019	
	93.865	National Institutes of Health	Pass-Through	Washington University In St. Louis	WU-22-0365	Child Health and Human Development Extramural Research	230.052	
	93.865	National Institutes of Health	Pass-Through	Wits Health Consortium	R01HD103466	Child Health and Human Development Extramural Research	84.668	
	33.005		r ass-mough	With Health Consolitum	10110103400	Child Health and Human Development Exitamoral Research	5,744,329	683,539
	93.866	National Institutes of Health	Direct		1F30AG080885-01	Asian Daaraash	17,960	003,333
	93.866	National Institutes of Health	Direct		1F31AG066358	Aging Research Aging Research	3,958	
	93.866	National Institutes of Health	Direct		1F31AG069462-01	Aging Research	2.638	
	93.866	National Institutes of Health	Direct		1F31AG076290-01A1	Aging Research	26,532	
	93.866	National Institutes of Health	Direct		1F31AG077791-01	Aging Research	26,732	
	93.866	National Institutes of Health	Direct		1F31AG079640-01	Aging Research	27,209	
	93.866	National Institutes of Health	Direct		1F31AG081025-01	Aging Research	5.316	
	93.866	National Institutes of Health	Direct		1F99AG079810-01	Aging Research	17,834	
	93.866	National Institutes of Health	Direct		1R01AG051626-01	Aging Research	(249)	
	93.866	National Institutes of Health	Direct		1R01AG054622	Aging Research	1,001,374	881,137
	93.866	National Institutes of Health	Direct		1R01AG056147-01	Aging Research	489	
	93.866	National Institutes of Health	Direct		1R01AG062685-01A1	Aging Research	725,621	303,587
	93.866	National Institutes of Health	Direct		1R01AG063771-01	Aging Research	566,000	11,158
	93.866	National Institutes of Health	Direct		1R01AG064950-01	Aging Research	569,490	118.328
	93.866	National Institutes of Health	Direct		1R01AG069900	Aging Research	1,079,853	775,923
	93.866	National Institutes of Health	Direct		1R01AG073354-01A1	Aging Research	370,682	
	93.866	National Institutes of Health	Direct		1R01AG078803-01	Aging Research	244,699	
	93.866	National Institutes of Health	Direct		1R21AG071975-01A1	Aging Research	49,068	8,779
	93.866	National Institutes of Health	Direct		1R21AG072188-01A1	Aging Research	191,145	9,953
	93.866	National Institutes of Health	Direct		1R21AG073891 - 01	Aging Research	221,876	
	93.866	National Institutes of Health	Direct		1R21AG077807-01	Aging Research	162,897	
	93.866	National Institutes of Health	Direct		1R21AG078480-01	Aging Research	159,430	46,542
	93.866	National Institutes of Health	Direct		1R21AG078554-01	Aging Research	265,156	-
	93.866	National Institutes of Health	Direct		1RF1AG068623	Aging Research	425,292	-
	93.866	National Institutes of Health	Direct		4R00AG052666	Aging Research	(136)	-
	93.866	National Institutes of Health	Direct		5 K23 AG46379-02	Aging Research	3	-
	93.866	National Institutes of Health	Direct		7RF1AG060754-02	Aging Research	913,794	558,194
	93.866	National Institutes of Health	Direct		R01AG070719	Aging Research	80,496	-
	93.866 93.866	National Institutes of Health National Institutes of Health	Direct	Brown University	T32AG058524 2236	Aging Research	309,071 29.050	34,798
	93.866	National Institutes of Health	Pass-Through Pass-Through	Cleveland Clinic	2236 R01AG066707	Aging Research Aging Research	29,050	
	93.866	National Institutes of Health	Pass-Through	Emory University	A375202	Aging Research	363,611	
	93.866	National Institutes of Health	Pass-Through	Rush University Medical Center	L03030302-Sub03	Aging Research	112 641	
	93.866	National Institutes of Health	Pass-Through	University of California Berkeley	1R01AG063389-01A1-00010220	Aging Research	28.274	
	93.866	National Institutes of Health	Pass-Through	University of California Berkeley University of Kansas Center for Research. Inc.	FY2021-086	Aging Research	75.464	-
	93.866	National Institutes of Health	Pass-Through	University of Michigan	SUBK00016070	Aging Research	7,446	
	93.866	National Institutes of Health	Pass-Through	University of Pittsburgh	0056283 (130061-1)	Aging Research	12.911	
	93.866	National Institutes of Health	Pass-Through	University of Pittsburgh	Univ of Pittsburg - AWD0000202	Aging Research	2,340	
	93.866	National Institutes of Health	Pass-Through	University of Texas Southwestern Medical Center	GM0191209	Aging Research	1,699	
	93.866	National Institutes of Health	Pass-Through	VUMC	5R01AG058639-02	Aging Research	135,944	-
	93.866	National Institutes of Health	Pass-Through	VUMC	PENDING	Aging Research	30,626	
	93.866	National Institutes of Health	Pass-Through	VUMC	VUMC 64875	Aging Research	(3,443)	
	93.866	National Institutes of Health	Pass-Through	VUMC	VUMC 87997	Aging Research	8,347	-
	93.866	National Institutes of Health	Pass-Through	VUMC	VUMC 90311	Aging Research	13,577	-
	93.866	National Institutes of Health	Pass-Through	VUMC	VUMC107475	Aging Research	12,086	-
	93.866	National Institutes of Health	Pass-Through	VUMC	VUMC86685	Aging Research	15,434	-
	93.866	National Institutes of Health	Pass-Through	VUMC	VUMC95951	Aging Research	388,178	
							8,760,334	2,748,399
	93.867	National Institutes of Health	Direct		1EYR01EY013462-16A1	Vision Research	1,295	
	93.867	National Institutes of Health	Direct		1F30EY033627-01A1	Vision Research	26,433	
	93.867	National Institutes of Health	Direct		1F31EY031293-01A1	Vision Research	4,306	
	93.867	National Institutes of Health	Direct		1F31EY032348-01A1	Vision Research	38,625	-
	93.867	National Institutes of Health	Direct		1F31EY032772	Vision Research	26,931	

	Assistance Listing	,					Federal	Passed Through to
Cluster	Number	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Expenditures	Subrecipients
	93.867	National Institutes of Health	Direct		1F31EY033235-01A1	Vision Research	25,272	
	93.867	National Institutes of Health	Direct		1F31EY033663-01A1	Vision Research	16,107	
	93.867	National Institutes of Health	Direct		1R01EY027402-01	Vision Research	147,340	
	93.867	National Institutes of Health	Direct		1R01EY029278-01	Vision Research	294,944	-
	93.867	National Institutes of Health	Direct		1R01EY030490-01	Vision Research	423,065	1,651
	93.867	National Institutes of Health	Direct		1R01EY031769-01	Vision Research	352,890	1,814
	93.867	National Institutes of Health	Direct		1R01EY032670-01	Vision Research	363,217	41,404
	93.867	National Institutes of Health	Direct		1R01EY033969-01A1	Vision Research	42,020	
	93.867	National Institutes of Health	Direct		1U54EY032442-01	Vision Research	1,763,160	468,161
	93.867	National Institutes of Health	Direct		2R01EY002686-45	Vision Research	320,193	-
		National Institutes of Health	Direct		2R01EY011500-23A1	Vision Research	623,485	-
	93.867	National Institutes of Health	Direct		2R01EY012018-22-26	Vision Research	758,455	
	93.867	National Institutes of Health	Direct		2R01EY013462-20A1	Vision Research	489,269	39,729
	93.867 93.867	National Institutes of Health National Institutes of Health	Direct		2R01EY019882-09 2R01EY021833-08A1	Vision Research Vision Research	(6,508) 457,492	-
	93.867 93.867	National Institutes of Health National Institutes of Health	Direct			Vision Research Vision Research	457,492 449,959	-
	93.867	National Institutes of Health	Direct		2R01EY024258-05A1 2T32EY007135-26	Vision Research	449,959 94,005	111,500
	93.867				4R00EY030909-03	Vision Research	251,427	
	93.867	National Institutes of Health National Institutes of Health	Direct		7R01EY017077-12	Vision Research	171,944	720
	93.867	National Institutes of Health	Direct		R01EY027729	Vision Research	232,074	67,371
	93.867	National Institutes of Health	Pass-Through	Boston University	4500004101	Vision Research	232,074 35,359	67,371
	93.867	National Institutes of Health	Pass-Through	University of Alabama at Birmingham	2R01EY027948-05 000531640-SC00	Vision Research	96,969	
	93.867	National Institutes of Health	Pass-Through	University of Houston	R-23-0022	Vision Research	28,999	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC 58888	Vision Research	265.155	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC 58890	Vision Research	113,330	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC 67445	Vision Research	162,301	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC 68303	Vision Research	20,953	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC108718	Vision Research	2,802	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC80598	Vision Research	11,881	
	93.867	National Institutes of Health	Pass-Through	VUMC	VUMC97368	Vision Research	10.289	
							8.115.437	732,350
								102,000
	93.870	Health Resources and Services Administration	Pass-Through	University of Texas at Austin	UTAUS-SUB00000417	Maternal, Infant and Early Childhood Home Visiting Grant Program	418,300	<u> </u>
							418,300	<u> </u>
	93.879	National Institutes of Health	Direct		1G13LM013557-01	Medical Library Assistance	18,842	
	93.879	National Institutes of Health	Direct		1R01LM013434-01A1	Medical Library Assistance	222,938	39.851
	93.879	National Institutes of Health	Direct		2T15LM007450	Medical Library Assistance	516,699	2,822
	93.879	National Institutes of Health	Direct		2T15LM007450-21	Medical Library Assistance	434,477	16,726
						····· ·· , ·····	1,192,955	59.399
								00,000
	93.884	Health Resources and Services Administration	Pass-Through	Meharry Medical College	190618MK206	Grants for Primary Care Training and Enhancement	58,254	<u> </u>
							58,254	
	93.943	Centers for Disease Control	Pass-Through	University of Memphis	A21-0156-S001	Epidemiologic Research Studies of Acquired Immunodeficiency Syndrome (AIDS) and		
	33.345		r ass-rniougn	Chiverary of Weinphila	A21-0130-3001	Human Immunodeficiency Virus (HIV) Infection in Selected Population Groups	28,017	
						Human immunodenciency virus (Firv) mecalor in delected Fopulation droups	28,017	
								<u> </u>
	93.959	Substance Abuse and Mental Health Services Administration	Pass-Through	TN Department of Mental Health and Substance Abuse	Edison ID 74360	Block Grants for Prevention and Treatment of Substance Abuse	59,926	<u> </u>
							59,926	
	93.969	Health Resources and Services Administration	Pass-Through	VUMC	VUMC 74809	PPHF Geriatric Education Centers	105,613	
	33.303	Health Resources and Gervices Auministration	r ass-rniougn	VOMO	VOINC /4003			
							105,613	<u> </u>
	97.RD	US Department of Homeland Security	Pass-Through	University of North Carolina Chapel Hill	5117117	Department of Homeland Security	1,629	<u> </u>
							1,629	
	98.RD	US Agency for International Development	Direct		7200AA19C00022	Agency for International Development	2,820,912	268,582
	30.ND	congener to mematorial pevelopment	5.000		. 200, 0 (1000022	Agency for microactional Development		
							2,820,912	268,582
		rch & Development Cluster					247,284,271	31,105,601
Head Star								
	93.600	Administration for Children and Families	Pass-Through	ZERO TO THREE	2020100043	Head Start	(276)	-
	93.600 93.600	Administration for Children and Families Administration for Children and Families	Pass-Through	ZERO TO THREE ZERO TO THREE	2021090580	Head Start	198,223 344 948	69,634 85,679
	93.600	Administration for Children and Families	Pass-Through	ZERO TO THREE	2022090142	Head Start		
							542,895	155,312
T	Fotal Head	Start Cluster					542,895	155,312
Student F	inancial As	sistance Cluster						_
		US Department of Education	Direct		P007A213941	Federal Supplemental Educational Opportunity Grants	6,000	
		US Department of Education	Direct		P007A223941	Federal Supplemental Educational Opportunity Grants	1,340,249	
							1,346,249	· · · ·
	84.033	US Desertment of Education	Discat		Doood and FIMO	Federal West: Onde Decemen	609	
	84.033 84.033	US Department of Education US Department of Education	Direct		P033A203941_FWS P033A213941	Federal Work-Study Program Federal Work-Study Program		-
			Direct				342,047	-
	84.033	US Department of Education	Direct		P033A223941	Federal Work-Study Program	1,613,622	<u> </u>
							1,956,278	<u> </u>
	84.038	Student Financial Assistance	Direct			Federal Perkins Loan Program	4,955,178	
							4,955,178	· · · ·
	04.000	US Desertment of Education	Discat		D000D040050	Fordered Dell Orent Decrement		
		US Department of Education	Direct Direct		P063P212253	Federal Pell Grant Program	56,394 6,952,282	-
	04.003	US Department of Education	Duect		P063P222253	Federal Pell Grant Program		<u>.</u>
							7,008,676	<u> </u>

Assist Listi Cluster Num	ng	Туре	Pass-Through Grantor	Award Identifier	Assistance Listing Program Title	Federal Expenditures	Passed Through to Subrecipients
84.2	58 Student Financial Assistance	Direct			Federal Direct Student Loans	107,723,423	-
						107,723,423	
84.3	79 US Department of Education	Direct		P379T232253	Teacher Education Assistance for College and Higher Education Grants (TEACH Grants)	6,601	
						6,601	-
93.2	54 Student Financial Assistance	Direct			Nurse Faculty Loan Program (NFLP)		
93.2	54 Student Financial Assistance	Direct			Outstanding loans as of July 1, 2022	8,841,447	
93.2	54 Student Financial Assistance	Direct			New loans inssued during 2023	2,002,490	
						10,843,937	<u> </u>
93.3		Direct			Nursing Student Loans		
93.3		Direct			Outstanding loans as of July 1, 2022	2,252,916	-
93.3	64 Student Financial Assistance	Direct			New loans inssued during 2023	302,500	
						2,555,416	<u> </u>
93.9	25 Health Resources and Services Administration	Direct		1 T08HP3933201-00	Scholarships for Health Professions Students from Disadvantaged Backgrounds	649,111	<u> </u>
						649,111	<u> </u>
Total St	udent Financial Assistance Cluster					137,044,869	
Special Education	on Cluster						
84.0		Pass-Through	NH Department of Education	SPED-2018-9_H323A170029	Special Education_Grants to States	184,281	190,435
84.0		Pass-Through	TN Department of Education	33101-23075GRF5	Special Education_Grants to States	30,144	
84.0		Pass-Through	TN Department of Education	33136-00718 DOE TN	Special Education_Grants to States	427,947	4,408
84.0		Pass-Through	VUMC	VUMC104209	Special Education_Grants to States	21,924	
84.0		Pass-Through	VUMC	VUMC105520	Special Education_Grants to States	36,580	
84.0	27 US Department of Education	Pass-Through	TN Department of Education	33101-2100433136GR5D_ED71227	Special Education_Grants to States	2,614,199 3.315.074	1,393,206
	becial Education Cluster					3,315,074	1,588,049
Other Programs							
20.2		Pass-Through	Tennessee State University	332.77-21.2000	Highway Planning and Construction	38,835	-
20.2		Pass-Through	TN Department of Transportation	91864	Highway Planning and Construction	52,218	-
20.2		Pass-Through	TN Department of Transportation	40100-11319-61300	Highway Planning and Construction	803,364	(33)
20.2		Pass-Through	TN Department of Transportation	40100-20220	Highway Planning and Construction	82,718	
20.2		Pass-Through	TN Department of Transportation	40100-23600	Highway Planning and Construction	1,169,387	-
20.2 20.2		Pass-Through Pass-Through	TN Department of Transportation TN Department of Transportation	40100-24320 40100-49700	Highway Planning and Construction Highway Planning and Construction	11,983 48,543	7,556 18.000
20.2		Pass-Through	TN Department of Transportation	40100-49730	Highway Planning and Construction	116.626	18,000
20.2		Pass-Through	University of Memphis	A23-0020-S002	Highway Planning and Construction	7,906	
20.2		r ass- mough		A23-0020-3002		2.331.581	25.523
97.0	57 US Department of Homeland Security	Pass-Through	State of Tennessee	PA-04-TN-4514-PW- 00299(305)	COVID 19: Homeland Security Grant Program	12,127,623	
51.0	of Department of Homeland Decurity	r ass-mough	State of Termessee	1 A-04-110-4314-1 W- 00233(303)	COVID 13. Holifeland declarky Grant Hogran	12,127,623	
							<u> </u>
98.0	01 US Agency for International Development	Pass-Through	Corporación Participación Ciudadana Ecuador	UNIV62342	USAID Foreign Assistance for Programs Overseas	36	<u> </u>
	her Programs					14,459,240	25,523
Total Fe	deral Expenditures					402,646,349	32,874,486

1. Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") includes the federal expenditures of Vanderbilt University ("Vanderbilt") under programs of the federal government for the year ended June 30, 2023. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* ("Uniform Guidance") and Office of Management and Budget Circular A-21, *Cost Principles for Educational Institutions* as applicable. Because the Schedule presents only a selected portion of the operations of Vanderbilt, it is not intended to, and does not, present the financial position, changes in net assets, or cash flows of Vanderbilt.

For purposes of the Schedule, federal awards include all grants, contracts, and similar agreements entered into directly between Vanderbilt and agencies and departments of the federal government and all subawards to Vanderbilt by nonfederal organizations pursuant to federal grants, contracts, and similar agreements.

2. Summary of Significant Accounting Policies for the Schedule

For purposes of the Schedule, expenditures for federal programs are recognized on the accrual basis, which is consistent with generally accepted accounting principles.

Expenditures for federal student financial assistance programs are recognized as incurred and include Federal Pell program grants to students, the federal share of students' FSEOG program grants, FWS program earnings, loans to students under federally guaranteed programs and certain other federal financial assistance grants for students and administrative cost allowances, where applicable.

Expenditures for other federal awards on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in *Uniform Guidance* or *A-21*, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

Expenditures for certain nonstudent financial assistance awards include facilities and administrative costs (indirect costs). Facilities and administrative costs allocated to such awards for the year ended June 30, 2023 were based on predetermined fixed rates negotiated with Vanderbilt's cognizant federal agency, the U.S. Department of Health and Human Services. Indirect costs and recoveries of those costs under sponsored programs are classified as unrestricted expenditures and revenues, respectively, in Vanderbilt's financial statements. Vanderbilt has elected not to use the 10-percent de minimis indirect cost rate allowed under the *Uniform Guidance*.

Negative amounts represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. This results in accurate reporting on a cumulative basis over multiple periods. Assistance Listing numbers and pass-through numbers are provided when available.

3. Federal Student Financial Assistance Programs

The Perkins, Nurse Faculty Loan Program (NFLP), and Nursing Student Loan (NSL) programs are administered directly by Vanderbilt, and balances and transactions relating to these programs are included in Vanderbilt's consolidated financial statements. The Perkins program was closed in 2017 and the outstanding funds are being paid back. Loans outstanding at the beginning of the year and the amount of direct loans made during the year ended June 30, 2023 are included in the federal expenditures presented in the Schedule. The balance of loans outstanding at June 30, 2023 consists of:

<u>Program</u>	Assistance Listing <u>Number 2023</u>			
Perkins	84.038 \$ 4,955,178			
NFLP	93.264 10,843,937			
NSL	93.3642,555,416			
	\$ 18,354,531			

Vanderbilt is responsible for the performance of certain administrative duties with respect to the guaranteed federal direct loan programs. As a university qualified to originate loans, Vanderbilt is responsible for handling the complete loan origination process, including funds management and promissory note functions. Vanderbilt is not responsible for the collection of these loans.

4. COVID-19 Department of Homeland Security Federal Emergency Management Agency (FEMA)

For the year ended June 30, 2023, Vanderbilt University recorded \$12,127,623 of claims to FEMA under 97.036. The claims submitted represented incurred eligible capital and operating expenses attributed to the University's response to COVID-19, which were expended in a prior fiscal year, but obligated by the federal and state agencies in the current year. The University has additional claims outstanding and under review with FEMA as of June 30, 2023, which will be recognized in the year the related funds are obligated by FEMA at the federal and state levels.



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 Trust of Vanderbilt 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 consolidated financial statements of Vanderbilt University and its subsidiaries, which comprise the consolidated statement of financial position as of June 30, 2023, and the related consolidated statements of activities and of cash flows for the year then ended, including the related notes (collectively referred to as the "consolidated financial statements"), and have issued our report thereon dated September 29, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Vanderbilt University's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Vanderbilt University's internal control. Accordingly, we do not express an opinion on the effectiveness of Vanderbilt 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 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.



Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether Vanderbilt 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 Vanderbilt 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 Vanderbilt University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Price waterhouse Coopers LLP

Nashville, Tennessee September 29, 2023



Report of Independent Auditors on Compliance for Each Major Program and on Internal Control Over Compliance Required by Uniform Guidance

To the Board of Trust of Vanderbilt University

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Vanderbilt University's (the "University") compliance with the types of compliance requirements identified as subject to audit 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, 2023. 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.

In our opinion, the University complied, in all material respects, with the 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, 2023.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (US GAAS); 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). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditors' Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the University's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to the University's federal programs.



Auditors' Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the University's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material, if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the University's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with US GAAS, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the University's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the University's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances 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 the University's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Other Matters

The results of our auditing procedures disclosed instances of noncompliance, which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying schedule of findings and questioned costs as item 2023-001. Our opinion on each major federal program is not modified with respect to this matter.

Government Auditing Standards requires the auditor to perform limited procedures on the University's response to the noncompliance finding identified in our audit described in the accompanying Management's View and Corrective Action Plan. The University's response was not subjected to the other auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.



Report on 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 is a deficiency in *internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance is a deficiency of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditors' Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

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.

Price waterhouse Coopers LLP

Nashville, Tennessee January 26, 2024

Vanderbilt University Schedule of Findings and Questioned Costs Year Ended June 30, 2023

Section I - Summary of Auditor's Results Financial Statements Type of auditor's report issued: Internal control over financial reporting: Material weakness(es) identified? Significant deficiency(ies) identified that are not considered to be material weaknesses? Noncompliance material to financial statements noted? Federal Awards Internal control over major programs: Material weakness(es) identified that are not considered to be material weaknesses? Type of auditor's report issued on compliance for major programs: Any audit findings disclosed that are required to be reported in accordance with the 2 CFR 200.516(a)?		Unmodified	yes yes yes	X X X	no none reportec no
		Unmodified X	yes yes	X X	no none reportec
			yes		no
Identification of major programs					
Assistance Listing Number(s)	Name of Federal Program or Cluster				
Various 97.067	Research and Development COVID 19: Homeland Security Grant Program				
Dollar threshold used to distinguish between type A and type B programs:		\$ 3,000,000			
Auditee qualified as low-risk auditee?		X	yes		no
Section II - Financial Statement Findings					

No matters noted.

Vanderbilt University Schedule of Findings and Questioned Costs Year Ended June 30, 2023

Section III – Federal Award Findings and Questioned Costs Finding 2023-001: Suspension and Debarment Check Federal Agency: Various Program: Research and Development Cluster Assistance Listing #: Various Award #: Various Award Year: 2023

Criteria:

When a non-federal entity enters into a covered transaction with an entity at a lower tier, the non-federal entity must verify that the entity, as defined in 2 CFR section 180.995 and agency adopting regulations, is not suspended or debarred or otherwise excluded from participating in the transaction.

Questioned Costs:

None.

Condition:

During the 2023 award year, for three out of twenty-five vendors tested in our sample of suspension and debarment checks, there was no evidence provided that the checks were performed. The University subsequently verified these vendors are not suspended or debarred.

Cause:

The University's internal controls include uploading all vendors into the GIACT online system, which tracks suspension and debarment. Upon completion of this upload, the GIACT system tracks suspension and debarment and notifies the University if there is a suspended or debarred name match (full/partial) on a vendor. For the three vendors noted above, management could not provide evidence that the vendors had been loaded into GIACT or that any other type of review or check for suspension and debarment had been performed.

Effect:

The University did not maintain evidence of its review for suspension and debarment for certain vendors.

Recommendation:

We recommend the University reiterate to control owners the importance of ensuring suspension and debarment checks is performed and that adequate documentation of the checks are maintained pursuant to its internal controls and policies. Additionally, a review control to ensure suspension and debarment checks are performed for all vendors on a routine basis should be considered.

Views of Responsible Officials/Management Response:

See Management's view and corrective action plan included at the end of this report.

Vanderbilt University Summary Schedule of Prior Audit Findings Year Ended June 30, 2023

Finding 2022-001: Notification of Title IV disbursement not provided appropriately Federal Agency: Department of Education Program: Student Financial Assistance Cluster Assistance Listing #: Various Award #: Various Award Year: 2021-2022

Condition:

During the 2021-2022 award year, four out of twenty-five students tested in our sample of disbursements of Title IV funds were not provided notification prior to disbursement of funds as dictated by 34 CFR 668.165. Notification was provided subsequent to disbursement for three of these students; however, one student was not notified at all.

Recommendation:

It was recommended that the University reiterate to control owners the importance of manually flagging students' accounts when reviews are performed. Additionally, a review control to ensure notifications are provided prior to disbursement should be considered.

Actions Taken:

Vanderbilt University implemented a quality control process that includes an automated query, which generates a report of students who have been awarded financial assistance but have not received the required award notification. This query runs daily and includes all students who are missing the notification. Therefore, a given student will not be removed from the daily report until an award notice is generated. Each generated query is archived after results are reviewed and acted upon by staff. This control was implemented November 2022.

Vanderbilt University Summary Schedule of Prior Audit Findings Year Ended June 30, 2023

Finding 2022-002: Understatement of Federal Expenditures Federal Agency: Department of Education Program: Special Education Cluster Assistance Listing #: 84.027 Award #: Various Award Year: 2021-2022

Condition:

The originally-issued Schedule of Expenditures of Federal Awards ("SEFA") for the year ended June 30, 2022 excluded expenditures of \$2,331,061 pertaining to Assistance Listing Number 84.027 Special Education Cluster (Idea). The Schedule has been revised to correctly reflect these expenditures, and as a result, that program has been audited as a major program.

Recommendation:

Management should enhance current controls surrounding award setup to ensure that the correct award type is utilized for every grant and contract. In addition, management should continue to perform a thorough review of the SEFA details to ensure completeness.

Actions Taken:

In September 2023, Vanderbilt University implemented a quality control process that includes three integrity check reports validating that a federal direct or federal prime sponsor is appropriately set up as a federal award and project type that will be used for award maintenance and SEFA presentation.



Office of Student Financial Aid and Scholarships

The following was noted during the audit of Federal programs in accordance with UMB Uniform Guidance. Management proposes the following Corrective Action Plan:

Finding 2023-0001: Suspension and Debarment Check

Management's View

The University agrees with this finding and acknowledges the importance of maintaining evidence of review for suspension and debarment of vendors. Vanderbilt takes findings seriously and is committed to ensuring that all necessary checks and verifications are conducted in accordance with the federal regulations and our internal controls. Vanderbilt Supplier Records was formerly relying on manual processes to input and support the review of suppliers.

Corrective Action Plan

As a corrective measure, Vanderbilt engaged with GIACT Systems to enhance existing controls by implementing an automated control that facilitates Office of Foreign Assets Control (OFAC) screening via an Application Programming Interface (API). This measure was put in place to ensure that all necessary suspension and debarment checks are conducted timely and accurately for every vendor onboarded.

The new automated control via GIACT's API ensures a more streamlined and reliable process for performing suspension and debarment checks. This automation not only checks the status of vendors but also maintains a detailed log of each check performed, thus addressing the documentation inadequacies noted in the audit finding. This enhancement ensures Vanderbilt is in compliance with 2 CFR section 180.995 and the respective agency adopting regulations. Vanderbilt is undergoing a reconciliation of all active federal suppliers to ensure OFAC screening is complete.

Additionally, Vanderbilt has reiterated to all control owners the importance of adherence to internal controls and policies regarding suspension and debarment checks. Vanderbilt has also scheduled routine reviews to ensure that these checks are being performed for all vendors.

Vanderbilt will continue to monitor and improve our processes to ensure full compliance with federal requirements and our internal policies. For follow-up questions and information, please contact Dalana Robertson, Associate Vice Chancellor for Finance and Controller.

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