

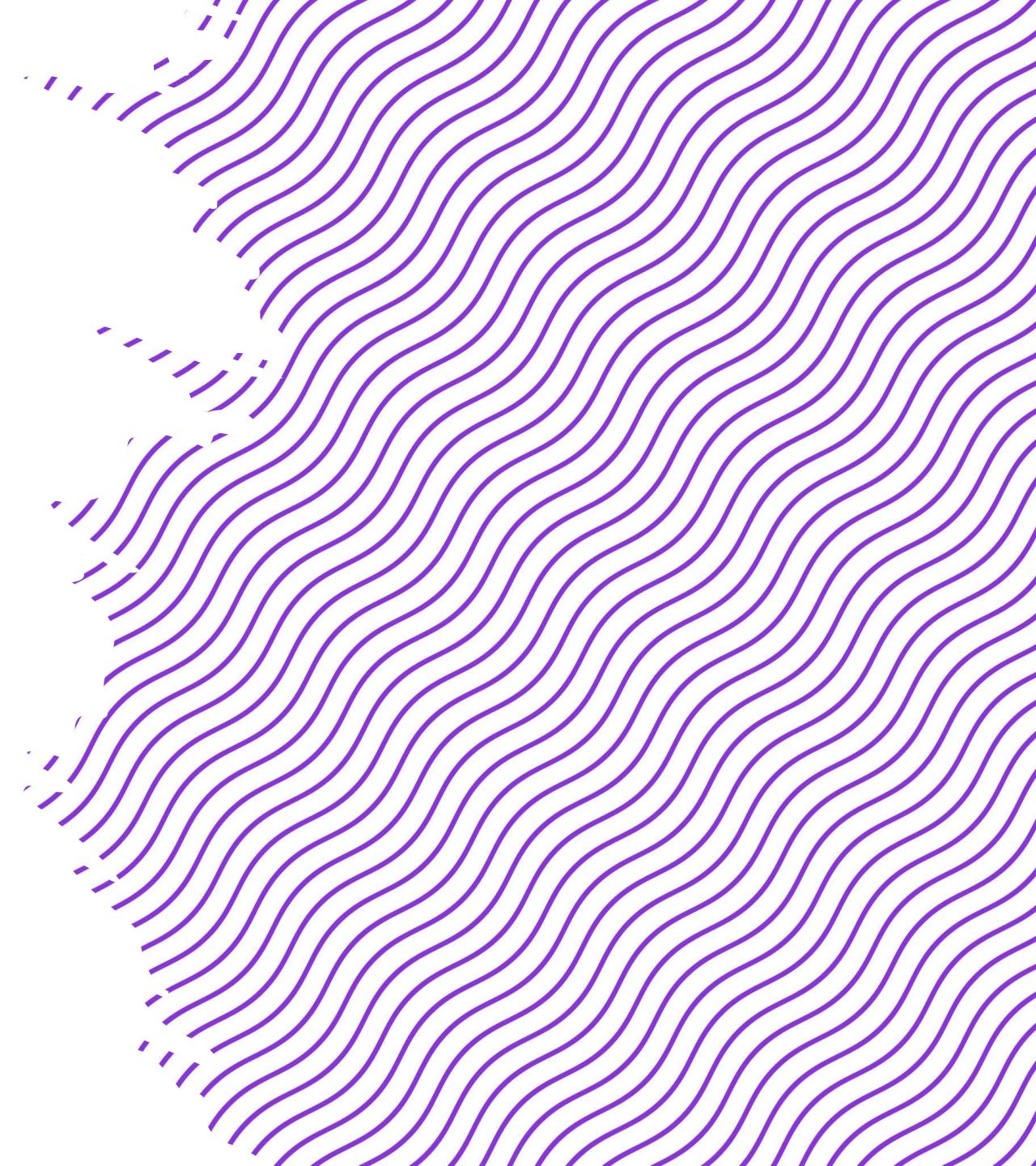
Using Agency Data for Research Development

Lou Hurst, M. A.

**Proposal Development Officer,
University of Kentucky**

2024 Research Analytics Summit

March 12, 2024



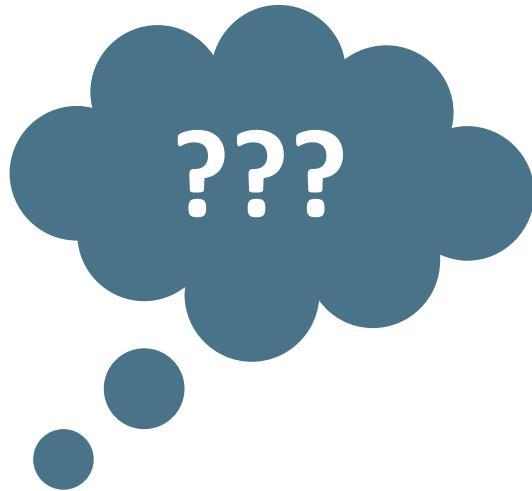


As a research development professional, you must help your institution and its investigators make decisions about pursuing external research funding.

You can use **agency-provided data** to inform and guide these decisions.

Funders provide this data in the interest of:

- Accountability and transparency
- Tracking mission-related performance



Questions Investigators have:

- What are my chances of success?
- Where are my most likely funding prospects?
- What projects similar to mine have been funded?
- How often do investigators /institutions like mine get funded by this sponsor?

Questions leadership have:

What are trends in funding opportunities?

What are trends in awards made?

How can we interpret our internal metrics?

How can we get more proposal submissions?

- Highlighting opportunities
- Targeting opportunities to the right investigators
- Clearing up misconceptions



Agency data can help you:

Find

Find suitable
funding
opportunities

Contextualize

Contextualize
funding
announcements

Plan

Plan and position in
light of emerging
trends

What are some trends you've seen?

- More limited-submission opportunities
- Shorter times between funding announcements and submission due dates
- More complex grant opportunities
- More opportunities for research on AI

How do you access the data?



Search and query tools

Raw data downloads & reports

Ready-made data products

- Graphs and charts
- Maps
- Fact sheets
- Reports, briefs, publications

Grants.gov and SAM.gov

Centralized and standardized
repositories of federal
grant/contract opportunities

You can:

- Search forecasted, active, and archived opportunities
- Save and export search results
- Subscribe to searches

Issues/problems with funding opportunity searches

Funding opportunities represent hypotheticals.

- Opportunities are not additive.

Funding opportunities are “not all equal.”

- Number of expected awards and award amounts is variable
- Eligibility may be questionable

Vetting opportunities requires textual analysis and interpretation.

- Can AI help?

Data on federal spending

USA Spending

<https://www.usaspending.gov/>

HHS - Tracking Accountability in Government Grants System (TAGGS)

<https://taggs.hhs.gov/>

HRSA Data Warehouse

<https://data.hrsa.gov/>

Defense Technical Information Center

<https://discover.dtic.mil/>

Advanced Search

[Share](#) [Download](#)

Filters

Learn which data elements are associated with certain search filters [i](#)

Submit Search [Reset search](#)

Keyword [i](#)

Time Period [i](#)

[Fiscal Year](#) [Date Range](#)

All Fiscal Years

FY2024 FY 2015

FY2023 FY 2014

FY2022 FY 2013

FY2021 FY 2012

FY2020 FY 2011

FY2019 FY 2010

FY2018 FY 2009

FY2017 FY 2008

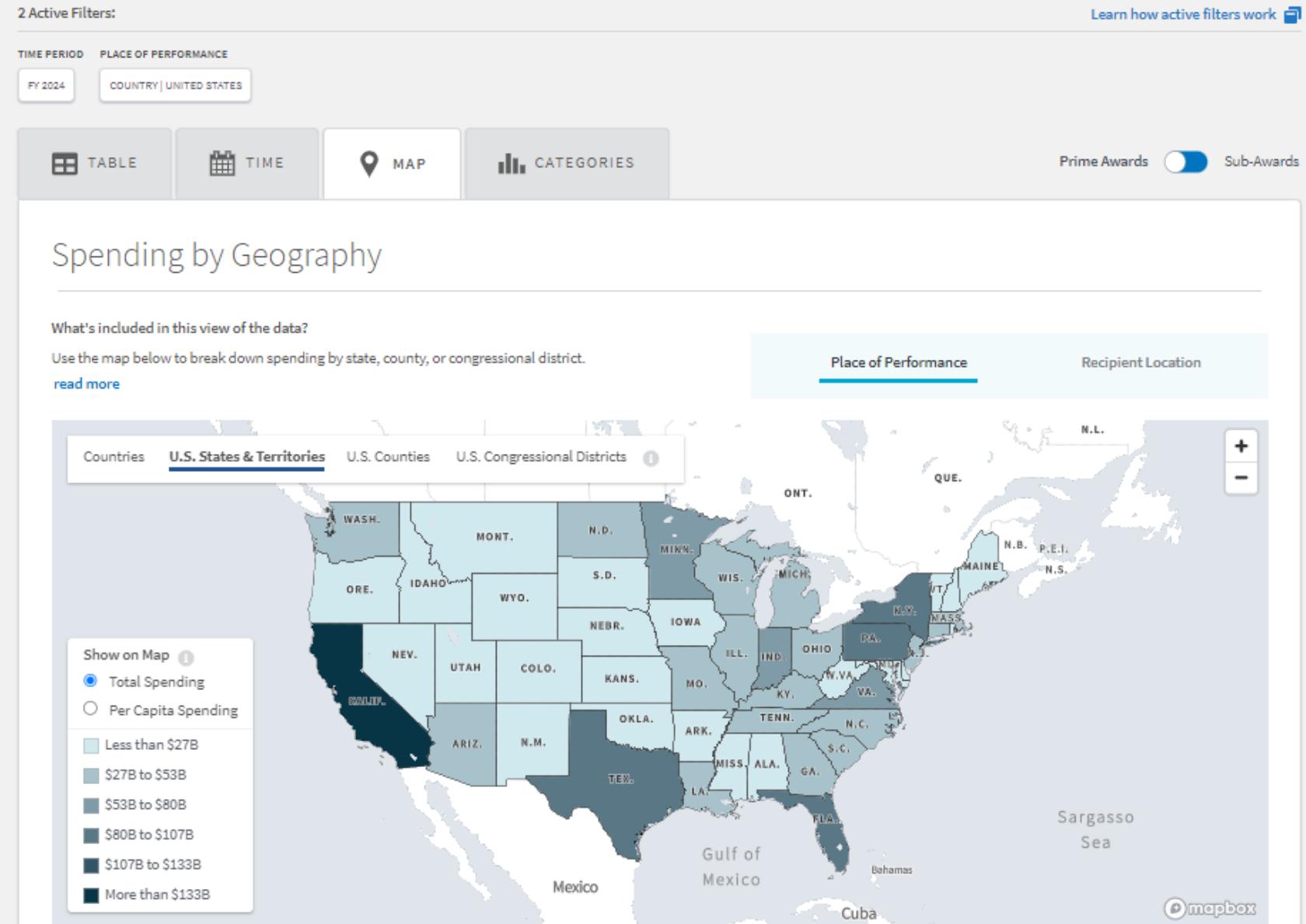
FY2016

Show New Awards Only [i](#)

Award Type

Agency

Treasury Account Symbol (TAS)



Filters

Learn which data elements are associated with certain search filters [?](#)

Submit Search

[Reset search](#)

Keyword [?](#)

Time Period [?](#)

[Fiscal Year](#)

[Date Range](#)

2 Active Filters:

[Learn how active filters work](#)

TIME PERIOD PLACE OF PERFORMANCE

FY 2024

COUNTRY | UNITED STATES

TABLE

TIME

MAP

CATEGORIES

Prime Awards



Sub-Awards

Spending by Geography

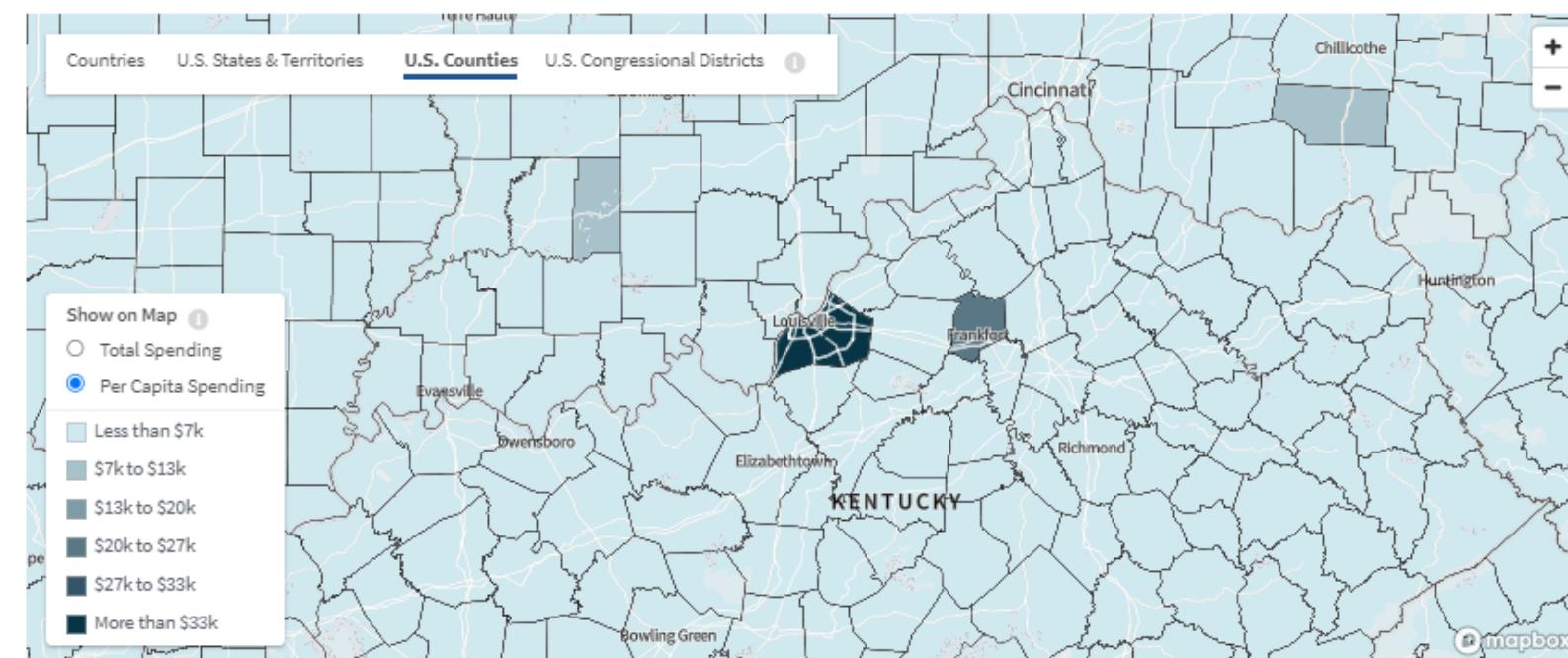
What's included in this view of the data?

Use the map below to break down spending by state, county, or congressional district.

[read more](#)

Place of Performance

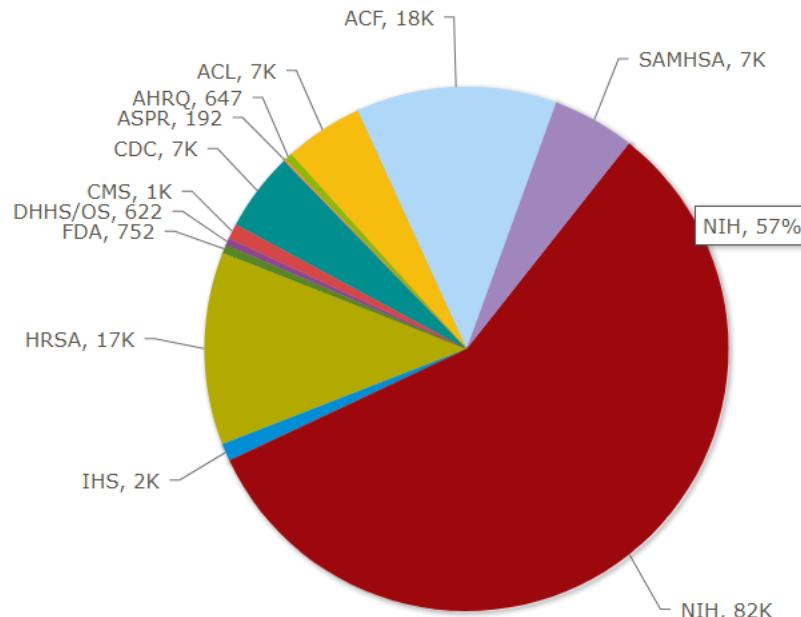
Recipient Location



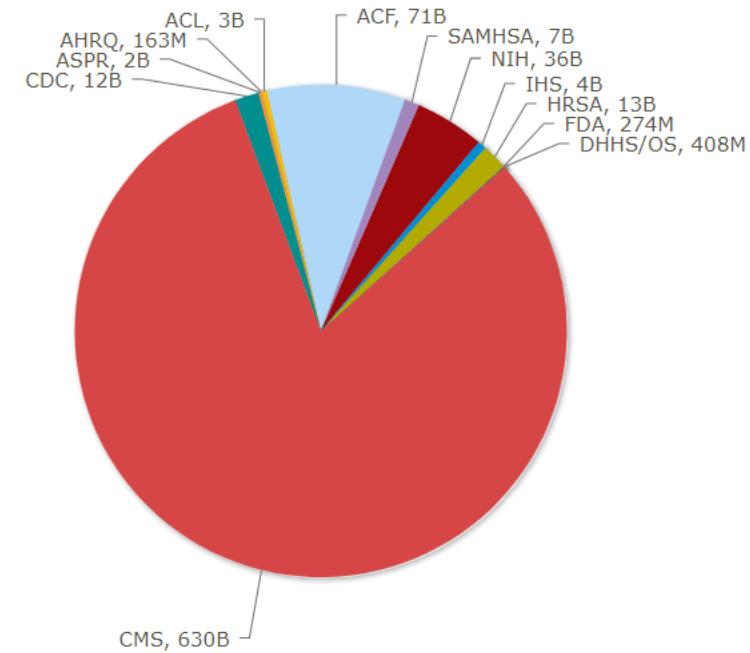
NOTE: Data reported by the Department of Health and Human Services (HHS) related to Medicare payments does not reflect the place where "the majority of the work" occurs, as required by USAspending's data model specifications. For more information, visit our [About Page](#).

HHS-TAGGS

Number of Grant Awards by OPDIV for FY 2023



Grant Award Dollars by OPDIV for FY 2023



Legend for Number of Grant Awards by OPDIV for FY 2023:

ACF	ACL	AHRQ	ASPR	CDC	CMS
DHHS/OS	FDA	HRSA	IHS	NIH	SAMHSA

Legend for Grant Award Dollars by OPDIV for FY 2023:

ACF	ACL	AHRQ	ASPR	CDC	CMS
DHHS/OS	FDA	HRSA	IHS	NIH	SAMHSA

HRSA Data Warehouse

 Health Resources & Services Administration

data.HRSA.gov

Search  A-Z Index

Find Health Care ▾

Data ▾

Maps ▾

Tools ▾

Topics ▾

Help ▾



Data by Geography

This tool provides an overview of HRSA's investments nationwide or by a geographic area, including: HHS region, state, county, and congressional district.

SELECT A GEOGRAPHIC AREA BELOW

Nation

HHS Region ▾

State/Territory ▾

County ▾

Congressional District ▾

Submit 

 Save This Search

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary federal agency that administers programs that provide equitable health care to people who are geographically isolated and economically or medically vulnerable.

FY 2023 – Kentucky



Demographic	2022 Data
Population	4,502,935
Median Household Income	\$60,183
Low Income Population (Population in households with incomes below 2-times the U.S. poverty level)	323,150

Based upon U.S. Census American Community Survey (ACS) 2022 5-year estimate data as of 12/31/2022

Total Awards

Program	FY 2023 Funding	Unique Awardees ¹	Total Awards ²
Grants and Cooperative Agreements ³	\$181,336,439	58	193
Loan Repayments and Scholarships	\$19,768,608	229	NA

Breakdown of Investments

HRSA makes grants to organizations and individuals to improve and expand health care services for underserved people, focusing on the following program areas:



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Search this site, DoD S&T Reports, and more..

ENHANCED BY Google



DTIC is piloting two innovative search tools designed to provide you more robust search results for the close to 1 million records available on our public site.

Minsky and Dimensions are innovative search platforms using natural language processing tools to better analyze your specific search parameters. These powerful tools allow you to discover relevant connections and insightful information to analyze the DoD science and technical data available in new ways, giving you a more dynamic experience on our platform.



[Minsky](#)

DTIC is pleased to provide access to its vast collection of Defense scientific and technical information through Minsky®. This Natural Language Processing platform allows for nuanced and expertise-specific processing of text data and provides new ways to explore DTIC's data collections, enabling users to:

- Use natural search terms as well as structured fields
- Discover connections and relevant material within varied datasets, through network maps
- Gain situational awareness of ongoing research across the S&T enterprise by exploring related information



[Dimensions](#)

Through an innovative pilot collaboration between DTIC and Dimensions, we are enhancing search and discovery within DTIC's extensive collection of technical reports. By applying modern data engineering and state-of-the-art natural language processing, DoD documents will be more findable than ever before.

- Analyze funding impact: Explore publications, grants, and patents linked to DoD funding
- Discover more DoD insights: Access DoD Technical Reports and Presidential Budget Reports
- Make informed decisions: Assess research activities and visualize trends

“Brain-machine interface”

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brain-machine interface

Filter 1 applied Clear X Search results 7

Document type

- DoD Grant Award 7
- Technical Report 7
- R2 Budgetary Justification 0
- Project 3
- Accomplishment 0

ENTITIES

Organizations

- Search
- United States Army 3
- Army Contracting Command 3
- United States Navy 2
- Office of Naval Research 2
- Harvard University 2
- United States Air Force 1
- Air Force Office of Scientific Research 1

DoD Grant Award

DoD Grant Award

The molecular and electrophysiologic response to chronic intraneuronal silicone electrode implantation

Jan 12, 2017

Abstract

The objective of this proposal is to quantify changes in gene expression subsequent to implantation and long-term presence of silicone multielectrode recording arrays and to correlate those molecular events with electrophysiological performance and tissue reactivity. Tasking to achieve the goals of ... brain-machine interface studies. Simultaneously, bipolar EMG electrodes will be implanted in the gastrocnemius and soleus muscles to assess neuromuscular input from the sciatic nerve. Implanted rodents will be allowed to recover for 14 days to permit healing and stabilization of the electrodes and pedestal before recording ...

Associated with this document

2 Organizations 2 Readers

Organizations

Office of the Secretary of Defense Army Contracting Command

2015 2016 2017 2018

NIH RePORTER

NIH RePORT RePORTER

FAQs API ExPORTER Sign In

Quick Search

Search RePORTER

Search

Enter just about anything in the RePORTER Quick Search box above (text, PI names, project numbers, fiscal year, agency) or launch the Advanced Search to precisely configure searches using separate search fields.

Advanced Search

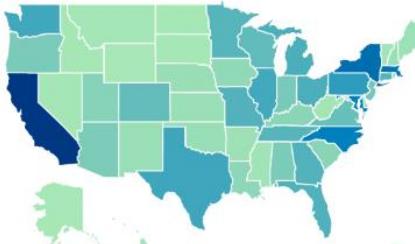
Welcome to the NIH RePORTER

Each award supported by NIH promotes efforts to seek fundamental knowledge about the nature and behavior of living systems and/or the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

Guided Tour

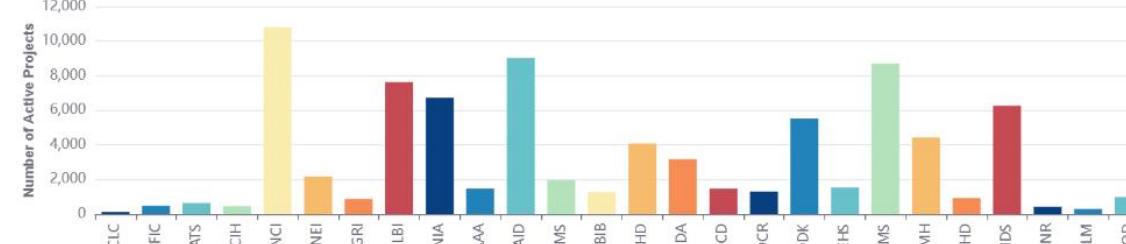
Active Funding by State

Select a state to view projects



Active Projects by Institute/Center

Select a bar to view projects for an Institute/Center



Institute/Center	Number of Active Projects
CLC	1
FIC	200
NCATS	300
NCCIH	200
NCI	11,000
NEI	2,000
NHGRI	1,000
NHLBI	7,000
NIA	6,000
NIAAA	1,000
NIAID	9,000
NIAMS	2,000
NIBIB	1,500
NICHD	4,000
NIDA	3,000
NIDCD	1,500
NIDCR	1,500
NIDDK	5,500
NIEHS	1,500
NGMRS	9,000
NIMH	4,000
NINDS	6,000
NINR	500
NLM	300
OD	1,000

Advanced Projects Search

Researcher and Organization

Fiscal Year [?](#)

Active Projects

Current FY is 2024

City [?](#)

Congressional District [?](#)

Please select a state first

Text Search

Text Search (Logic) [?](#)

AND [?](#)

OR [?](#)

Advanced [?](#)



2,500 characters left

[Reset](#) [Search](#)

Principal Investigator (PI) [?](#)

PI Names or Profile IDs; semicolon ";" separated

Organization [?](#)

Enter at least 3 characters to search

State [?](#)

Country [?](#)

Department Type [?](#)

Organization Type [?](#)

Project Details

Agency/Institute/Center [?](#)

NIH Spending Category [?](#)

Funding Mechanism [?](#)

Matchmaker

Find potential Program Officials, ICs, and review panels for your research.

[Get Started >](#)

Publications Search

Find publications associated with extramural or intramural funded projects using PubMed IDs (PMID) or PubMed Central IDs (PMC ID).

[Get Started >](#)

Search Results

609 Projects

Save...

Edit Search Criteria

Export

Share

Search Criteria Fiscal Year: Active Projects

Projects

Publications

Patents

Clinical Studies

News & More

List

Charts

Map

Chart Type

Summary By (Chart X Axis)

Plot By (Chart Y Axis)

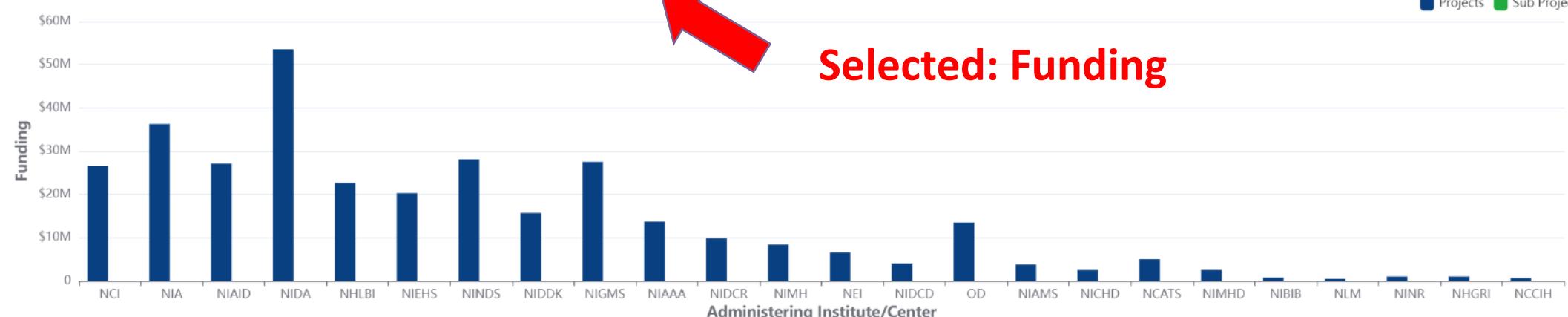
Administering Institute/Center

Projects Funding

Projects Sub Projects

Filters

- MD (3364)
- IL (2825)
- OH (2506)
- MI (2357)
- WA (2178)
- FL (2051)
- GA (1882)
- MO (1857)
- CT (1791)
- TN (1627)
- MN (1566)
- CO (1548)
- VA (1314)
- WI (1261)
- IN (1036)
- NJ (974)
- AL (923)
- OR (919)
- UT (801)
- AZ (781)
- RI (691)
- SC (660)
- KY (609)



Selected: Funding

Note: Please note that if the hit list contains both a subproject and its parent grant, the subproject funding is already included in the parent project funding amount.

* Funding data available only for NIH, CDC, FDA, AHRQ, and ACF.

Administering Institute/Center	Projects	Total Funding	Sub Projects	Sub Project Funding
NLM	2	\$451,451		
NCCIH	1	\$658,973		
NIBIB	3	\$773,837		
NINR	2	\$996,798		
NHGRI	2	\$998,333		
NICHD	9	\$2,507,071		
NIMHD	4	\$2,538,735		

Thank you for your feedback!



Selected: Kentucky

NIH Data Book

[NIH](#) RePORT > NIH Data Book

Search Reports

- NIH Budget History
- Research Grants
- Small Business Research (SBIR / STTR)
- Success and Funding Rates
- NIH Peer Review
- The NIH-Funded Research Workforce
- National Statistics on Graduate Students
- National Statistics on Postdoctorates
- Loan Repayment Program (LRP)
- FAQs
- Historical Data Books

Welcome to the NIH Data Book

What's New?

- FY2023 statistics are now available for most grant-related reports, including:

[Success Rates](#)

[Research Grants](#)

[The NIH-Funded Research Workforce](#)

The NIH Data Book (NDB) provides basic summary statistics on extramural grants and contract awards, grant applications, the organizations that NIH supports, the trainees and fellows supported through NIH programs, and the national biomedical workforce.

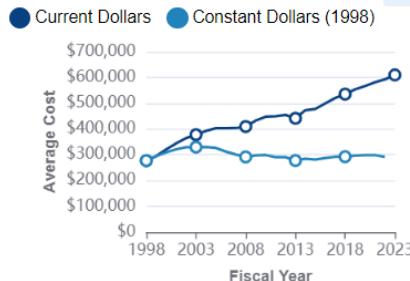
The Data Book is organized into categories and sub-categories, each of which will display related reports together on a single page. Most reports provide both an interactive chart visualization and the underlying data table. Chart images can be exported in a PNG graphic format. Tabular data export is available in the Excel file format.

The interactive chart interface provides a visual summary with easy access to the details of each report. Mouse over visualizations to see the specific values, and interact with any buttons above a chart to customize the display.

Total NIH Budget Authority: FY 2022 Operating Plan

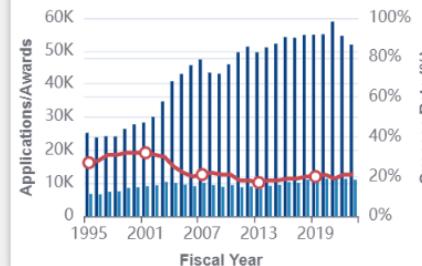


Research Project Grants: Average Size



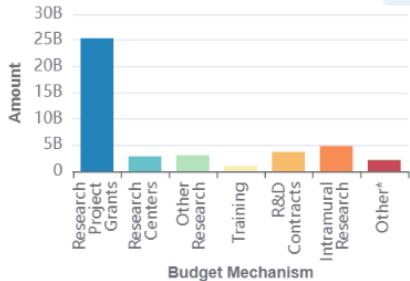
Fiscal Year	Current Dollars	Constant Dollars (1998)
1998	\$250,000	\$250,000
2003	\$350,000	\$300,000
2008	\$400,000	\$300,000
2013	\$450,000	\$250,000
2018	\$500,000	\$250,000
2023	\$550,000	\$250,000

Research Project Grants: Competing Applications, Awards, and Success Rates



Fiscal Year	Applications/Awards	Success Rate (%)
1995	20K	15%
2001	30K	18%
2007	45K	12%
2013	50K	10%
2019	55K	10%

NIH Budget Mechanism Detail



Budget Mechanism	Amount
Research Project Grants	25B
Research Centers	3B
Other Research	2B
Training	1B
R&D Contracts	2B
Intramural Research	3B
Other*	1B

Research Project Grants: Success Rates of New (Type 1) Competing Applications for Targeted and Untargeted Research by Institute or Center (IC)

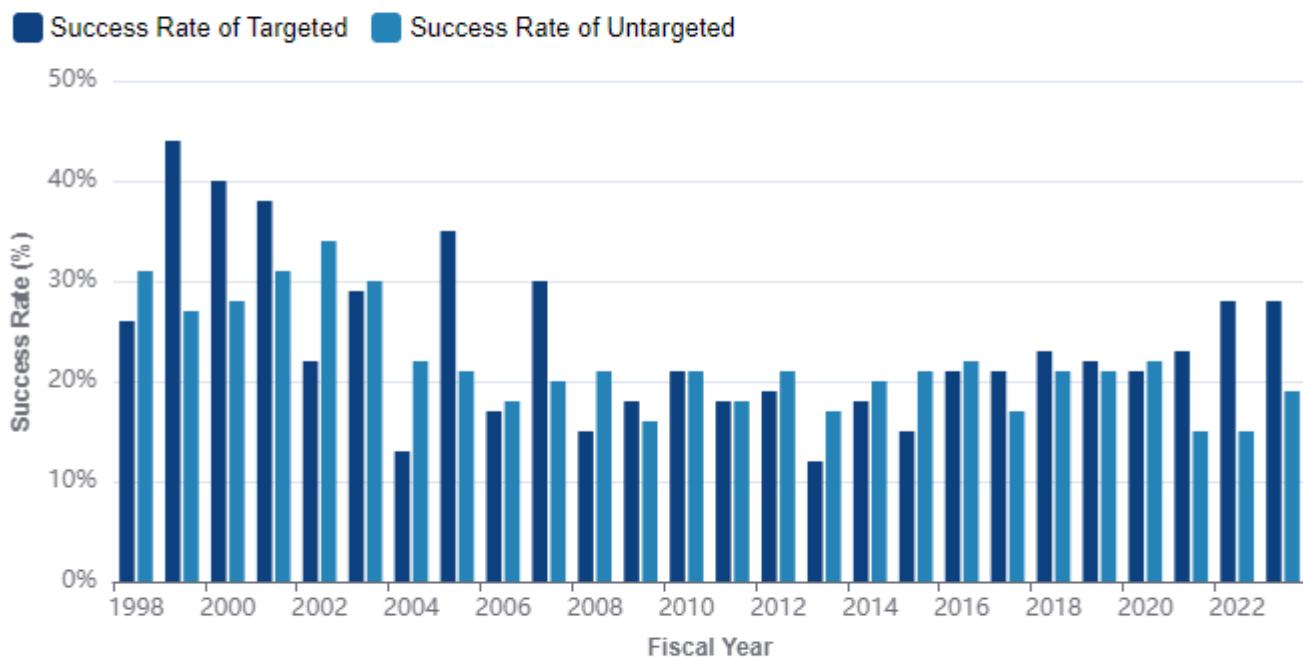
NIH Data Book Report ID: 157

Share 

NIAID 

Data 

Export 



FY 2009 and 2010 exclude awards made under the American Recovery and Reinvestment Act of 2009 (ARRA) and all ARRA solicited applications and awards.

Source: National Institutes of Health Data Book, 2024. Last updated: January 2024. Data as of December 2023. © 2024 National Institutes of Health.

Last Updated: January 2024

View More

All NIH

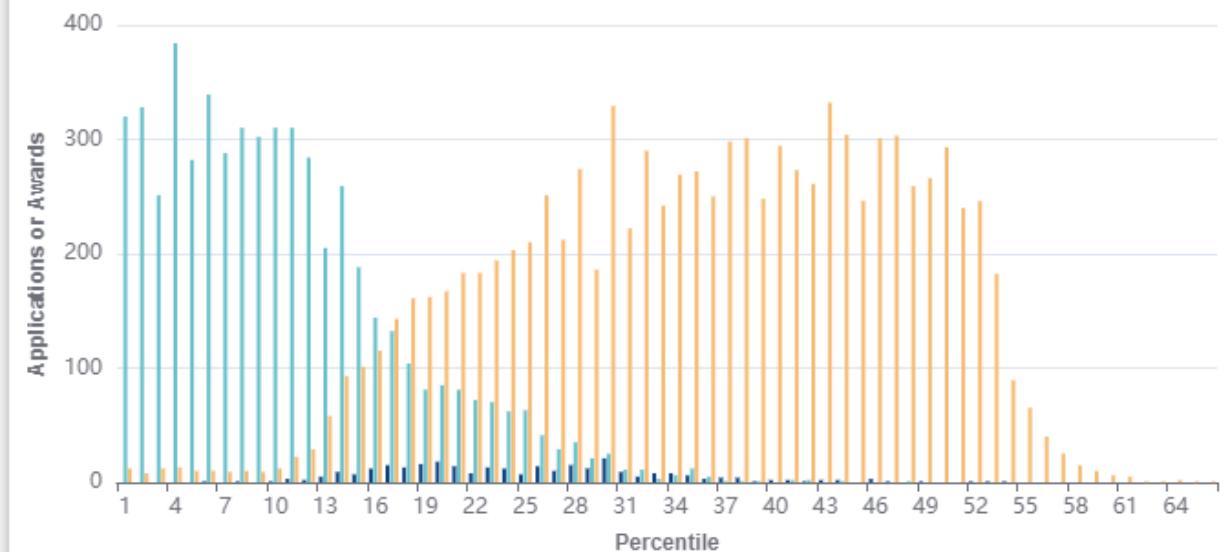
Funding Patterns by Institute or Center (IC)

NIH Data Book Report ID: 302 [Share](#)

ALL NIH [▼](#) 2023 [▼](#)

Data  Export 

 R56 Awards  R01-Equivalent Awards  Not Awarded



NIDA

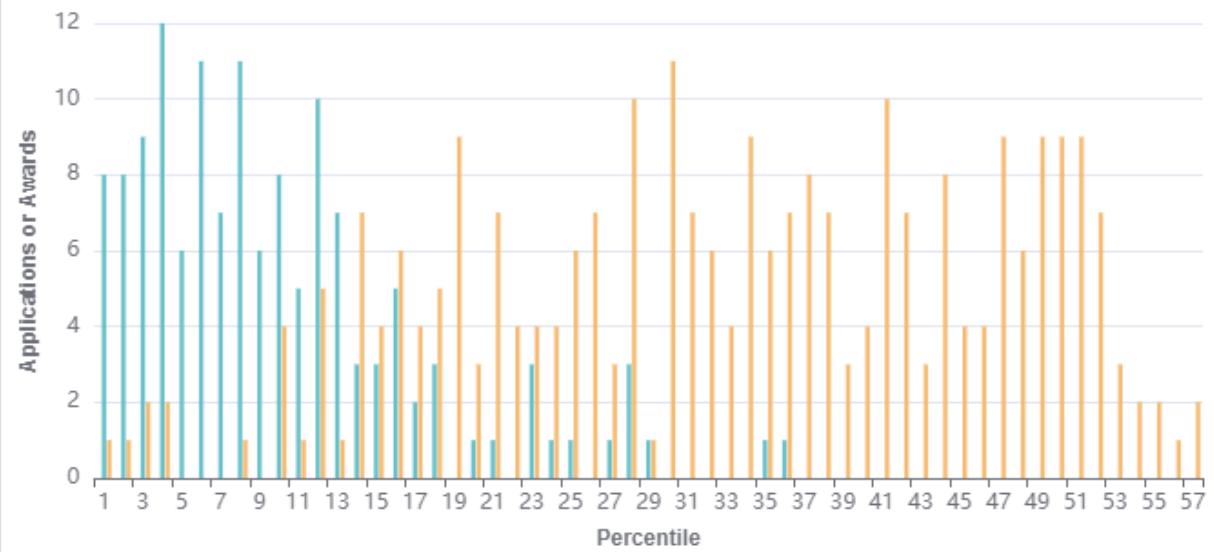
Funding Patterns by Institute or Center (IC)

NIH Data Book Report ID: 302 [Share](#)

NIDA [▼](#) 2023 [▼](#)

Data  Export 

 R56 Awards  R01-Equivalent Awards  Not Awarded

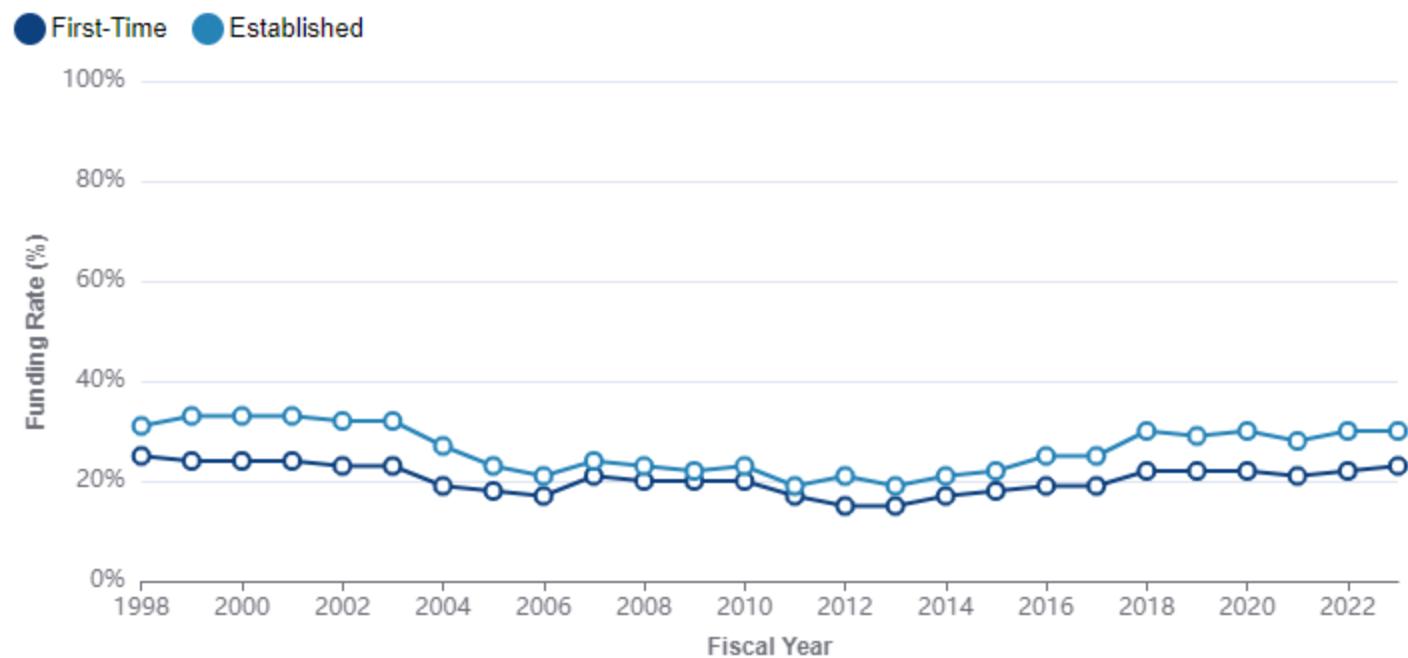


R01-Equivalent Investigators, New (Type 1): Funding Rates, by Career Stage of Investigator

NIH Data Book Report ID: 166 [Share](#)



Data Export



FY 2009 and 2010 exclude awards made under the American Recovery and Reinvestment Act of 2009 (ARRA) and all ARRA solicited applications and awards.

NIH Data Book Report ID: 166. Last Updated: January 2024. View More. © 2024 National Institutes of Health. All rights reserved. NIH Data Book Report ID: 166.

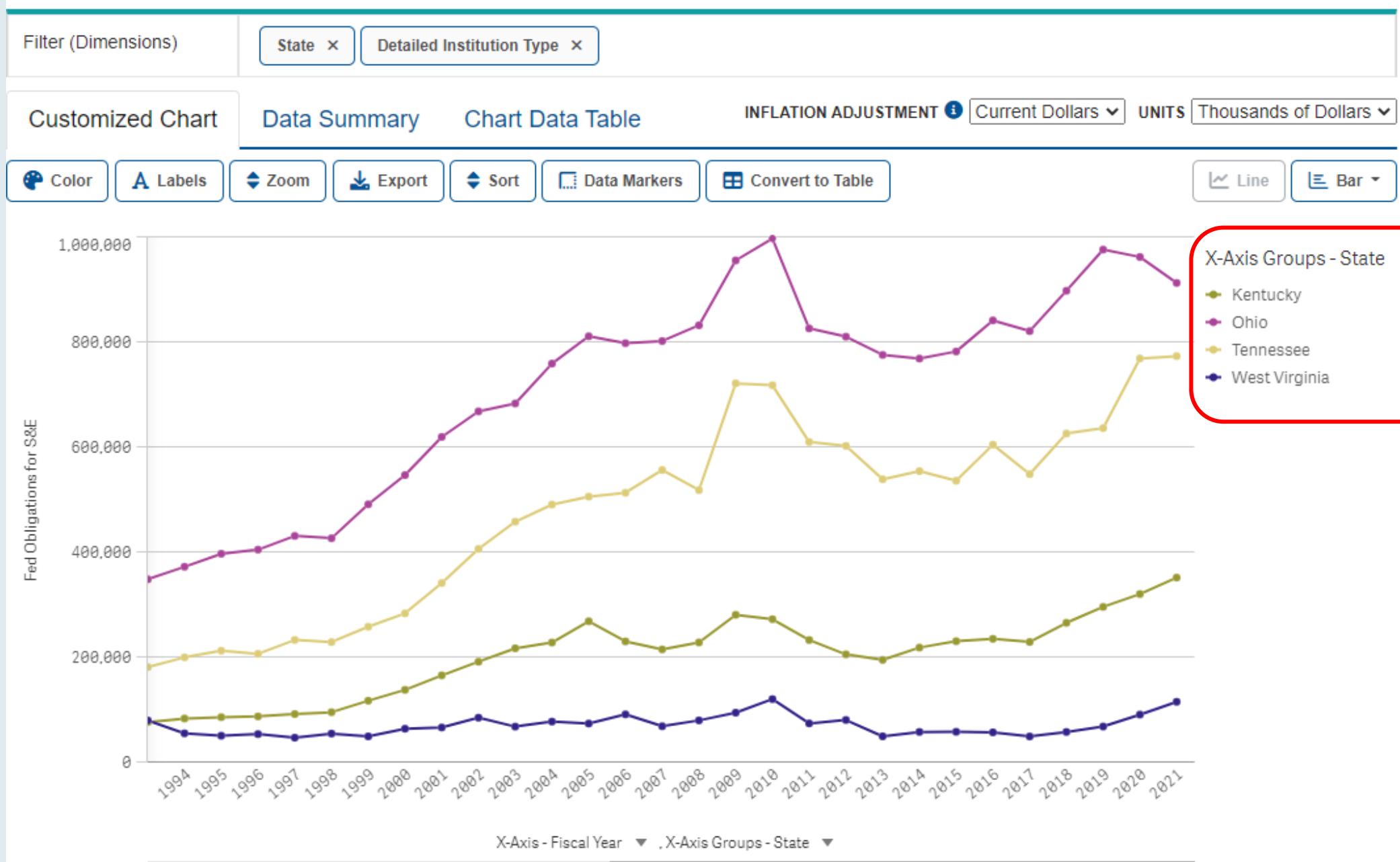
Last Updated: January 2024

[View More](#)

NCSES's Survey of Federal Funds for Research and Development

- <https://www.nsf.gov/statistics/fedfunds/>

The screenshot shows the official website of the U.S. National Science Foundation (NSF). The header features the NSF logo and the text "U.S. National Science Foundation". On the right side of the header is a search bar with a magnifying glass icon. Below the header, there are navigation links: "Find Funding & Apply", "Manage Your Award", "Focus Areas", "News & Events", and "About". The main content area has a blue sidebar on the left with the following menu items: "Social, Behavioral and Economic Sciences (SBE)", "Social, Behavioral and Economic Sciences (SBE) Home", "Behavioral and Cognitive Sciences (BCS)", "National Center for Science and Engineering Statistics (NCSES)", "About NCSES", "Explore Data", "Surveys & Analysis", and "Topics". The main content area displays the "Federal Funds for R&D" page. The page title is "Federal Funds for R&D". Below the title, a subtext states: "This series reviews current and historical trends in Federal obligations and funding for research and development in science and engineering." There is a link to an "Interactive Data Tool" with an icon of a gear and a bar chart. Below this, there are two buttons: "Products" and "Sources", with "Sources" being the active tab. At the bottom of the page, there is a section titled "Most recent data year" with a blue icon of a document. The text reads: "Federal Funding to University Affiliated Research Centers Totaled \$1.5 Billion in FY 2021" and "OTHER | NSF 24-315 | JANUARY 16, 2024 | NEW". To the right of the main content area, there are links for "Email", "Print", and "Share".



Caveats about using awards/spending data

The same data can be used to tell multiple stories.

- Patterns observed can't always reveal causes and effects.

The data may give a false sense of security/certainty.

- Use the data as part of a larger conversation.

The past doesn't always predict the future.

- Funders may be looking for novelty!

**Subscription
funding
databases/
directories**

Pivot-RP

Candid (Foundation Center)

Case 1

Professor A just had an email forwarded to him about a new grant program from the Whosis Foundation. He has never heard of them and wonders whether they would be likely to fund his project about mental health intervention for college students. If it's not a good fit, he would like to know what alternative funders exist for this research.

Case 2

Dr. B has just been appointed Associate Dean of Research in her college. In meetings with faculty in the college, she finds that many have become apathetic or discouraged about pursuing funding. She would like to stimulate interest in proposals by letting faculty know what opportunities are out there.

Case 3

Dr. C has submitted seven proposals to NIH over the last few years and has not yet been funded. He wonders whether his experience is typical for someone at his career stage, and he should consider tailoring his project to target a different NIH institute.

Case 4

Several faculty in your institution are thinking of establishing a new multidisciplinary research unit. They want to know if they can make the case to university leadership that such a unit would be competitive for funding.

How Agency Data Adds Value to Research Development

- Curation of funding opportunities
- Determination of sponsor fit
- Advice on funding agency trends
- Comparison, combination and triangulation with internal institutional data

Questions? Comments? Ideas?

Lou Hurst

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