

Table A-23. Higher Education Research and Development Survey data table crosswalk: FY 2023 vs. FY 2024

(Crosswalk)

2023	2024	2024 table title and group
<b>Data Tables Report</b>		
		<b>Higher education R&amp;D expenditures reported by all institutions (standard form and short form populations)</b>
1	1	Higher education R&D expenditures, by source of funds: FYs 1953–2024
2	2	Higher education R&D expenditures, by source of funds and survey form: FYs 2010–24
3	3	Higher education R&D expenditures, by source of funds, R&D field, and survey population: FY 2024
5	4	Higher education R&D expenditures at higher education institutions in the standard form and short form survey populations, ranked by all R&D expenditures, by source of funds: FY 2024
6	5	Higher education R&D expenditures at institutions in the standard form and short form survey populations, by state, institutional control, system, and institution: FY 2024
7	6	Total and federally financed higher education R&D expenditures at higher education institutions in the standard form and short form survey populations, ranked by FY 2024 total R&D expenditures: FYs 2021–24
		<b>Higher education R&amp;D expenditures within standard form population</b>
8	7	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population, by type of R&D: FYs 1953–2024
9	8	Higher education R&D expenditures at institutions in the standard form survey population, by source of funds and type of R&D: FYs 2010–24
10	9	Higher education R&D expenditures at institutions in the standard form survey population, by R&D field: FYs 2010–24
		<b>Higher education R&amp;D expenditures by selected area</b>
13	10	Higher education R&D expenditures at institutions in the standard form survey population, by source of funds and R&D field: FY 2024
14	11	Federally financed higher education R&D expenditures at institutions in the standard form survey population, by federal agency and R&D field: FY 2024
17	12	Higher education R&D expenditures at institutions in the standard form survey population, by type of cost, highest degree granted, and institutional control: FYs 2010–24
		<b>Institution rankings, by all R&amp;D expenditures</b>
21	13	Higher education R&D expenditures at institutions in the standard form survey population, ranked by FY 2024 R&D expenditures: FYs 2010–24
22	14	Higher education R&D expenditures at institutions in the standard form survey population, ranked by all R&D expenditures, by source of funds: FY 2024
23	15	Higher education R&D expenditures at institutions in the standard form survey population, ranked by all R&D expenditures, by R&D field: FY 2024
		<b>Institution rankings, by federally financed R&amp;D expenditures</b>
24	16	Federally financed higher education R&D expenditures at institutions in the standard form survey population, ranked by FY 2024 R&D expenditures: FYs 2010–24
25	17	Federally financed higher education R&D expenditures at institutions in the standard form survey population, ranked by all federal R&D expenditures, by R&D field: FY 2024
26	18	Federally financed higher education R&D expenditures at institutions in the standard form survey population, ranked by all federal R&D expenditures, by federal agency: FY 2024
		<b>Institution rankings, by special focus</b>
36	19	Higher education R&D expenditures at all institutions in the standard form survey population, ranked by all non-medical school R&D expenditures: FY 2024
37	20	Higher education R&D expenditures at public institutions in the standard form survey population, ranked by all R&D expenditures, by source of funds: FY 2024
		<b>Higher education R&amp;D expenditures in engineering fields, ranked by FY 2024 total</b>
55	21	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in engineering, ranked by FY 2024 total: FYs 2021–24
56	22	Higher education R&D expenditures at institutions in the standard form survey population in engineering subfields, ranked by all FY 2024 engineering R&D: FYs 2022–24 and by subfield for FY 2024
		<b>Higher education R&amp;D expenditures in non-S&amp;E fields and subfields, ranked by FY 2024 total</b>
58	23	Higher education R&D expenditures at institutions in the standard form survey population in non-science and engineering fields, ranked by all FY 2024 non-S&E fields: FYs 2022–24 and by subfield for FY 2024
		<b>Federally financed expenditures, ranked by federal agency total, by R&amp;D field: FY 2024</b>
60	24	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2024
		<b>Geographic distribution: FYs 2010-24</b>
67	25	Higher education R&D expenditures at institutions in the standard form survey population, by state: FYs 2010–24
		<b>Headcount and full-time equivalents (FTEs) of and R&amp;D personnel at higher education institutions</b>
78	26	Headcount and FTEs of R&D personnel at higher education institutions in the standard form survey population, by personnel function and sex: FYs 2020–24

**Table A-23. Higher Education Research and Development Survey data table crosswalk: FY 2023 vs. FY 2024**

(Crosswalk)

2023	2024	2024 table title and group
79	27	Headcount and FTEs of R&D personnel at higher education institutions in the standard form survey population, by state, institutional control, institution, and personnel function: FY 2024
<b>Tables previously in the Data Tables Report now available only in the Web-based Table Builder data tool</b>		
<b>Institution rankings, by nonfederally financed R&amp;D expenditures</b>		
27	28	Higher education R&D expenditures at institutions in the standard form survey population funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2024
28	29	Higher education R&D expenditures at institutions in the standard form survey population funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2024
29	30	Higher education R&D expenditures at institutions in the standard form survey population funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2024
30	31	Higher education R&D expenditures at institutions in the standard form survey population funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2024
31	32	Higher education R&D expenditures at institutions in the standard form survey population funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2024
<b>Higher education R&amp;D expenditures in science fields, ranked by FY 2024 total</b>		
39	33	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in the computer and information sciences, ranked by FY 2024 total: FYs 2021–24
40	34	Higher education R&D expenditures at institutions in the standard form survey population in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2024 geosciences, atmospheric sciences, and ocean sciences: FYs 2021–24
41	35	Federally financed higher education R&D expenditures at institutions in the standard form survey population in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2024 geosciences, atmospheric sciences, and ocean sciences: FYs 2021–24
42	36	Higher education R&D expenditures at institutions in the standard form survey population in the life sciences, ranked by all FY 2024 life sciences: FYs 2021–24
43	37	Federally financed higher education R&D expenditures at institutions in the standard form survey population in the life sciences, ranked by all FY 2024 life sciences: FYs 2021–24
44	38	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in the agricultural sciences and natural resources and conservation, ranked by FY 2024 agricultural sciences and natural resources conservation total: FYs 2021–24
45	39	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in the biological and biomedical sciences, ranked by FY 2024 total: FYs 2021–24
46	40	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in the health sciences, ranked by FY 2024 total: FYs 2021–24
47	41	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in mathematics and statistics, ranked by FY 2024 total: FYs 2021–24
48	42	Higher education R&D expenditures at institutions in the standard form survey population in the physical sciences, ranked by all FY 2024 physical sciences: FYs 2021–24
49	43	Federally financed higher education R&D expenditures at institutions in the standard form survey population in the physical sciences, ranked by all FY 2024 physical sciences: FYs 2021–24
50	44	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in chemistry, ranked by FY 2024 total: FYs 2021–24
51	45	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in physics, ranked by FY 2024 total: FYs 2021–24
52	46	Total and federally financed higher education R&D expenditures at institutions in the standard form survey population in psychology, ranked by FY 2024 total: FYs 2021–24
53	47	Higher education R&D expenditures at institutions in the standard form survey population in the social sciences, ranked by all FY 2024 social sciences: FYs 2021–24
54	48	Federally financed higher education R&D expenditures at institutions in the standard form survey population in the social sciences, ranked by all FY 2024 social sciences: FYs 2021–24
<b>Higher education R&amp;D expenditures in engineering fields, ranked by FY 2024 total</b>		
57	49	Federally financed higher education R&D expenditures at institutions in the standard form survey population in engineering subfields, ranked by all FY 2024 engineering R&D: FYs 2022–24
<b>Federally financed expenditures, ranked by federal agency total, by R&amp;D field: FY 2024</b>		
61	50	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2024
62	51	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2024
63	52	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2024
64	53	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2024
65	54	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2024
66	55	Federally financed higher education R&D expenditures at institutions in the standard form survey population, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2024
<b>Technical Tables</b>		
A-1	A-1	Institution name changes between FY 2023 and FY 2024 Higher Education Research and Development Survey
A-2	A-2	Total and federally financed higher education R&D expenditures at surveyed institutions reporting less than \$150,000 in separately accounted-for R&D expenditures: FY 2024

**Table A-23. Higher Education Research and Development Survey data table crosswalk: FY 2023 vs. FY 2024**

(Crosswalk)

2023	2024	2024 table title and group
A-3	A-3	Institutions surveyed for the Higher Education Research and Development Survey, by highest degree granted and survey population: FYs 2019–24
		<b>Response rates: FY 2024</b>
A-4	A-4	Response rates for the Higher Education Research and Development Survey, by survey population, highest degree granted, and institutional control: FY 2024
A-5	A-5	Response rates for the Higher Education Research and Development Survey, by survey form and question: FY 2024
		<b>Imputed amounts for higher education R&amp;D expenditures: FY 2024</b>
A-6	A-6	Imputed amounts for total higher education R&D expenditures, by survey population and highest degree granted: FY 2024
A-7	A-7	Imputed amounts for total higher education R&D expenditures, by survey population and source of funds: FY 2024
A-8	A-8	Imputed amounts for higher education R&D expenditures from foreign sources, by source of funds: FY 2024
A-9	A-9	Imputed amounts for externally financed higher education R&D expenditures, by type of agreement: FY 2024
A-10	A-10	Imputed amounts for higher education R&D expenditures in a medical school, by institutional control: FY 2024
A-11	A-11	Imputed amounts for higher education R&D expenditures in clinical trials, by source of funds: FY 2024
		<b>Imputed amounts for federally funded higher education R&amp;D expenditures: FY 2024</b>
A-12	A-12	Imputed amounts for total and federally financed higher education R&D expenditures, by type of R&D: FY 2024
A-13	A-13	Imputed amounts for total and federally financed higher education R&D expenditures received as a subrecipient, by survey population and type of pass-through entity: FY 2024
A-14	A-14	Imputed amounts for total and federally financed higher education R&D expenditures passed through, by survey population and type of subrecipient: FY 2024
A-15	A-15	Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the standard form population, by R&D field: FY 2024
A-16	A-16	Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the short form population, by R&D field: FY 2024
A-17	A-17	Imputed amounts for higher education R&D expenditures, by type of cost: FY 2024
A-18	A-18	Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2024
		<b>Imputed amounts for headcount and full-time equivalents (FTEs) of R&amp;D personnel: FY 2024</b>
A-19	A-19	Imputed amounts for headcount of R&D personnel, by personnel function and sex: FY 2024
A-20	A-20	Imputed amounts for FTEs, by personnel function: FY 2024
		<b>Response details: FY 2024</b>
A-21	A-21	Federally financed higher education R&D expenditures from federal agencies not specified in Question 9: FY 2024
A-22	A-22	Response summary for Question 13, capitalization thresholds, by highest degree granted, institutional control, and capitalization threshold: FY 2024
		<b>Crosswalk: FY 2023 vs. FY 2024</b>
New	A-23	Higher Education Research and Development Survey data table crosswalk: FY 2023 vs. FY 2024
		<b>Tables no longer published; data available by custom selections in the Table Builder data tool</b>
		<b>Higher education R&amp;D expenditures reported by all institutions (standard form and short form populations)</b>
4	NA	Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, by source of funds and survey population: FY 2024
		<b>Higher education R&amp;D expenditures within standard form population</b>
11	NA	Federally financed higher education R&D expenditures at institutions in the standard form survey population, by R&D field: FYs 2010–24
12	NA	Nonfederally financed higher education R&D expenditures at institutions in the standard form survey population, by R&D field: FYs 2010–24
		<b>Higher education R&amp;D expenditures by selected area</b>
15	NA	Higher education R&D expenditures from foreign sources at institutions in the standard form survey population, by highest degree granted and institutional control: FYs 2010–24 and by source of foreign funds for FYs 2016–24
16	NA	Externally funded higher education R&D expenditures at institutions in the standard form survey population, by highest degree granted, institutional control, and type of agreement: FYs 2010–24
18	NA	Higher education R&D expenditures for equipment at institutions in the standard form survey population, by R&D field, source of funds, and institutional control: FY 2024
19	NA	Total R&D expenditures within medical schools at institutions in the standard form survey population, by highest degree granted and institutional control: FYs 2010–24

**Table A-23. Higher Education Research and Development Survey data table crosswalk: FY 2023 vs. FY 2024**

(Crosswalk)

2023	2024	2024 table title and group
20	NA	Higher education R&D expenditures for clinical trials at institutions in the standard form survey population, by source of funds, highest degree granted, and institutional control: FYs 2010–24
		<b>Institution rankings, by special focus</b>
32	NA	Higher education R&D expenditures at historically black colleges and universities in the standard form survey population, ranked by all R&D expenditures, by source of funds: FY 2024
33	NA	Higher education R&D expenditures at historically black colleges and universities in the standard form survey population, ranked by all R&D expenditures, by R&D field: FY 2024
34	NA	Higher education R&D expenditures at high-Hispanic-enrollment institutions in the standard form survey population, ranked by all R&D expenditures, by source of funds: FY 2024
35	NA	Higher education R&D expenditures at high-Hispanic-enrollment institutions in the standard form survey population, ranked by all R&D expenditures, by R&D field: FY 2024
38	NA	Higher education R&D expenditures at private institutions in the standard form survey population, ranked by all R&D expenditures, by source of funds: FY 2024
		<b>Higher education R&amp;D expenditures in non-S&amp;E fields and subfields, ranked by FY 2024 total</b>
59	NA	Federally financed higher education R&D expenditures at institutions in the standard form survey population in non-science and engineering fields, ranked by all FY 2024 non-S&E fields: FYs 2022–24 and by subfield for FY 2024
		<b>Geographic distribution: FYs 2010–24</b>
68	NA	Higher education R&D expenditures at institutions in the standard form survey population, by state, institutional control, and institution: FYs 2010–24
69	NA	Higher education R&D expenditures at institutions in the standard form survey population, by state and source of funds: FY 2024
		<b>Geographic distribution, by institutional control and institution: FY 2024</b>
70	NA	Higher education R&D expenditures at institutions in the standard form survey population, by state, institutional control, institution, and source of funds: FY 2024
71	NA	Higher education R&D expenditures at institutions in the standard form survey population, by state, institutional control, institution, and R&D field: FY 2024
72	NA	Higher education R&D expenditures at institutions with a medical school in the standard form survey population, by state, institutional control, and institution: FY 2024
73	NA	Higher education R&D expenditures at institutions reporting clinical trials in the standard form survey population, by state, institutional control, institution, and source of funds: FY 2024
		<b>Higher education R&amp;D expenditures passed through to and received as subrecipients: FY 2024</b>
74	NA	Total and federally financed higher education R&D expenditures received as a subrecipient, at institutions in the standard form survey population, by highest degree granted and institutional control: FY 2024
75	NA	Total and federally financed higher education R&D expenditures passed through to subrecipients, at institutions in the standard form survey population, by highest degree granted and institutional control: FY 2024
76	NA	Total and federally financed higher education R&D expenditures received as a subrecipient, at institutions in the standard form survey population, by state, institutional control, and institution: FY 2024
77	NA	Total and federally financed higher education R&D expenditures passed through to subrecipients, at institutions in the standard form survey population, by state, institutional control, and institution: FY 2024
		<b>Higher education R&amp;D expenditures in science and engineering fields only: FYs 2010-23</b>
80	NA	Higher education R&D expenditures at institutions in the standard form survey population in science and engineering fields, ranked by FY 2024 R&D expenditures: FYs 2010–24
81	NA	Federally financed higher education R&D expenditures at institutions in the standard form survey population in science and engineering fields, ranked by FY 2024 R&D expenditures: FYs 2010–24
82	NA	Higher education R&D expenditures at institutions in the standard form survey population in science and engineering fields, by state: FYs 2010–24
		<b>Higher education R&amp;D expenditures reported by the short form population</b>
83	NA	Higher education R&D expenditures at institutions in the short form survey population in FY 2024, by state, institutional control, and institution: FYs 2021–24
84	NA	Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2024
85	NA	Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2024
86	NA	Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2024

NA = not available in pre-produced table; data still available via custom selections in the Table Builder data tool (<https://ncesdata.nsf.gov/builder/herd>).**Note(s):**

The data tables and technical tables provided as part of the Higher Education Research and Development Survey 2024 data release were revised. These changes do not reflect a change in the survey or the availability of the underlying data; this new configuration presents a streamlined approach to the published data. The NCSES Table Builder data tool and public use file contain all of the data necessary to replicate the tables that are no longer published.

**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.