

Frequently Asked Questions about Facilities and Administrative (F&A) Costs of Federally Sponsored University Research

1. What are “facilities and administrative” (F&A) costs?

F&A costs – also referred to as “indirect costs” – are essential costs of conducting research. The federal government’s longstanding recognition and payment of these costs has helped U.S. colleges and universities build and support the required research infrastructure that has made the American research enterprise the best in the world.

When the government provides a grant to a university for a research project, a portion (typically 67-75 percent) of the funds are distributed directly to the research team. This “direct costs” portion supports researcher salaries, graduate students, equipment, and supplies. Another portion (typically 25-33 percent) covers necessary research infrastructure and operating expenses that the university provides to support the research. These research expenses – officially called facilities and administrative (F&A) costs – include: state-of-the art research laboratories; high-speed data processing; national security protections (e.g., export controls); patient safety (e.g., human subjects protections); radiation safety and hazardous waste disposal; personnel required to support essential administrative and regulatory compliance work, maintenance staff, and other activities necessary for supporting research.

2. Why does the federal government provide support for F&A costs of research?

F&A costs are research costs. Universities and the federal government have a long-standing and successful partnership that grew out of World War II. The federal government relies on universities to conduct research in the national interest. This includes research aimed at meeting specific national goals such as health and welfare, economic growth, and national defense. Performing research on behalf of federal agencies incurs a variety of expenses that would not otherwise exist for universities. Universities – not the federal government – assume the risk of building the necessary infrastructure to support this research in anticipation that their research faculty will successfully compete for federal research grants and thus the university will be reimbursed for a part of the associated infrastructure costs.

3. Do universities contribute any of their own funds towards research?

Yes. Behind the federal government, universities are the second leading sponsor of the academic research and development (R&D) that take place on their campuses. Federal data show that colleges and universities pay for more than 25 percent of total academic R&D funding from their own funds. This university contribution amounted to \$22 billion in FY20, including \$5.7 billion in unreimbursed F&A costs. These institutional commitments to academic R&D significantly exceed the combined total of all other non-federal sources of support for academic R&D: state and local government (5 percent), industry (6 percent), and foundation (7 percent) support in FY20 and other non-federal sources provided 3 percent in FY20. Federal spending on higher education R&D has lacked significant investment and was just over \$46.2 billion in FY20, or 54 percent of all funding for academic R&D (See figures 1-2).ⁱ While universities contribute significantly to the costs of research, these institutions continue to be stretched thin. State support for public universities has declined greatly over the past 20 years and, in many cases, universities are educating more students. The notion that universities should cover even more of the expense of conducting research for the federal government is not realistic.

4. Do universities 'profit' from the F&A cost reimbursements they receive associated with federal research grants?

No, universities absolutely do not make gains from their F&A recoveries. As defined by the federal government, these are *reimbursements* for costs incurred by universities in conducting research on behalf of the government, and hence, it is impossible for the costs reimbursements to result in a profit. In fact, universities are not even fully reimbursed for the expenses they incur to provide the necessary infrastructure and support to conduct federal research. According to data collected by the NSF, in FY20 universities contributed approximately \$5.7 billion in facilities and administrative expenditures not reimbursed by the government, many of which were not covered because of existing Office of Management and Budget (OMB) cap limiting the amount the government can support universities for administrative and compliance related expenses, including federal mandates.ⁱⁱ

5. Has the university contribution to research been increasing or decreasing?

Increasing. Over the past several years, the share of institutional support that colleges and universities provide to support research conducted by their faculty has grown 24 percent since 2015, faster than any other sector, including the federal government which has seen 18 percent growth since 2015 after several years of static or declining support (see figure 3).ⁱⁱⁱ The increase in institutions' support for the R&D they conduct is due in part to the rising compliance costs associated with increased federal research regulations and reporting requirements in areas such as human subject protection, export control compliance,

and ensuring research security and integrity. Despite the increasing administrative expense for compliance, the amount universities can be reimbursed from the government for these costs has been capped at a flat rate by OMB since 1991. This cap **only** applies to higher education institutions. Unlike other sectors that conduct government research, universities must therefore subsidize compliance costs from their own financial resources.

6. Has the percentage of federal funding for F&A cost reimbursements changed over time?

No. F&A costs recovered by research institutions have remained flat for over 20 years. For example, the National Institutes of Health's percent of total funding going towards F&A cost reimbursements has remained unchanged, at approximately 27-28 percent of total funding, for more than almost two decades (see figure 4).^{iv}

7. How much does the federal government pay for university F&A expenses compared to what it pays other government research performers such as the national laboratories and industrial contractors?

Generally, past studies suggest that total F&A expenses for university research are slightly less than those for other research performers. A study in 2000 by the RAND Corporation found universities had the lowest percentage classified as F&A (31 percent). Federal laboratories were somewhat higher at 33 percent and industrial laboratories were higher still at 36 percent. This demonstrates that universities are efficient performers of research.^v Unfortunately, a comparable study to the RAND study has not been undertaken in recent years. Such a study would be welcomed by the university community.

Additionally, as indicated under the previous question, the federal payment to universities for their F&A cost reimbursements does not cover the full expense to their institution. This is unlike other sectors that receive full compensation for all their expenses. The federal government has smartly invested in university-based research: F&A costs at universities are lower than other sectors, the government does not pay a profit to universities like it must for industry research performers, there is a university-specific cap on the amount the government will cover for administrative expenses, and the system of agency oversight ensures universities continue to be excellent stewards of federal taxpayers' dollars.

8. Can universities itemize F&A expenses for each research project grant?

No. F&A expenses cannot be itemized for individual grant and other research awards and contracts because F&A costs are reimbursements of the aggregated total costs incurred for hundreds and at AAU institutions, thousands of individual awards that faculty and institutions annually receive. The reimbursement methodology is widely accepted by the federal oversight and

audit community, and it provides a much more efficient and rational approach to reimbursing universities for these costs than negotiating and determining an F&A rate for each individual research award. The sheer volume of grants, contracts, and other awards received by universities from various federal agencies, many of which are small in size, means having an established F&A rate makes the grant process more efficient as opposed to negotiating a new F&A rate for every grant, award, or contract.

9. Why do foundations pay less for F&A costs reimbursements than the federal government does? Is the federal government subsidizing the infrastructure required to do foundation-sponsored research?

Comparing what can and cannot be charged to a federal grant versus a foundation grant is an “apples to oranges” comparison since foundations categorize and pay grant-related expenses very differently than the federal government does. For example, foundations often categorize some items as direct expenses that federal rules require to be counted as F&A expenses. This further underscores that direct and F&A costs are all part of total research costs and are inseparable when it comes to the actual conduct of research.

To the extent that a foundation does not pay for certain F&A expenses, these costs must be covered by the institution. OMB rules ([2 CFR Part 200 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards](#)) specifically require universities to ensure the federal government does not subsidize non-federally sponsored research activity – including research and associated infrastructure costs performed by universities for private foundations – in their support for F&A expenses.

Additionally, as previously noted, after World War II the federal government consciously chose to encourage universities to conduct research on its behalf to help achieve national goals. A core tenant of the partnership between the federal government and universities is that the government shares in the costs of research by providing universities with competitively awarded grants to support the people, tools, *and infrastructure* necessary to conduct high-quality research for the nation. Historically, most foundations view their grants as supplementing research that scientists are already conducting. To this day, most foundation research funding is viewed as supplementing existing federal and non-federal research.

Finally, foundation funding for university-based research remains a small proportion of total academic R&D funding (only 7 percent) compared to federal funding (54 percent) and the funding provided to support academic R&D by the colleges and universities themselves (25 percent).

10. Are federal F&A cost reimbursements used to subsidize other campus accounts, such as athletics or construction?

No. OMB rules ([2 CFR Part 200 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards](#)) require that F&A cost reimbursements can **only** be based on federally funded research space and related research activities, not education or other university facilities or activities.

11. Is it true that universities with F&A rates over 50 percent spend more than half the grant funds they receive from the federal government to pay for F&A expenses?

No. A university's F&A cost rate is **not** a percent of the total grant, but rather a percentage only of the research project's direct costs. Currently, the average amount paid to universities for F&A expenses is approximately 25-33 percent of the total amount of a grant. (Campuses with medical centers tend to be closer to 33 percent because of the increased costs and expenses involved in providing for medical research facilities.)

12. How does the F&A rate determine how much a university receives for F&A costs on a grant?

To determine the level of F&A expenses the federal government will cover, every 3 to 4 years, the agency responsible for setting a university's F&A rate (either the Department of Defense Office of Naval Research or the Department of Health and Human Services) will comprehensively audit and assess these shared costs to determine the appropriate federal share based upon specific costs that have been deemed allowable expenses by the OMB. The overall figure is ultimately calculated *as a percentage of the amount the federal government awards for direct research costs (not a percentage of the overall funds, the figure most people see)*.

For example, after reviewing all the expected costs and considering past research projects, a university and the federal government may determine that an amount equal to 50 percent of direct research costs is appropriate for the federal government to contribute toward F&A expenses. In that case, if the federal government awards a university \$450,000 for the direct research portion of a grant, of which \$365,000 is the modified total direct cost¹, then it also awards \$182,500 for F&A cost reimbursements, for a total of \$632,500. These overall institutional F&A rates are then applied uniformly to each grant at the university to avoid the very tedious, expensive and inefficient process of computing the F&A expenses for individual awards – which would add additional costs for both the government and the university.

Research Budget	NIH R01 (Lab-based)
Direct Costs	
Personnel	
<i>Principal Investigator (MTDC)</i>	60,000
<i>Lab Techs / Scientists (MTDC)</i>	130,000
<i>PostDocs / Grad Students (MTDC)</i>	115,000
Supplies (MTDC)	55,000
Travel (MTDC)	5,000
Grad Student Tuition	20,000
Equipment	60,000
<u>SUB-TOTAL</u>	<u>450,000</u>
<u>MODIFIED TOTAL DIRECT COSTS (MTDC)</u>	<u>365,000¹</u>
Indirect Costs	
NIH R01 F&A (50% applicable to MTDC)	182,500 ¹
<u>F&A AS % OF TOTAL BUDGET</u>	<u>28.8%</u>
<u>TOTAL RESEARCH BUDGET</u>	<u>632,500</u>

¹ An institution's F&A rate is applied to modified total direct costs (MTDC). In this example, personnel (\$305,000), supplies (\$55,000), and travel (\$5,000). Therefore, the 50% F&A rate is applicable to the sum of these cost items (\$365,000), resulting in an F&A amount of \$182,500.

13. Why do F&A cost reimbursement rates vary between institutions?

Federal agency officials and university administrators predetermine an overall percentage of allowed F&A cost reimbursements to be paid, based on documented historical costs and cost analysis studies. The final rates allowed for F&A expenses are established based on a rigorous review and audit of the actual funds previously spent for such costs. F&A cost reimbursement rates vary from institution to institution because construction, maintenance, utilities, and administration costs vary by institution and by region.

Additionally, F&A rates depend upon other factors such as the age and condition of facilities and buildings and the amount of renovation and construction needed to house certain types of research projects. For example, the F&A costs for a biomedical

research facility built in an urban area that experiences earthquakes is different than an engineering research facility built in a rural area.

14. How would universities cover F&A costs if the government cut back on the amount it would reimburse?

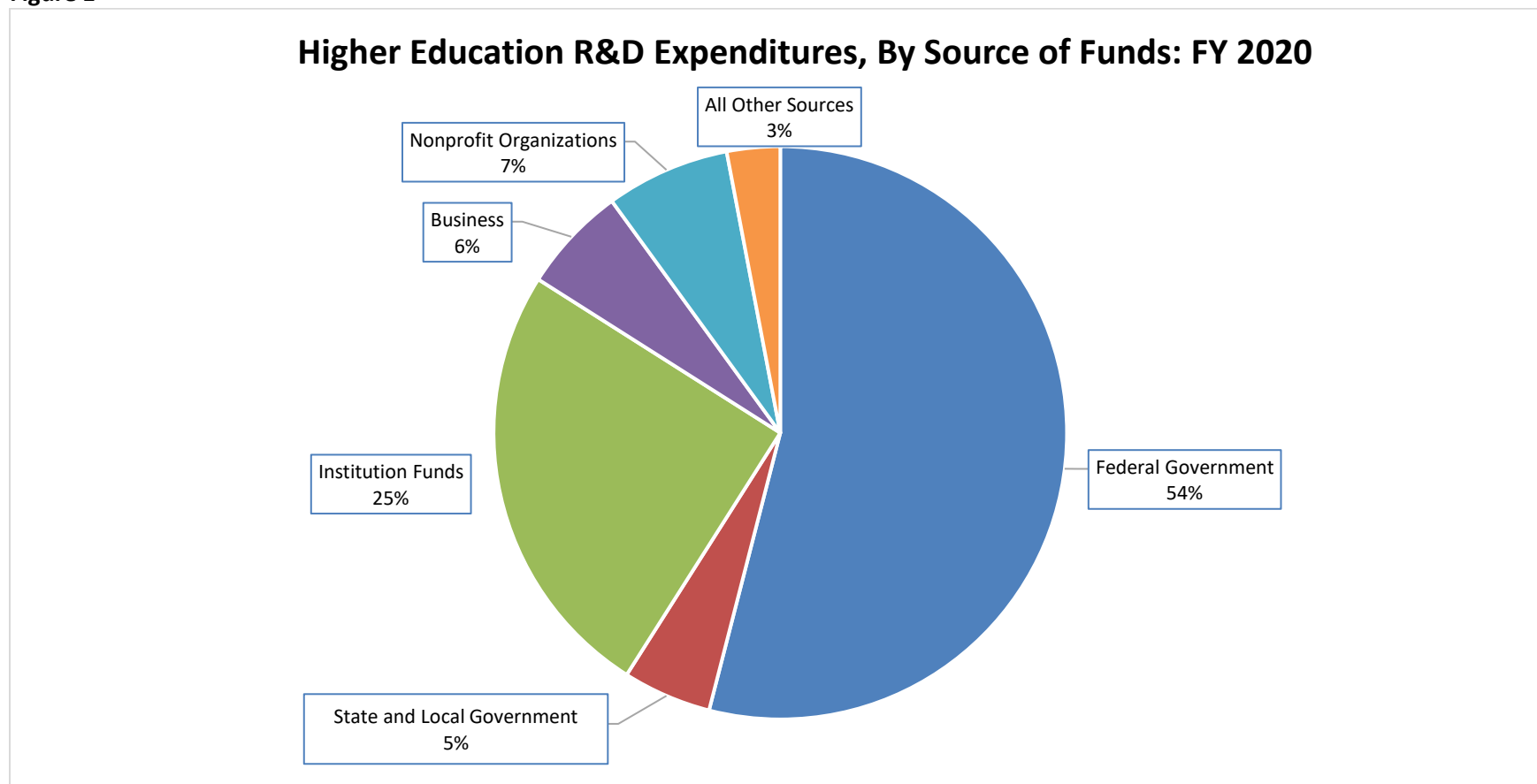
Universities have a limited number of funding sources. The primary funding sources for research universities to fulfill their educational missions of teaching, research, and service are: tuition, research grants, cooperative agreements and contracts, philanthropy, endowment income, and state appropriations.

A reduction of federal F&A cost reimbursements would result in one or more of the following:

- The inability of universities to accept research awards from, and conduct research on behalf of, federal agencies;
- The deterioration of research facilities as the financial risk to build new facilities or maintain existing ones becomes too great to invest institutional funds;
- The inability to sustain required support staff and infrastructure required to comply with government regulations; this could threaten the health and safety of patients, researchers and students;
- A reduction in the pipeline of trained scientists and engineers in the workforce due to reduced research training opportunities at universities.
- An increase in tuition rates, an action which universities would not want to take.

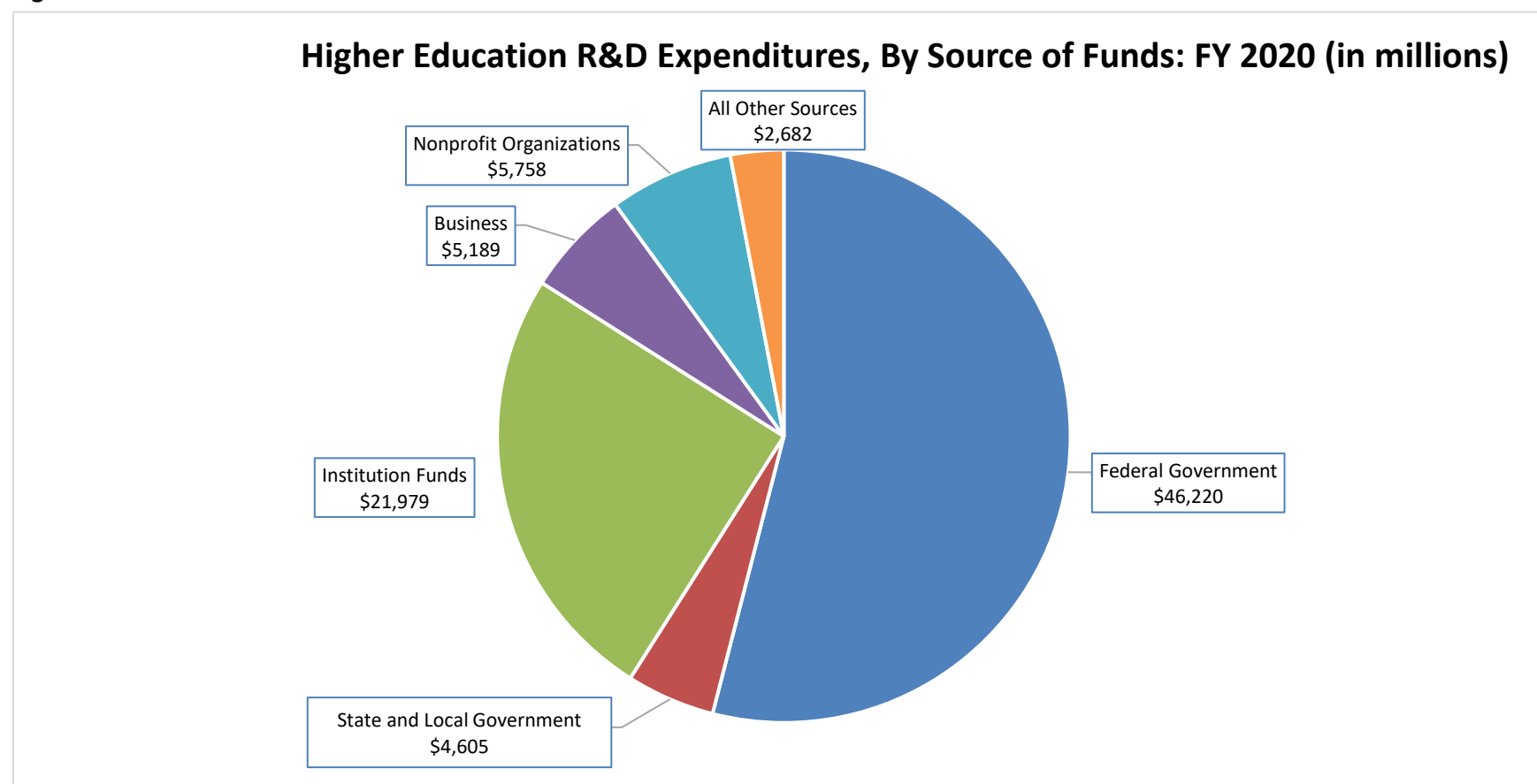
Bottom Line: *Cuts to F&A research costs are cuts to research. If such cuts are made, they will reduce the amount of research universities and their scientists can conduct on behalf of the federal government to achieve key national goals to improve the health and welfare of the American people, grow the economy, and enhance our national security.*

Figure 1



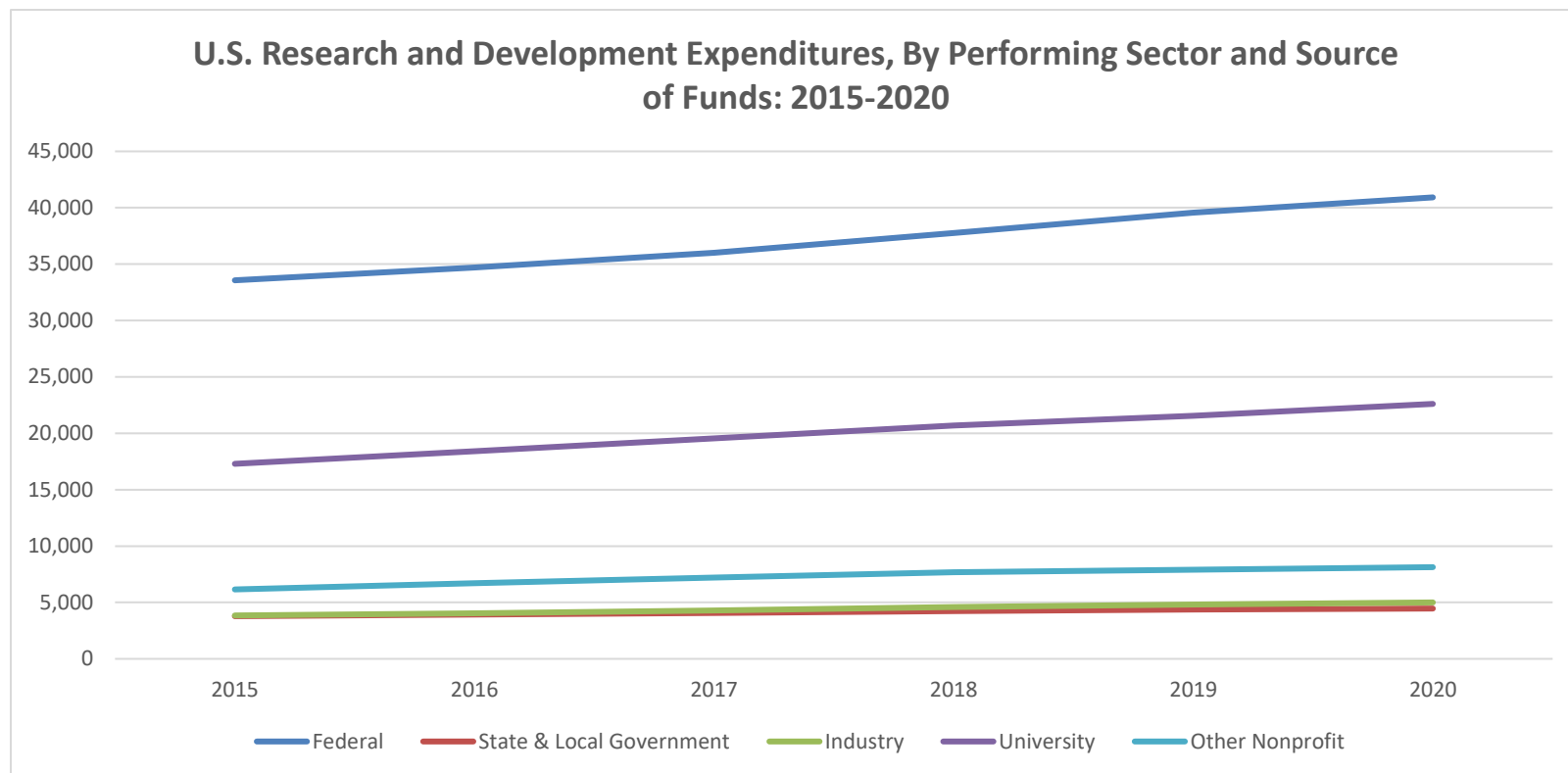
Source: NSF, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey

Figure 2



Source: NSF, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey

Figure 3



Source: NSF, National Center for Science and Engineering Statistics 2017, National Patterns of R&D Resources: 2019-20 Data Update

Figure 4

NIH Direct and F&A Awarded (Dollars and Percent)

Fiscal Year	Direct Awarded (000s)	F&A Awarded (000s)	Total Awarded (000s)	Direct as a Percent of Total	F&A as a Percent of Total
FY 2002	12,822,068	4,835,456	17,657,524	72.6	27.4
FY 2007	15,387,745	5,876,060	21,263,805	72.4	27.6
FY 2012	15,978,032	6,182,900	22,160,932	72.1	27.9
FY 2017	17,799,515	6,838,801	24,638,316	72.2	27.8
FY 2021	22,363,606	8,620,853	30,984,459	72.2	27.8

Source: Congressional Justification of the NIH FY2023 budget request; Overview of 2023 President's Budget

ⁱ National Science Foundation, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey. Table 2: Higher education R&D expenditures, by source of funds: FYs 2015–2020.

ⁱⁱ National Science Foundation, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey. Higher education R&D expenditures, by highest degree granted, institutional control, and type of cost: FYs 2010–20.

ⁱⁱⁱ National Science Foundation, National Center for Science and Engineering Statistics. 2017. National Patterns of R&D Resources: 2019–20 Data Update. Table 2: U.S. research and development expenditures, by performing sector and source of funds: 1953–2020.

^{iv} Congressional Justification of the NIH FY2023 budget request; Overview of 2023 President's Budget.

^v Goldman, Charles A., Traci Williams, David M. Adamson and Kathy Rosenblatt. Paying for University Research Facilities and Administration. Santa Monica, CA: RAND Corporation, 2000. https://www.rand.org/pubs/monograph_reports/MR1135-1.html.