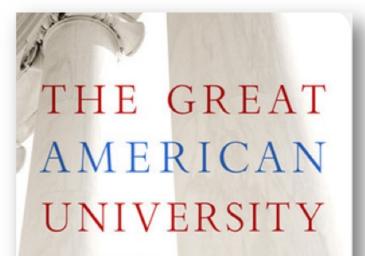
UTSA CREATING BOLD FUTURES®

WHAT IS A GREAT PUBLIC RESEARCH UNIVERSITY?

The UTSA Journey

JoAnn Browning, Interim Vice President for Research Heather Shipley, Interim Provost and Senior Vice President for Academic Affairs Steve Wilkerson, Associate Vice Provost for Institutional Research and Analysis Taylor Eighmy, President

August 16, 2023



ITS RISE TO PREEMINENCE

ITS INDISPENSABLE NATIONAL ROLE

WHY IT MUST BE PROTECTED



Academy Meetings

The Great American University

Ionathan R. Cole

1956th Stated Meeting, held in collaboration with Boston University on September 16, 2010, at Boston University

tric toothbrush, Gatorade, the Heimlich ma-

neuver, or Viagra. Yet all these discoveries

Most people think of universities in terms

of undergraduate and professional educa-

tion – of teaching and the transmission of

knowledge - rather than in terms of the cre-

ation of knowledge. This point of view is

inderstandable : Americans are concerne

ican research universities.



Ionathan R. Col

When most educated Americans think

Academy since 1992

Presentation

Ionathan R. Cole is the John Mitchell Mason Pro fessor of the University at Columbia University and was Provost and Dean of Faculties from 1989 to 2003. He has been a Fellow of the American

tion - as important as that is - but our abil ity to fulfill one of the other central missions of leading universities : the production of new knowledge through the discoveries that change our lives and the world. In The Great American University, I tell the story of how American universities became the greatest engine of innovation and dis-

concepts of congestion pricing, human cap- mist Henry Rosovsky approximated these

ital, and the self-fulfilling prophecy. They basic ratios years ago, and the numbers still almost certainly don't think about the elec- hold today. There is not one German univer

and innovations have their origins at Amer- ings). By China's own accounting, there are

about our great universities, they probably don't think about the origins of lasers, FM how that success was achieved in a relatively short period of time, and how our uniradio, magnetic resonance imaging, global versities are under threat today. On what positioning systems, barcodes, the Google evidence do I base the claim that our unialgorithm, the fetal monitor, the nicotine patch, antibiotics, the Richter scale, buckyversities are the best in the world? During the past century, the United States has pro balls and nanotechnology, the discovery of the insulin gene, the invention of the comduced an abundance of creative scientists puter, or the development of bioengineering more than any other nation. through the discovery of recombinant DNA In numerous surveys and rankings, 80 per-Nor do they think about improved weather cent of the top 20 universities in the world forecasting, cures for childhood leukemia. are in the United States: American univerthe pap smear, scientific agriculture, surveysities make up 75 percent of the top 50 and ing and measuring public opinion, or the

bout the education of their children an grandchildren, and they base their under-What has made our universi standing of universities on their own expe ties the greatest in the world is riences in education. Certainly, teaching undergraduate and graduate students is not the quality of our undercritically important and an integral part of the university's mission. But what has mad graduate education but the our universities the greatest in the world is not the quality of our undergraduate educa- production of new knowledge through the discoveries that change our lives and the world. of the world. Because many of the brightest and most able young people throughout the world want to attend and work at them our universities may collectively represent the covery the world has perhaps ever known only American industry that currently has a favorable balance of trade.

sity in the top 50, nor one Russian universit

in the top 75 (unless they do their own rank-

no Chinese universities in the top 200. Furthermore, 60 percent of all Nobel Prize win-

ners in science since World War II have been

Americans or foreign nationals working at

American universities. The most widely

cited scientific literature is dominated by

American scientists and scholars. Indeed

American universities have become the envy

Contrary to what most people think, the American research university is amazingly young, and it is highly embedded in the dy namics of the larger American society. It did not originate in 1636, when Harvard Un versity opened its doors, or with the founding of Yale University or Columbia University, though we tend to think of these institutions as old, great universities. In reality, the American research university dates to one hundred years after the signing of the Declaration of Independence, when Johns

Bulletin of the American Academy, Spring 2011 27

This content downloaded from 98.50.3.126 on Sun, 09 Jul 2023 11:57:15 +00:00 All use subject to https://about.jstor.org/terms

roughly 60 percent of the top 100. Econo

"But what has made our universities the greatest in the world is not the quality of our undergraduate education- as important as that is- but our ability to fulfill one of the central missions of leading universities: the production of new knowledge through discoveries that change our lives and the world.





DESIGNATIONS OF EXCELLENCE





Tier One Research Classification

Recognizes UTSA as one of USA's top 4% research institutions



Excelencia in Education Seal of Excelencia

> Recognizes UTSA's leadership in advancing Latino student success



Community Engagement Classification

> Highlights UTSA's commitment to serving the San Antonio region

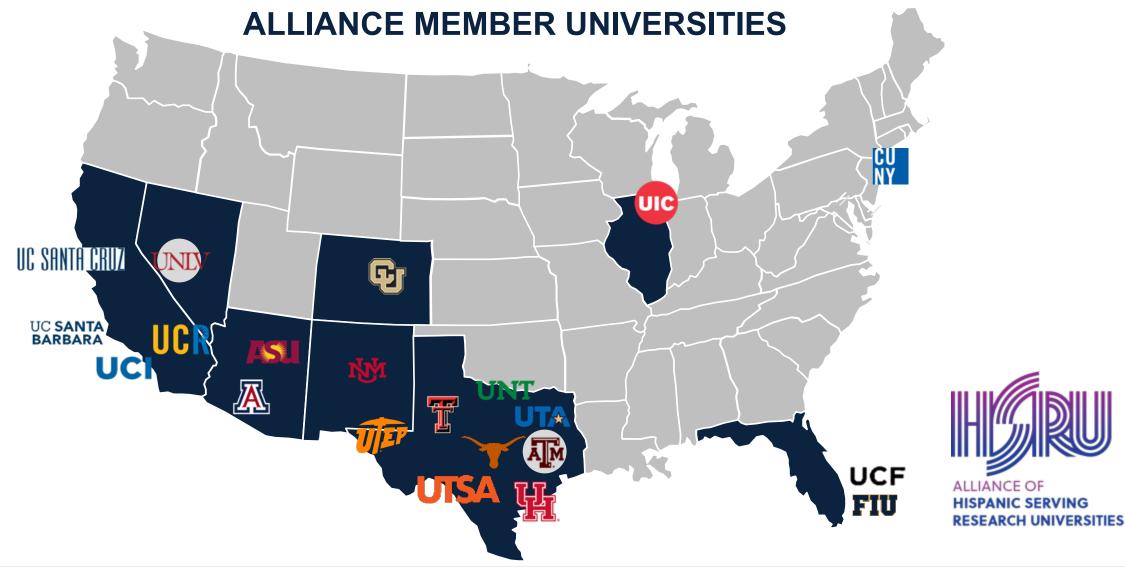


Innovation & Economic Prosperity University

Recognizes UTSA's leadership in fostering economic growth, prosperity and innovation.



HISPANIC SERVING & CARNEGIE R1





ECONOMIC & COMMUNITY

Economic Contributions of The University of Texas at San Antonio

Fiscal Year 2021

December 2022 Prepared by:

UTSA Center for Community & Business Research

\$2.5 Billion

Direct Economic Impact FY 2021 (Total revenues or output)

\$1.3 Billion
Gross Regional Product17,620
Jobs Supported in the Area\$814.3 Million
Salaries and Wages to Workers\$33.2 Million
State Government Revenues

\$33.7 Million Local Government Revenues



NATIONAL ACADEMY MEMBERS







Leadership • Innovation • Impact | for a healthier future

AMERICAN ACADEMY OF ARTS & SCIENCES



Rena Bizios



Sergio

Alcocer

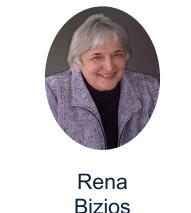
Randall Poston



Michael Yaszemski

Feed

Rena Bizios



Coming 2023



6 NATIONAL ACADEMY 0 FINUENTORS



Rena Bizios



Taylor Eighmy



David Akopian



Ravi Sandhu



Michael Yaszemski



Anson Ong





AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



Taylor Eighmy



Audrey Lamb



Rena Bizios



A.T. Chronopoulos



Aimin Liu



Angela Speck



Ravi Sandhu



James Chambers



Banglin Chen



Howard

Grimes



George Perry





CAREER AWARDS

Ahmad

Taha

2023

Chris

Combs







David Restrepo Itamar Lerner 2022





Chris Rathbone Anthony Rios



Gabriela Romero Uribe



Yanmin (Emily) Gong



2021

2020



Murtuza Jadliwala 2019



Alexis Godet Niko Gatsis







Wang



UTSA, BOLD FUTURES.

Wei

Gao

Various Measures For Research Quality

NSF HERD

	The Higher Education F and Development Surv	
	Higher education institutions in the Unit component to the U.S. RAD system, help well as scientific and technological brea and funding can demonstrate the Unite expanding knowledge and economic gen	ed States serve as a key ing drive innovation, as throughs. R&D activity States' investment in
What is the HERD Survey?	• • • • • • • • • • • • • • • • • • • •	
that have spent at least \$150,000 for R&D t	pment (HERD) Survey collects information from U.S hat has been separately accounted for in the past fi ineering Statistics (NCSES) within the National Scien	scal year. It is conducted
How can I use the HERD Surv	ey?	
Data from the HERD Survey can answer qu		
 Who funds university R&D? Which federal agencies fund R&D at h education institutions? Where has there been the most growt 	on R&D?	
		$ \langle \psi \rangle $
Why is the HERD Survey import The HERD Survey is the primary source of expenditures within higher education insti States, and it collects information from ow	Information on R&D tutions in the United	
For more information, the HERD Survey he statistics/srvyherd) features additional det questionnaires, and links to related publica	alls about the survey, its	





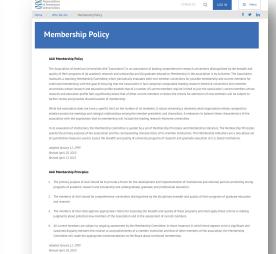
Flactive Classification

352 ** Institutions hold the C Engagement Classifica 195 ** Small, highly residents



CMUP

AAU





NSF HERD

METRICS:

- Total Research Expenditures
- Federal Research Expenditures
- By Major Agency (NSF, NIH, DOD, DOE, etc.)
- State and Local Expenditures
- Institutional Expenditures
- Business Expenditures
- Non-Profit Expenditures
- All Other Sources

National Center for Science and Engineering Statistics Measuring Research and Development at Colleges and Universities in the United States



The Higher Education Research and Development Survey

Higher education institutions in the United States serve as a key component to the U.S. R&D system, helping drive innovation, as well as scientific and technological breakthroughs. R&D activity and funding can demonstrate the United States' investment in expanding knowledge and economic growth.

What is the HERD Survey?

The Higher Education Research and Development (HERD) Survey collects information from U.S. colleges and universities that have spent at least \$150,000 for R&D that has been separately accounted for in the past fiscal year. It is conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation.

How can I use the HERD Survey?

Data from the HERD Survey can answer questions like

Who funds university R&D?

- Which R&D fields have the highest expenditures?
- Which federal agencies fund R&D at higher education institutions?
- How much did minority-serving institutions spend on R&D?
- Where has there been the most growth in R&D?
- Why is the HERD Survey important? •

The HERD Survey is the primary source of information on R&D expenditures within higher education institutions in the United States, and it collects information from over 900 institutions annually

For more information, the **HERD Survey homepage** (https://nsf.gov/ statistics/srvyherd) features additional details about the survey, its questionnaires, and links to related publications and products.





National Center for Science and Engineering Statistics (NCSES) Measuring America's Progress in Science, Technology, and Innovation

NCSES 22-217

.

UTSA, BOLD FUTURES,

CARNEGIE R1

METRICS:

- Total Research Expenditures
- STEM Research Expenditures
 - By Major Agency (NSF, NIH, DOD, DOE, etc.)
- Non-STEM Expenditures
- Research Staff (Post-docs)
- Number of Faculty
- Total PhDs
- STEM PhDs
- Humanities PhDs
- Social Sciences PhDs
- Other PhDs



STITUTIONS OF HIGHER EDUCATION SEA	TITUTION UNIVERSAL CASSIFICATIONS	ELECTIVE ELECTIVE CLASSIFICATIONS RESOURCES
CARNEGIE CLASSIFICATI INSTITUTIONS HIGHER EDUC	COF CATION® stitutions of Higher framework for	A States
Classification Lookup	Search by: Institution Name	Classification
<u>-</u> <u>Try a Custom Search ></u>	Enter institution name	۹
institutional diversity in U.S. higher Higher Education began developing support its program of research an	leading framework for recognizing and descri education. In 1970, the Carnegie Commission g classification of colleges and universities to d policy analysis. The framework was first ted every 3 years to reflect changes among classification >	Institutions are classified as Special Focus

CMUP

METRICS:

- Total Research Expenditures
- Federal Research Expenditures
 - By Major Agency (NSF, NIH, DOD, DOE, etc.)
- Research by Major Discipline
- Endowment Assets
- Annual Giving
- National Academy Memberships

- Faculty Awards
- Doctorates Awarded
- Postdoctoral Appointees
- SAT Scores
- National Merit Scholars

The Top American Research Universities	
2020 Annual Report	
The Center for Measuring University Performance John V. Lombardi Craig W. Abbey Diane D. Craig Lynne N. Collis	



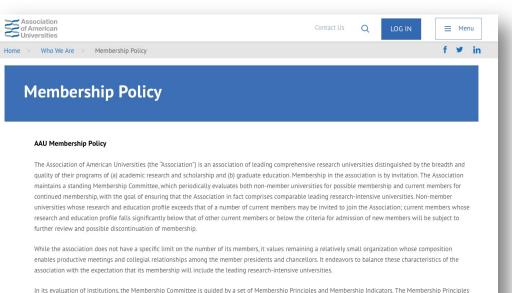
AAU

PHASE 1 METRICS:

- Federal Research Expenditures
 - By Major Agency (NSF, NIH, DOD, DOE, etc.)
- Faculty Awards, Fellowships, Memberships including National Academies
- Thomas Reuters InCites Citations
- Books (esp Arts, Humanities, Social Sciences)

PHASE 2 METRICS:

- USDA, State, Industrial Expenditures
- Doctorates graduated
- Postdoctoral Appointees



In its evaluation of institutions, the Membership Committee is guided by a set of Membership Principles and Membership Indicators. The Membership Principles specify the primary purpose of the association and the corresponding characteristics of its member institutions. The Membership Indicators are a two-phase set of quantitative measures used to assess the breadth and quality of university programs of research and graduate education at U.S. based institutions.

Adopted January 12, 1999 Revised April 20, 2010 Revised April 17, 2023

OTHER CONSIDERATIONS:

- Pell
- Undergraduate Graduation Rates
- Pell Recipient Graduation Rates
- Graduation Rate Gap





NATIONAL ASPIRANTS

Institution	Age	Total Enrollment	Grants a Medical Degree	Land Grant Institution	Carnegie Classification	Association of American Universities	Carnegie Community Engaged	APLU Innovation & Economic Prosperity	<i>Seal</i> of Excelencia	Athletic Conference *not football
Arizona State University	138	77,881	Ν	Ν	R1	Y	Y	Y	Y	Pacific-12
Florida International University	58	56,664	Y	Ν	R1	Ν	Υ	Y	Y	Conference USA
George Mason University	74	38,628	Ν	Ν	R1	Ν	Ν	Ν	Ν	Atlantic 10 Conference*
Georgia State University	110	36,973	Ν	Ν	R1	Ν	Ν	Ν	Ν	Sunbelt
University of California, Irvine	59	36,505	Y	Ν	R1	Y	Ν	Ν	Ν	Big West Conference*
University of California, Santa Cruz	58	19,841	Ν	Ν	R1	Y	Ν	Ν	Y	Big West Conference*
University of California, Riverside	69	26,847	Y	Ν	R1	Y	Ν	Ν	Y	Big West Conference*
University of Central Florida	60	70,310	Y	Ν	R1	Ν	Y	Y	Y	Big 12
University of Illinois, Chicago	164	34,199	Y	Ν	R1	Ν	Ν	Ν	Y	Horizon League*
University of South Florida	67	49,708	Y	Ν	R1	Y	Y	Y	Ν	American Athletic Conference
University of Texas at San Antonio	54	34,734	Ν	Ν	R1	Ν	Y	Y	Y	American Athletic Conference







TEXAS PEERS

Institution	Age	Total Enrollment	Grants a Medical Degree	Land Grant Institution	Carnegie Classification	Association of American Universities	Carnegie Community Engaged	APLU Innovation & Economic Prosperity	<i>Seal</i> of Excelencia	Athletic Conference *not football
Texas A&M University	147	72,530	Y	Y	R1	Y	Ν	Ν	Ν	Southeastern Conference
Texas State University	124	37,864	Ν	Ν	R2	Ν	Ν	Ν	Y	Sun Belt Conference
Texas Tech University	100	40,542	Ν	Ν	R1	Ν	Y	Y	Ν	Big Twelve Conference
University of Houston	89	47,031	Ν	Ν	R1	Ν	Y	Y	Ν	Big Twelve Conference
University of North Texas	133	42,441	Ν	Ν	R1	Ν	Ν	Ν	Ν	American Athletic Conference
University of Texas at Arlington	128	45,949	Ν	Ν	R1	Ν	Ν	Ν	Y	Sun Belt Conference*
University of Texas at Austin	140	51,991	Y	Ν	R1	Y	Y	Ν	Y	Big Twelve Conference
University of Texas at Dallas	62	29,696	Ν	Ν	R1	Ν	Ν	Y	Ν	American Southwest Conference*
University of Texas at El Paso	109	24,003	Ν	Ν	R1	Ν	Y	Y	Y	Conference USA
University of Texas at San Antonio	54	34,734	Ν	Ν	R1	Ν	Y	Y	Y	American Athletic Conference



NSF HERD: SOME DATA

2022 Higher Education Research and Development (HERD) Report: 2021 Data

METRICS:

- Total Research Expenditures
- Federal Research Expenditures
- NSF Expenditures
- NIH Expenditures

National Center for Science and Engineering Statistics Measuring Research and Development at Colleges and Universities in the United States



The Higher Education Research and Development Survey

Higher education institutions in the United States serve as a key component to the U.S. R&D system, helping drive innovation, as well as scientific and technological breakthroughs. R&D activity and funding can demonstrate the United States' investment in expanding knowledge and economic growth.

What is the HERD Survey?

The Higher Education Research and Development (HERD) Survey collects information from U.S. colleges and universities that have spent at least \$150,000 for R&D that has been separately accounted for in the past fiscal year. It is conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation.

How can I use the HERD Survey?

Data from the HERD Survey can answer questions like

- Who funds university R&D?
- Which federal agencies fund R&D at higher education institutions?
- Which R&D fields have the highest expenditures?
- How much did minority-serving institutions spend on R&D?
- Where has there been the most growth in R&D?
- Why is the HERD Survey important? •

The HERD Survey is the primary source of information on R&D expenditures within higher education institutions in the United States, and it collects information from over 900 institutions annually

For more information, the **HERD Survey homepage** (https://nsf.gov/ statistics/srvyherd) features additional details about the survey, its questionnaires, and links to related publications and products.





National Center for Science and Engineering Statistics (NCSES) Measuring America's Progress in Science, Technology, and Innovation

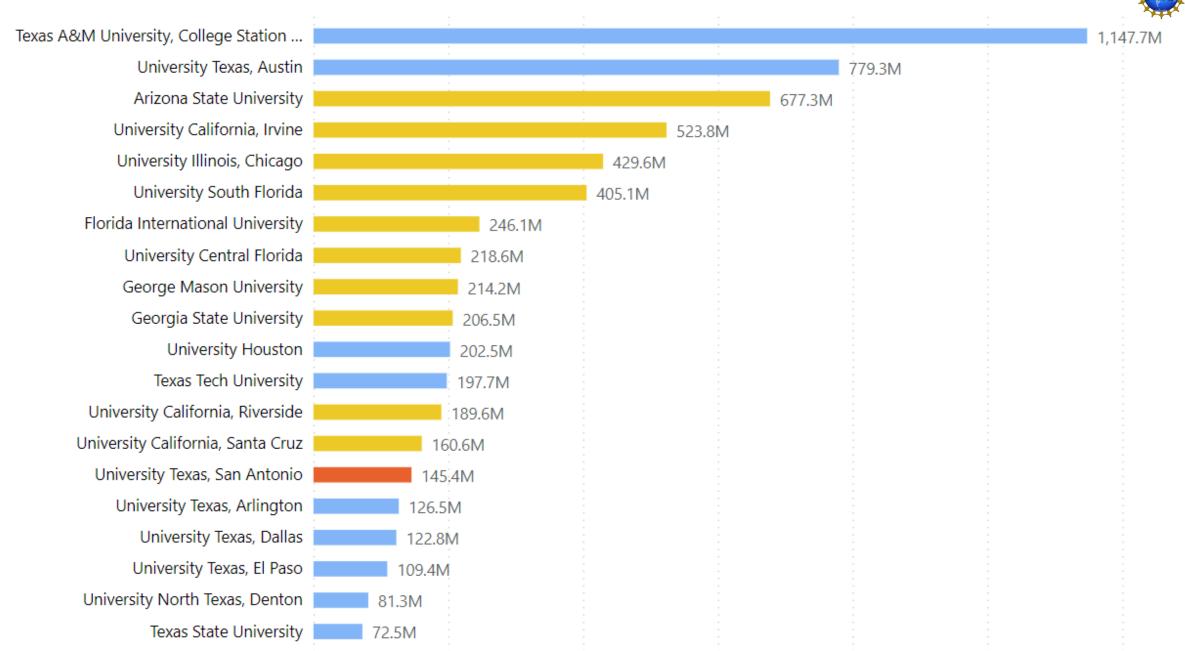
NCSES 22-217

.



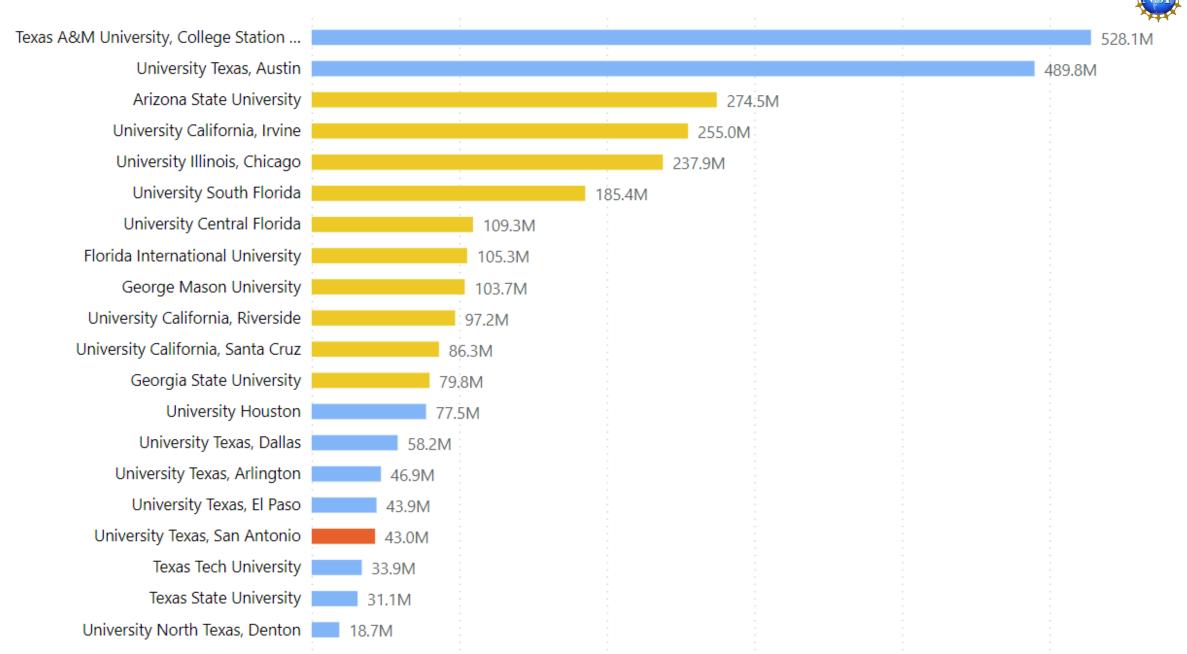
All R&D Expenditures

Peer Models of Excellence Texas Research University UTSA



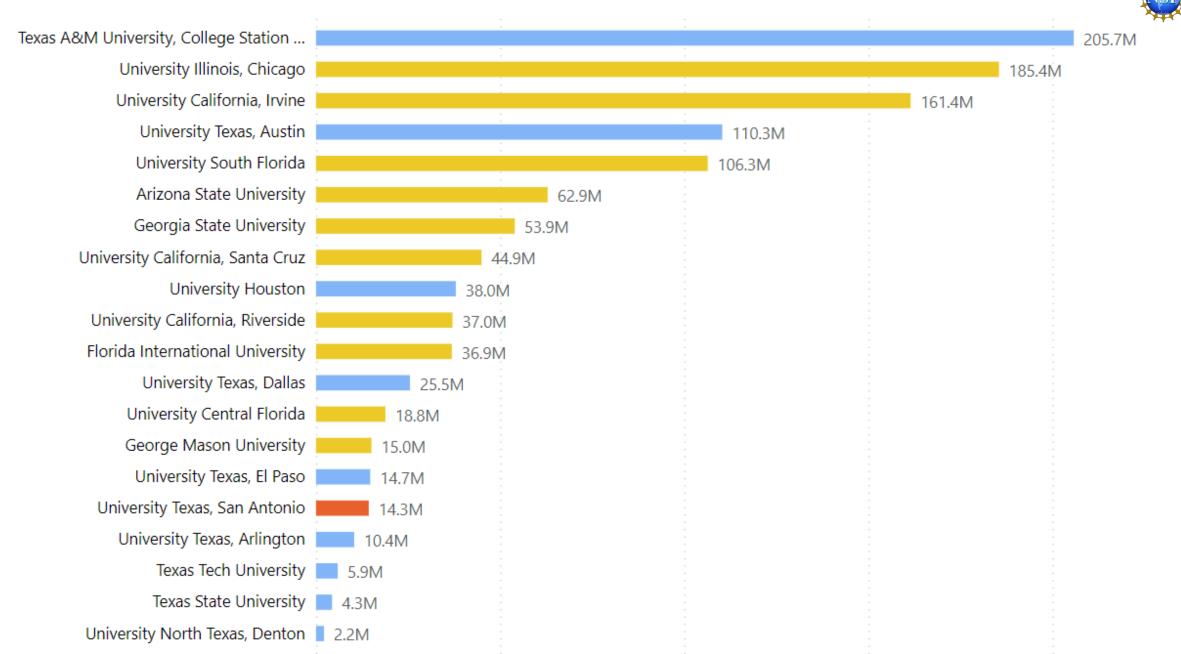
Federal Government Expenditures

Peer Models of Excellence Texas Research University UTSA



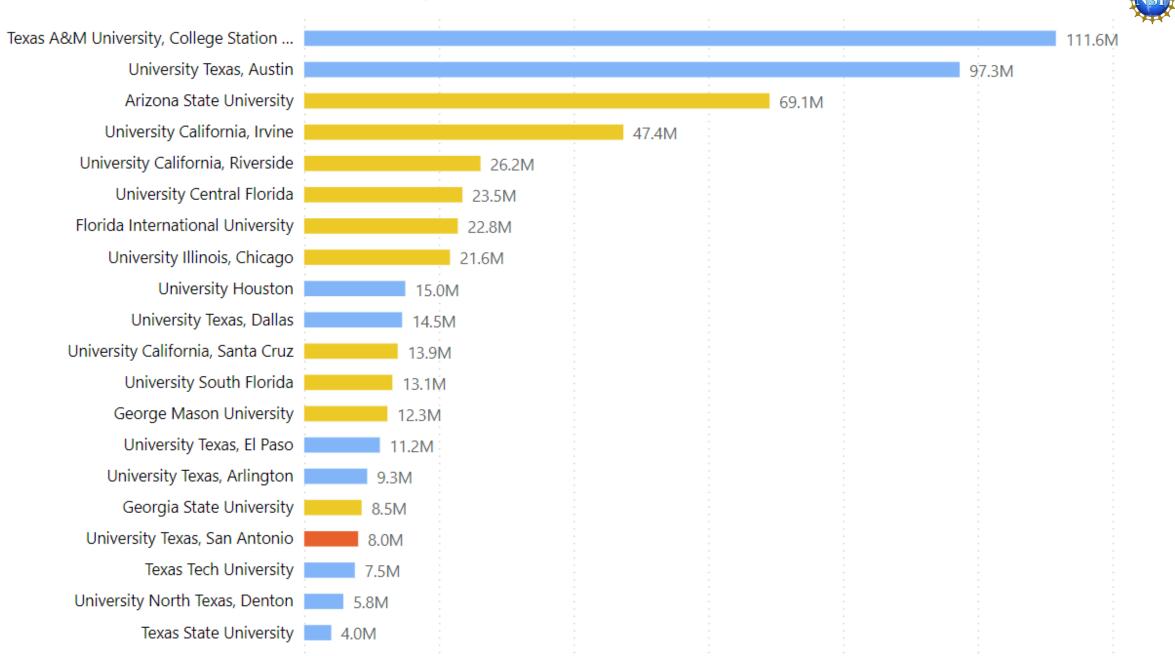
HHS Federally Financed Expenditures

Peer Models of Excellence Texas Research University UTSA



NSF Federally Financed Expenditures

Peer Models of Excellence Texas Research University UTSA



CARNEGIE R1 SOME DATA

2022 Report, Showing 2021 Data

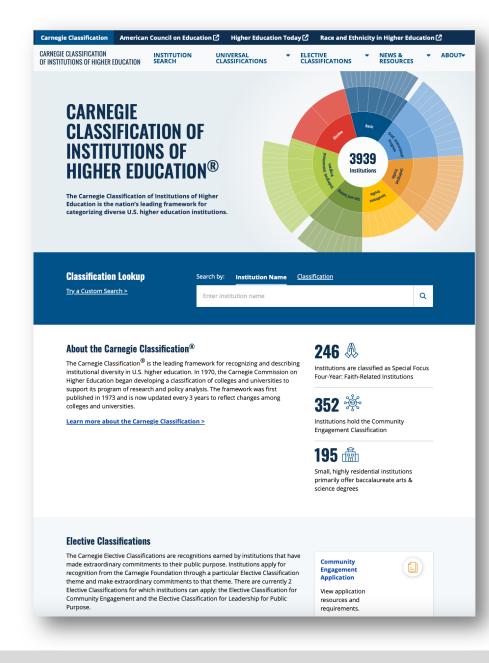
METRICS:

- **Total Research Expenditures**
- **STEM Research Expenditures** •
 - By Major Agency (NSF, NIH, DOD, DOE, etc.)
- Non-STEM Expenditures STEM PhDs •
- Research Staff (Post-docs) Humanities PhDs •
- Number of Faculty •

UTSA BOLD FUTURES

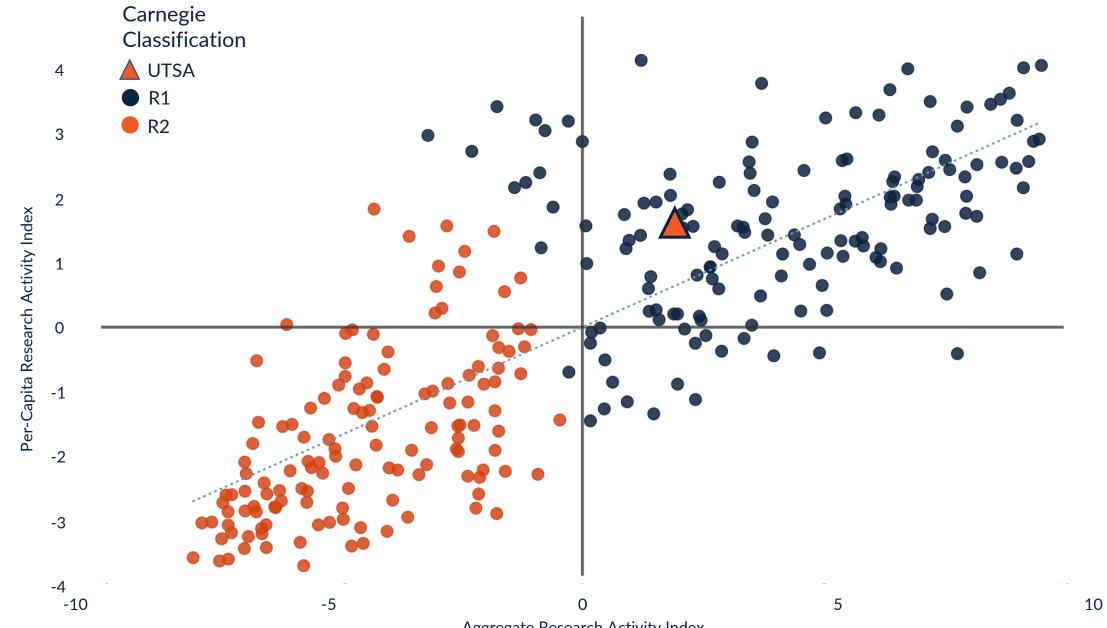
Total PhDs •

- Social Sciences PhDs
- Other PhDs •

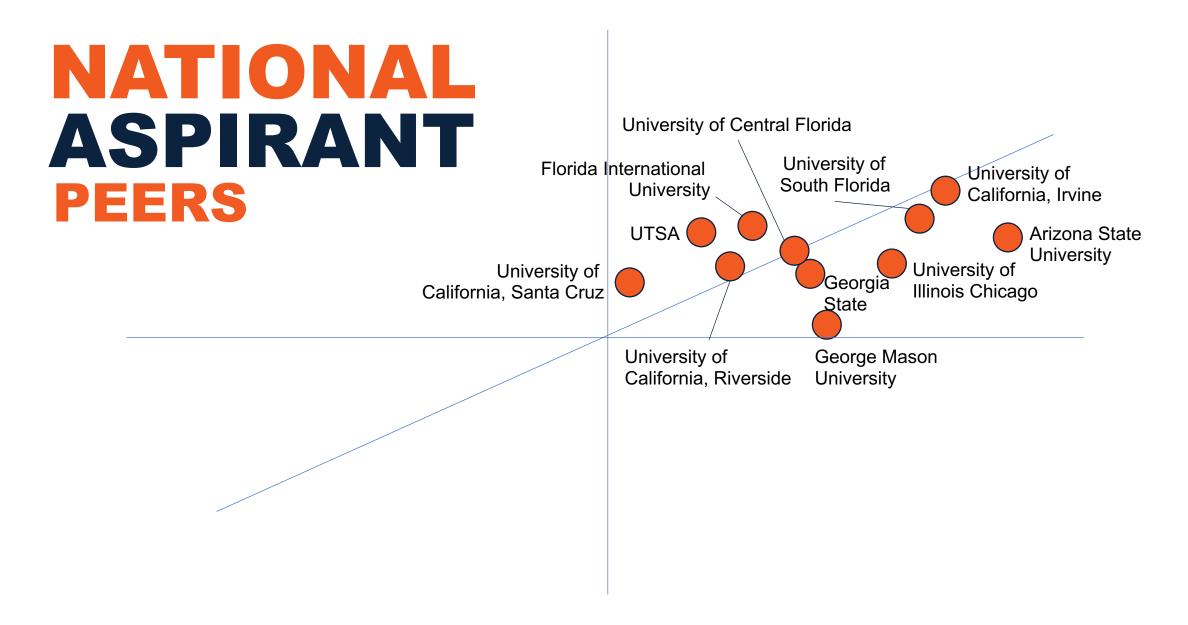


24

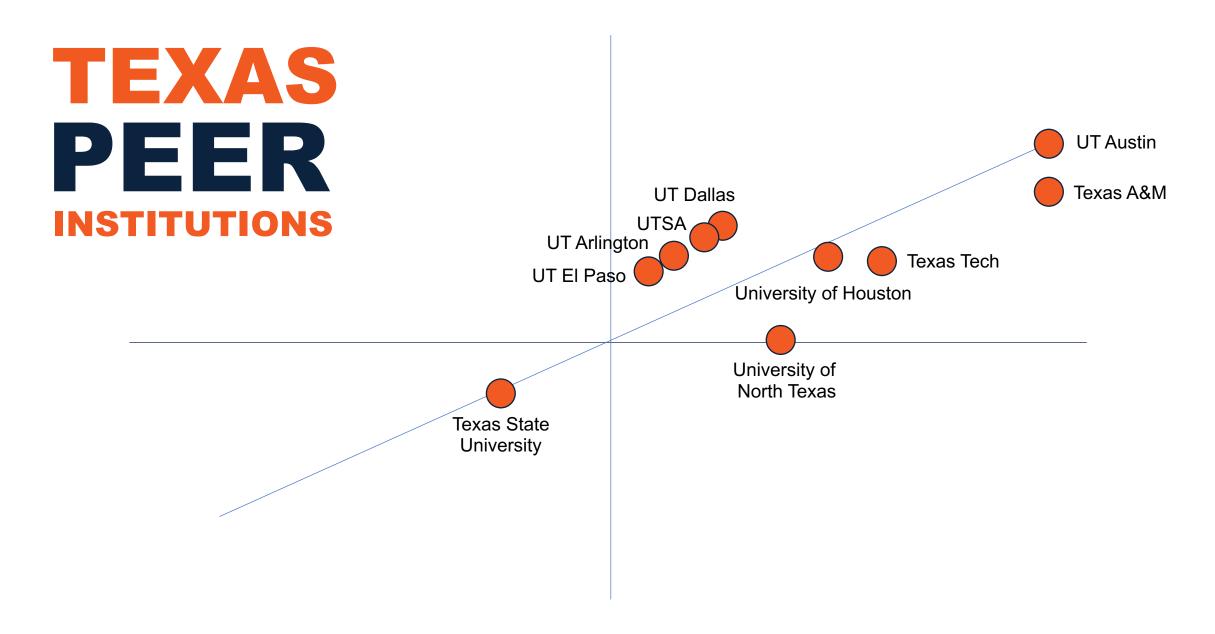
Classification R1 Carnegie



Aggregate Research Activity Index



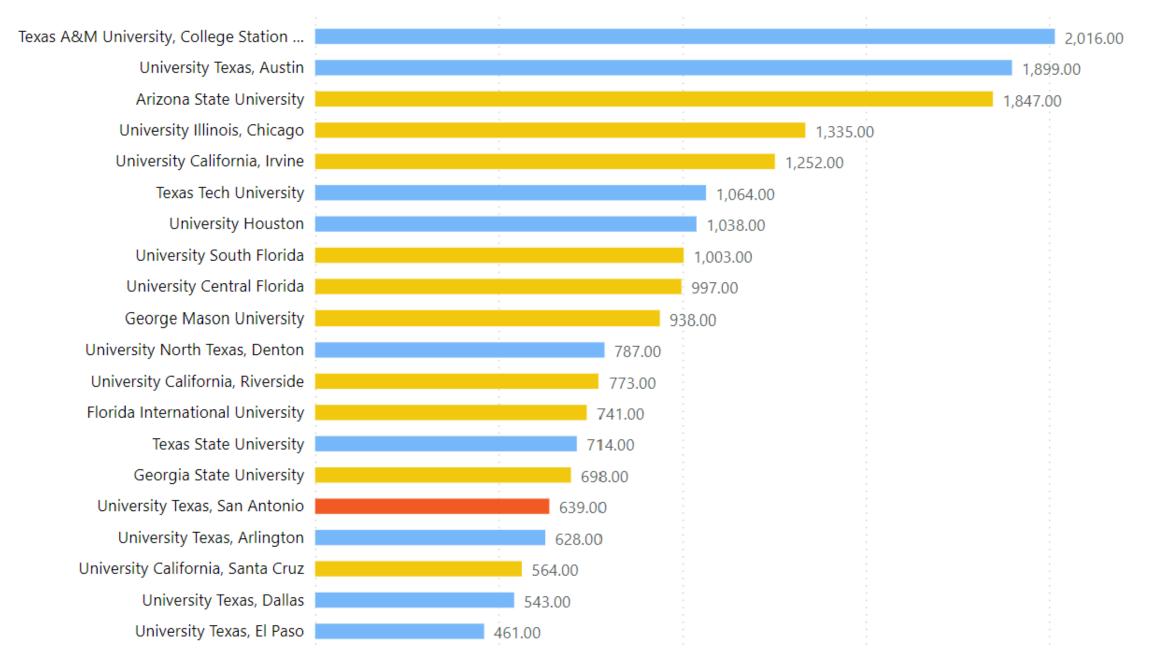






Tenured Tenure-Track Faculty Count

Peer Models of Excellence Texas Research University UTSA

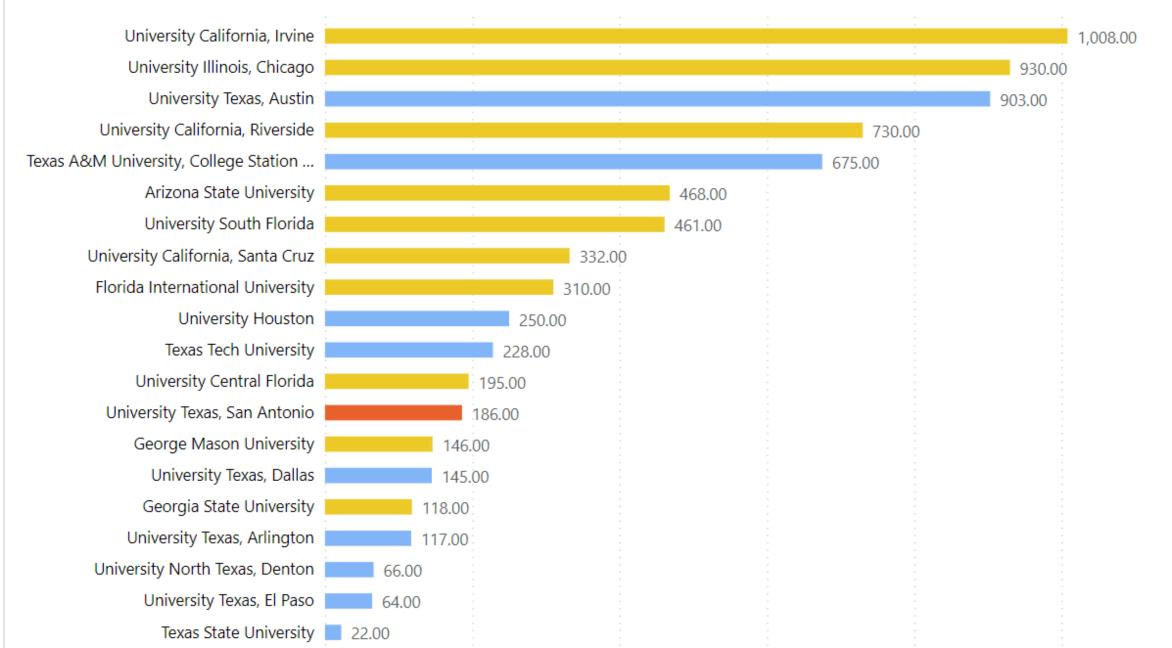


2020 IPEDS

Research Staff

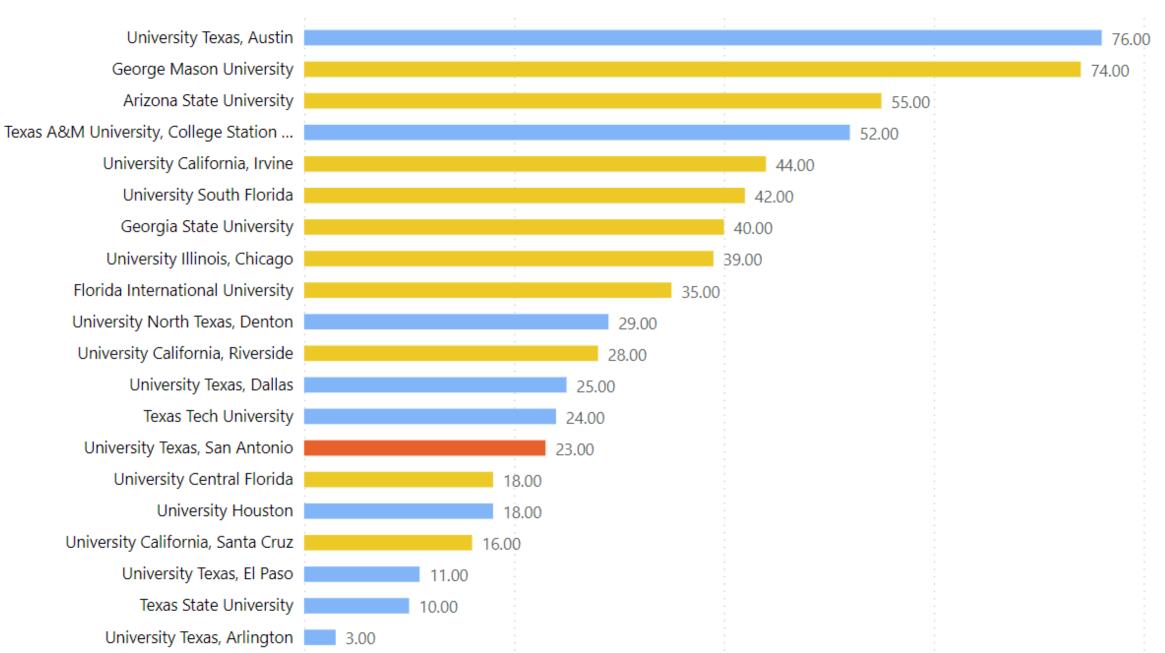
2020 IPEDS

Peer Models of Excellence Texas Research University UTSA



Humanities PhDs

Peer Models of Excellence Texas Research University UTSA

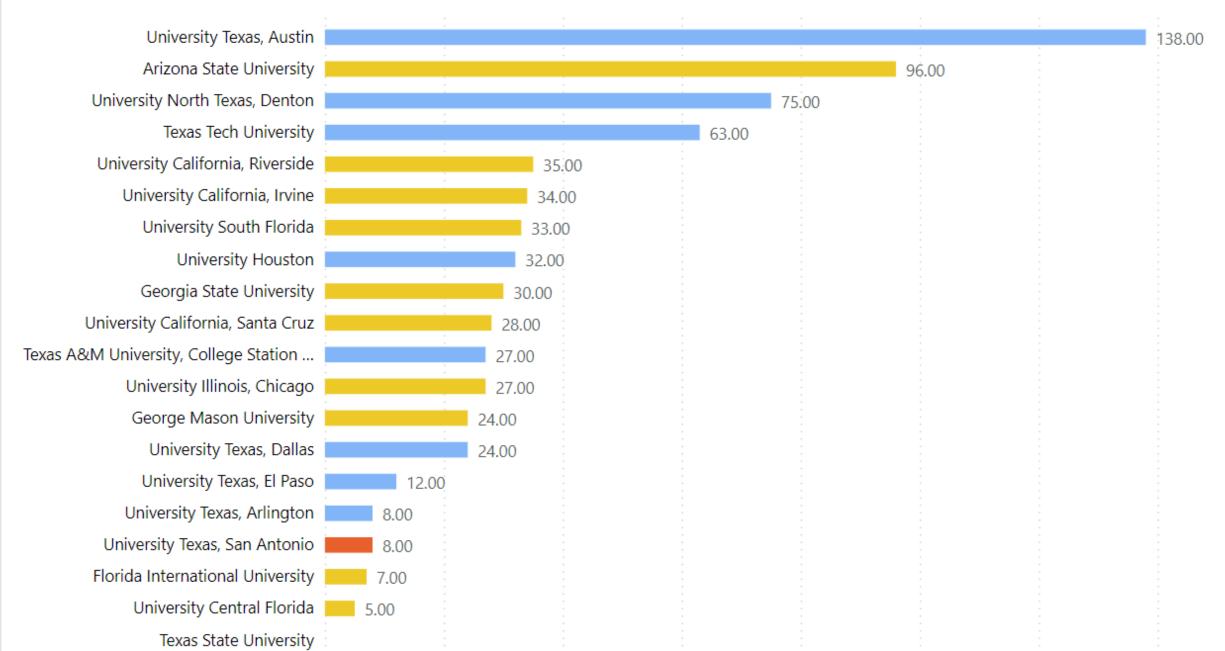


2020 IPEDS

Social Science PhDs

2020 IPEDS

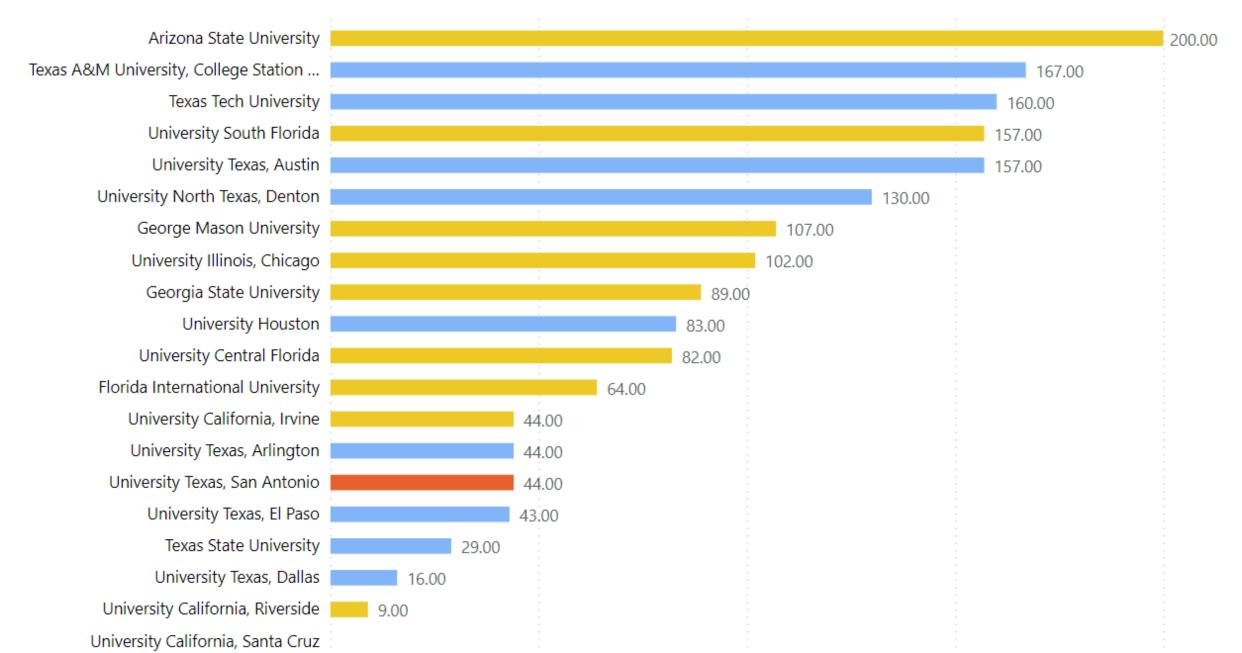
Peer Models of Excellence Texas Research University UTSA



Other PhDs

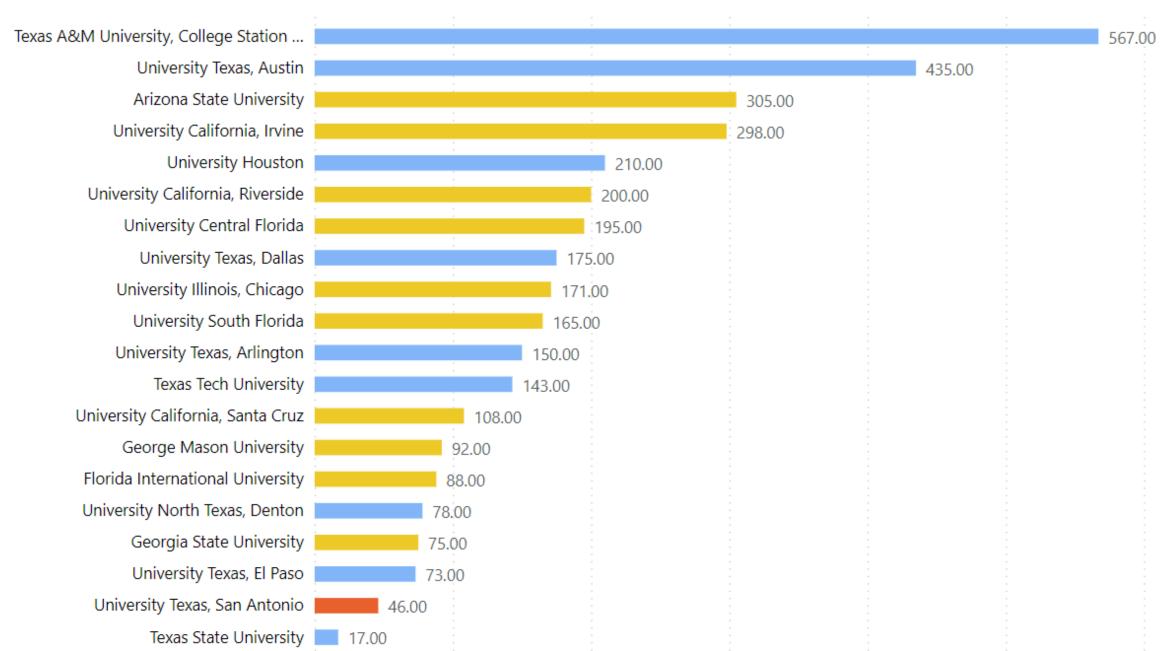
2020 IPEDS

Peer Models of Excellence Texas Research University UTSA



STEM PhDs

Peer Models of Excellence Texas Research University UTSA

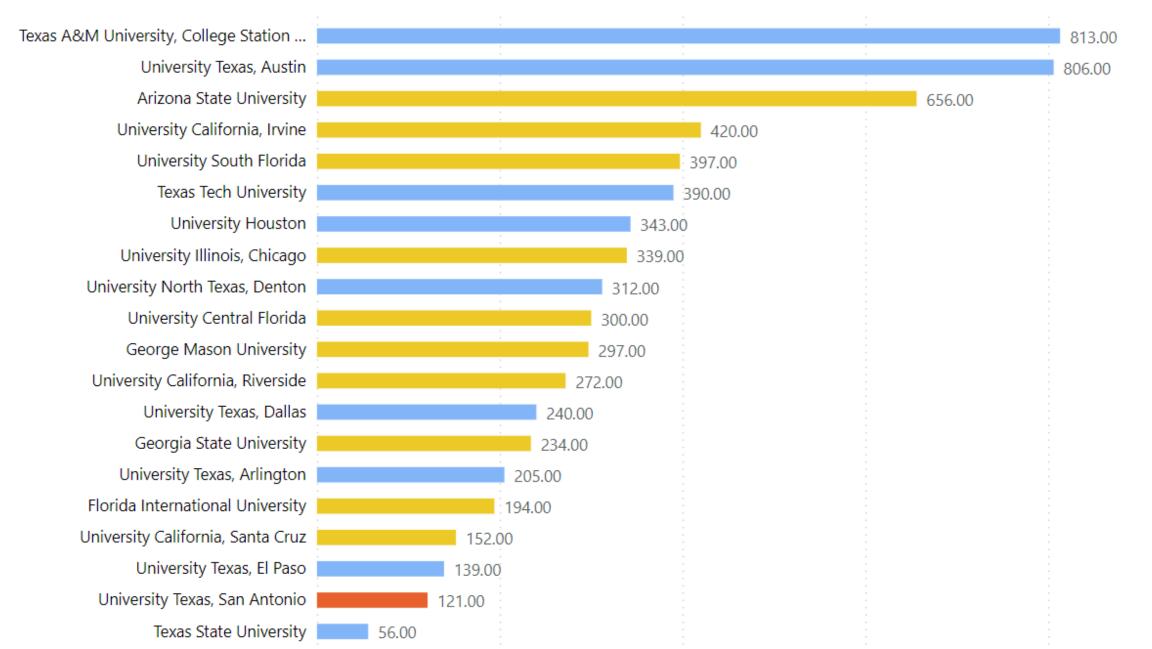


2020 IPEDS

Total PhDs

2020 IPEDS

Peer Models of Excellence Texas Research University UTSA



CMUP SOME DATA

2020 Report, Showing 2019 Data

METRICS:

- Faculty Awards
- Doctorates Awarded



2020 Annual Report

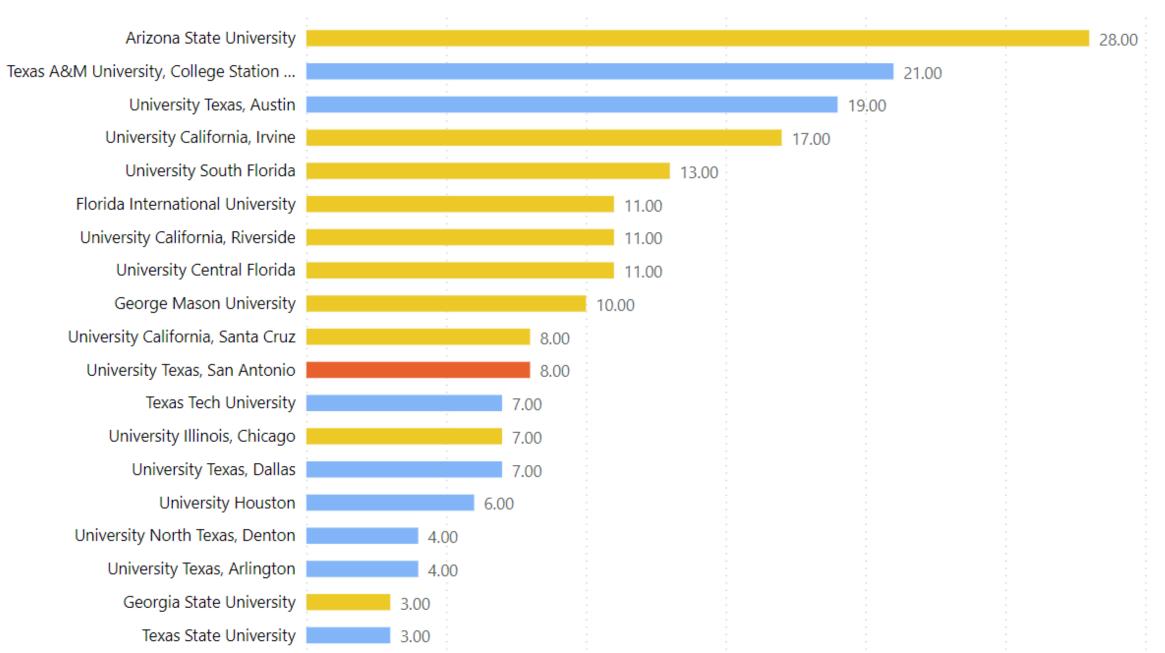
The Center for Measuring University Performance

John V. Lombardi Craig W. Abbey Diane D. Craig Lynne N. Collis



Faculty Awards

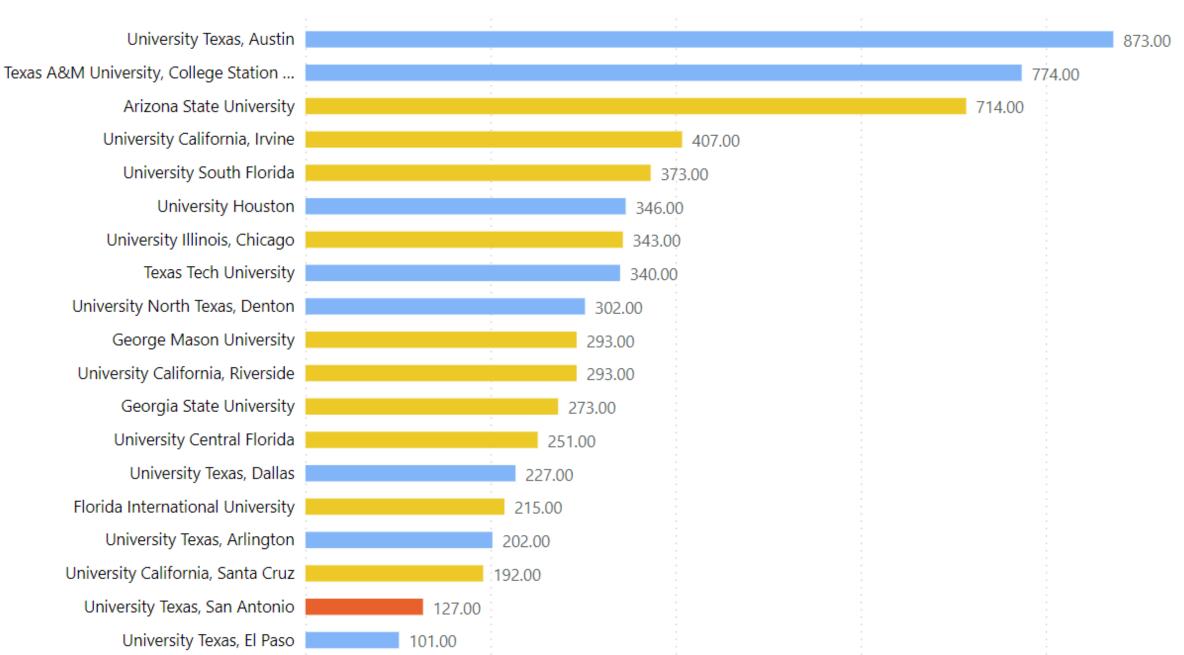
Peer Models of Excellence Texas Research University UTSA



2020 CMUP

Doctorates Awarded

Peer Models of Excellence Texas Research University UTSA



2020 CMUP

AAU SOME DATA

PHASE 1 METRICS:

- Thompson Reuters InCites Citations
- Books

OTHER CONSIDERATIONS:

- Pell
- Undergraduate Graduation Rates
- Pell Recipient Graduation Rates
- Graduation Rate Gap

S of American Universities	Contact Us	4	LOG IN	≡ Menu
Home > Who We Are > Membership Policy				f ≇ in

Membership Policy

AAU Membership Policy

The Association of American Universities (the "Association") is an association of leading comprehensive research universities distinguished by the breadth and quality of their programs of (a) academic research and scholarship and (b) graduate education. Membership in the association is by invitation. The Association maintains a standing Membership Committee, which periodically evaluates both non-member universities for possible membership and current members for continued membership, with the goal of ensuring that the Association in fact comprases comparable leading research-intensive universities. Non-member universities whose research and education profile exceeds that of a number of current members may be invited to join the Association; current members whose research and education profile falls significantly below that of other current members or below the criteria for admission of new members will be subject to further review and possible discontinuation of membership.

While the association does not have a specific limit on the number of its members, it values remaining a relatively small organization whose composition enables productive meetings and collegial relationships among the member presidents and chancellors. It endeavors to balance these characteristics of the association with the expectation that its membership will include the leading research-intensive universities.

In its evaluation of institutions, the Membership Committee is guided by a set of Membership Principles and Membership Indicators. The Membership Principles specify the primary purpose of the association and the corresponding characteristics of its member institutions. The Membership Indicators are a two-phase set of quantitative measures used to assess the breadth and quality of university programs of research and graduate education at U.S. based institutions.

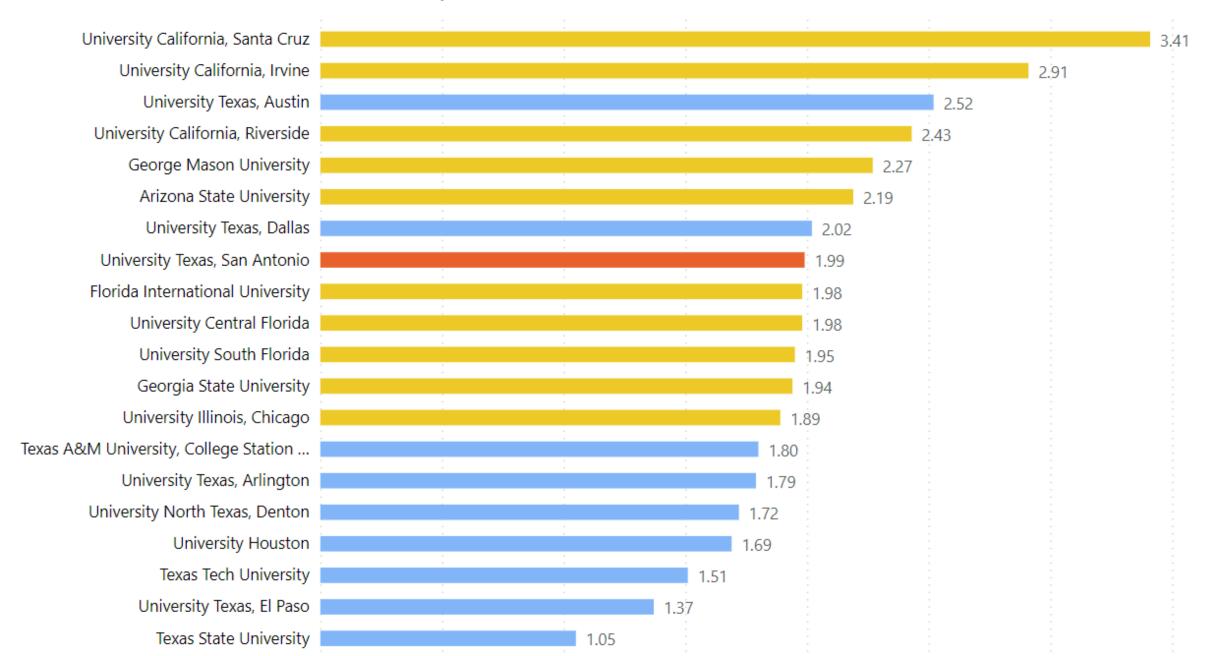
Adopted January 12, 1999 Revised April 20, 2010 Revised April 17, 2023



% of Web of Science Documents in the World's Top 1%

2018-2022 Clarivate InCites

Peer Models of Excellence Texas Research University UTSA



% of Web of Science Documents Cited

Peer Models of Excellence Texas Research University UTSA

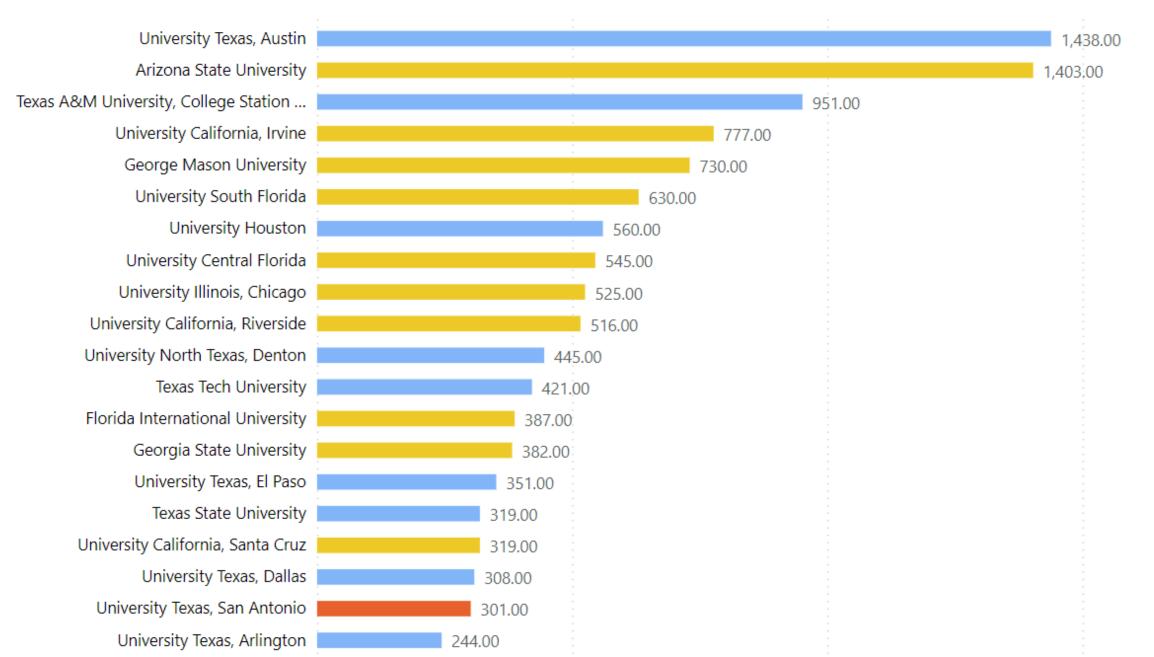
University California, Santa Cruz 76.11 University Texas, Dallas 74.57 University California, Riverside 73.67 University Texas, San Antonio 73.27 Texas A&M University, College Station ... 72.80 University Texas, Austin 72.44 University Texas, Arlington 72.18 Arizona State University 71.86 Florida International University 70.69 University Houston 70.09 University California, Irvine 69.95 University North Texas, Denton 69.63 Georgia State University 69.62 University Texas, El Paso 68.62 University Central Florida 68.33 George Mason University 66.86 Texas Tech University 66.28 University South Florida 66.18 Texas State University 65.10 University Illinois, Chicago 64.73

2018-2022 Clarivate InCites

Count of Books Published

2021 Academic Analytics

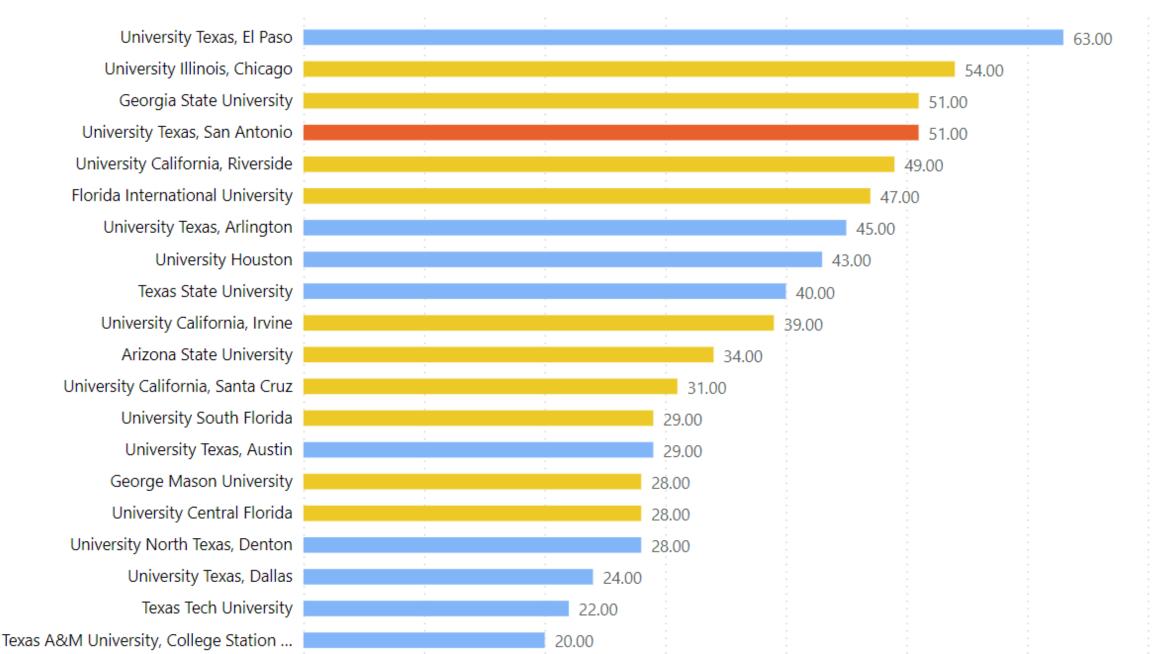
Peer Models of Excellence Texas Research University UTSA



Pell Enrollment

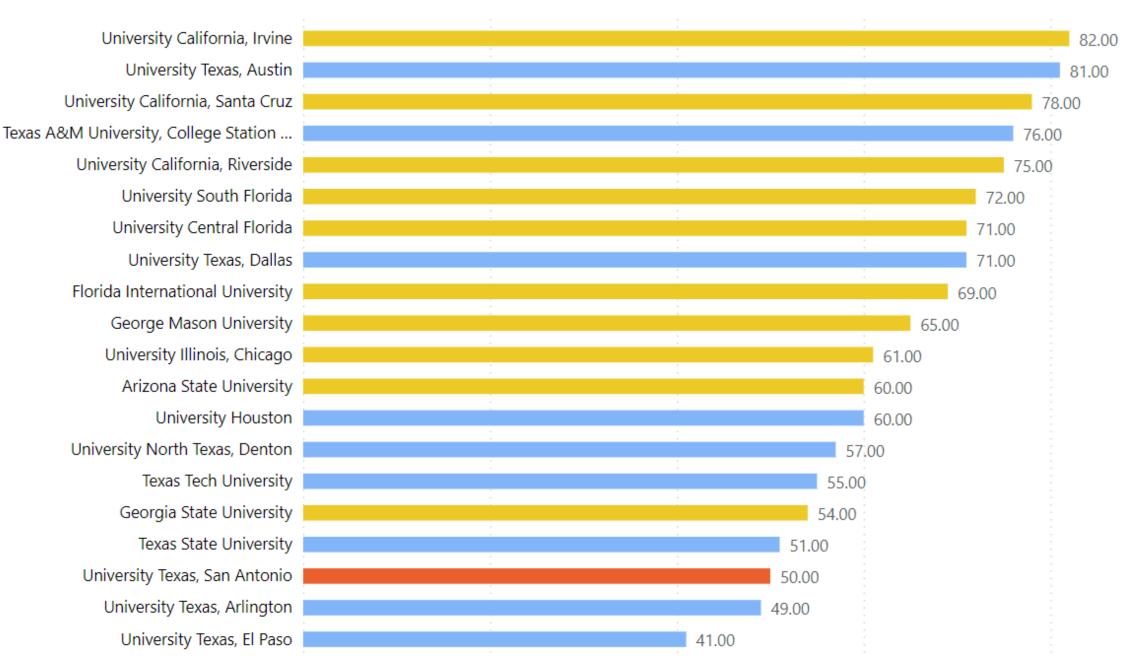
2020 IPEDS

Peer Models of Excellence Texas Research University UTSA



Pell Grant Recipient Graduation Rate

Peer Models of Excellence Texas Research University UTSA



2020 IPEDS

Undergraduate Graduation Rate

Peer Models of Excellence Texas Research University UTSA



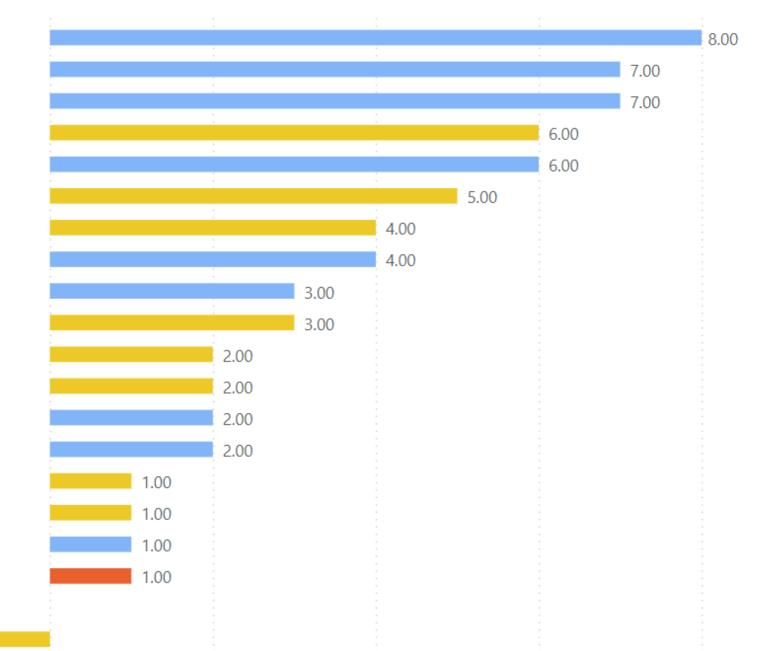
2020 IPEDS

Graduation Rate Gap

Peer Models of Excellence Texas Research University UTSA

2020 IPEDS

Texas Tech University Texas A&M University, College Station ... University Texas, Austin Arizona State University Texas State University George Mason University University Central Florida University Texas, El Paso University North Texas, Denton University South Florida Georgia State University University California, Irvine University Houston University Texas, Arlington University California, Riverside University Illinois, Chicago University Texas, Dallas University Texas, San Antonio University California, Santa Cruz Florida International University -2.00



RESEARCH PILLARS



Digital Economy

AI & Machine Learning Cloud & Edge Computing Cyber Security

Data Science & Analytics NexGen Wireless

Quantum



Fundamental Futures

Environmental Change Earth & Space Sciences Energy & Manufacturing

National Security & Defense

Smart Infrastructure

Human Health

Bioregeneration

Brain Health & Neuroengineering

Health Disparities

Human Performance

Infectious Disease

Precision Therapeutics



Culture & Inclusion

Cultural Sustainability

Digital Humanities

Disability Studies

Language & Literacy

Race & Ethnic Studies

Women & Gender Studies



Socio-Economic Transformation

Career-Engaged Education

Entrepreneurship

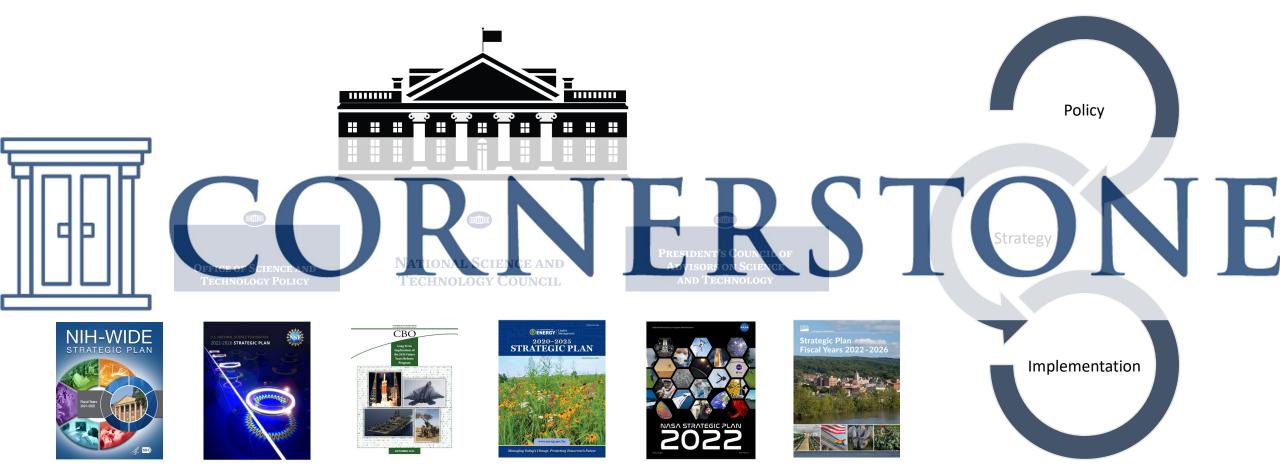
Human Development

Justice

Socioeconomic Equity



FEDERAL AWARDS: KNOWLEDGE & INFLUENCE





UTSA RESEARCH METABOLISM

total research dollars \$145 M

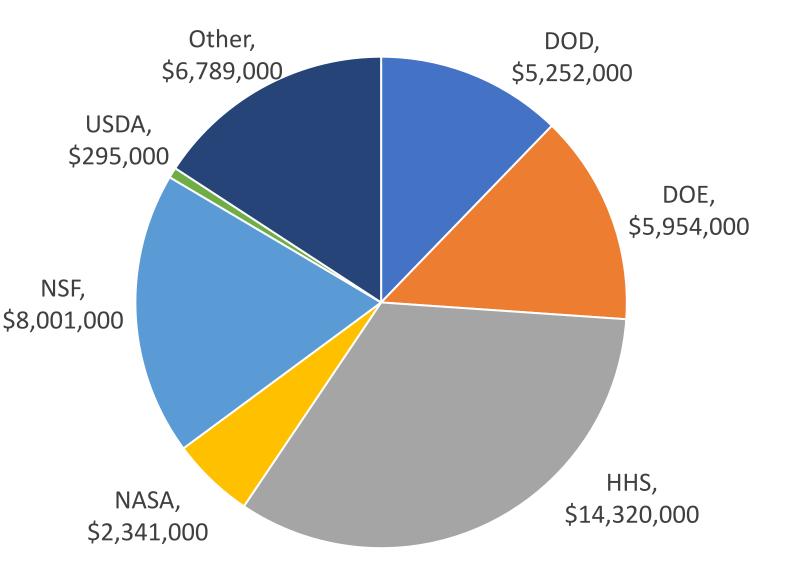
FIVE YEAR CHANGE

FEDERAL DOLLARS

FIVE YEAR CHANGE



2021 UTSA FEDERAL **RESEARCH &** DEVELOPMENT EXPENDITURES (HERD)





Strategic Research Development

Align with Strategic Partners Build on Core

Competencies

- Capture
- Internal Development & Review
- External Development & Review
- Capture Team Approaches
- Foster Awareness/Involvement
- Mutual Interest & Support
- Create Complementary Teams
- Benchmark with Peers
- Analyze Scholarly Work & Funding
- Develop Strategic Research Groups
- Early Knowledge of Opportunities
- White House Policies
- Council Strategies
- Agency Implementation



CORE COMPETENCIES



Top 5 Areas by Publication Categories

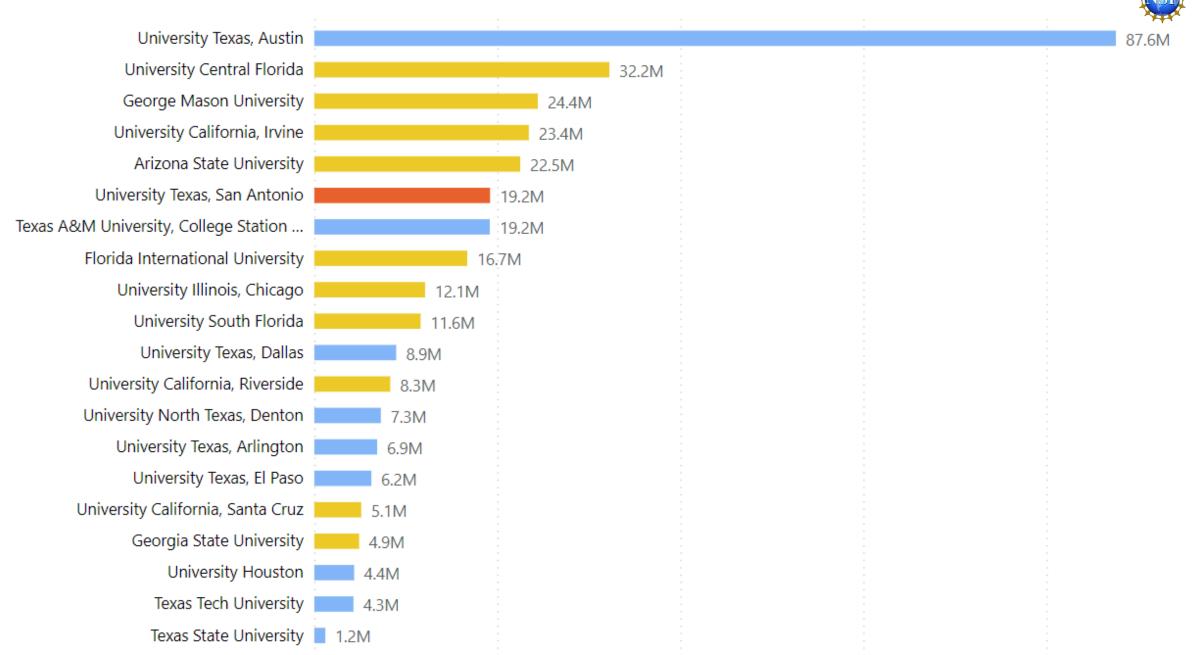
2018-2022 Clarivate InCites Research Area Schema: Citation Topics micro

Measure	1		2		3	4	5	
InCites Analysis By Publication Categories								
WOS Documents	Random Ora	acle Model	Metal-Organic Framew	/orks	PTSD	Malware	Magnetosphere	
Times Cited	Metal-Organic	Frameworks	Blockchain		Random Oracle Model	Object Tracking	Deep Learning	
Highly Cited Papers	Metal-Organic	Frameworks	Blockchain		Random Oracle Model	Radio Astronomy	Unmanned Aerial Vehicles	
Corresponding Author	Metal-Organic	Frameworks	Malware		Corporate Governance	Crime	Language Policy	
Hot Papers	X-Rays: I	Binaries	Alzheimer's Diseas	е	Metal-Organic Frameworks	Differential Privacy	Radio Astronomy	
Compute	er-Data	Energy-	Materials	Spa	ice-Physics	Health	Other	
Random Ora	cle Model	Ν	/IOF	Rad	io Astronomy	Alzheimer's	Corporate Gov	
Blockch	nain			X-R	ays: Binaries	PTSD	Crime	
Malwa	are			Ma	gnetosphere	I	Unmanned Aerial Vehicles	
Object Tra	acking						Language Policy	
Deep Lea	arning							
Differential Privacy								



Computer and Information Sciences Expenditures

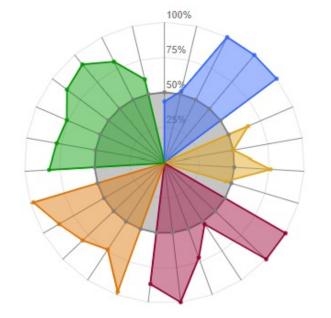
Peer Models of Excellence Texas Research University UTSA

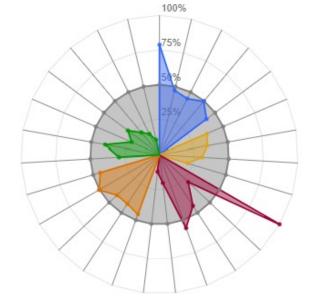


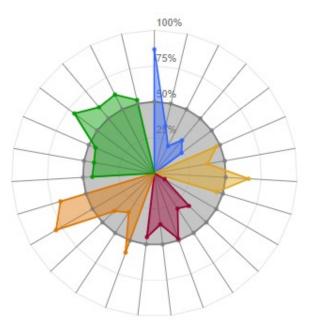
2021 Higher Education Research and Development (HERD)

ACADEMIC ANALYTICS: COMPARE CARNEGIE R1









Information Systems & Cyber Security Electrical & Computer Engineering

Computer Science



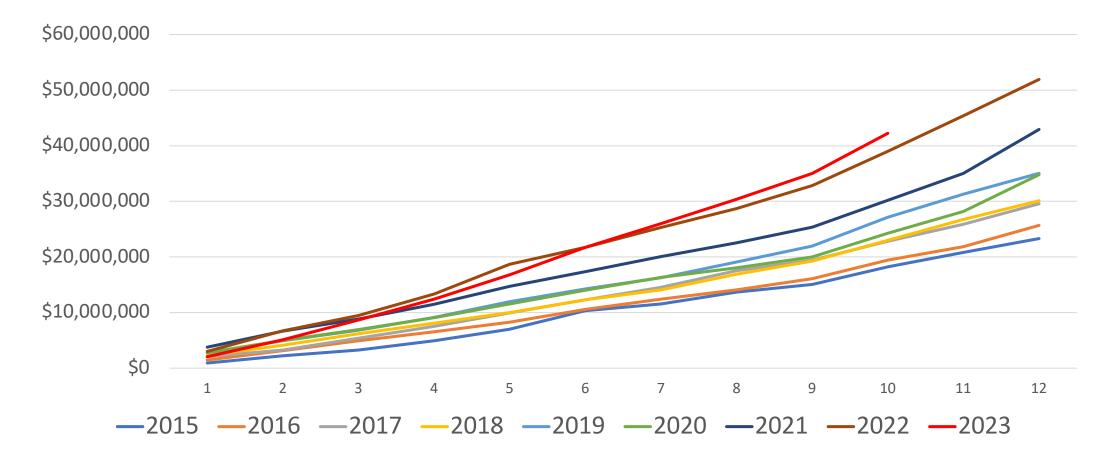
CORE COMPETENCIES BY FEDERALLY-FUNDED LARGE PROJECTS*

Area	Total Funding 2018-2023	Number	Agencies
Security Systems	\$108M	9	DoE, DoD, DHS
Internet Of Things	\$90M	3	DoE, DoD
Software Engineering	\$88M	2	DoE, DoD
Data Structures, Algorithms & Complexity	\$70M	1	DoE
Clinical & Life Sciences	\$37M	8	NIH
Education	\$34M	13	NSF, ED, USDA, DHS
Artificial Intelligence & Machine Learning	\$33M	5	DoE, DoD
Distributed & Real Time Computing	\$18M	1	DoD
Psychiatry & Psychology	\$7M	2	ED and NIH
Space Sciences	\$6.5M	3	NASA
Astronomy & Astrophysics	\$6.5M	3	NASA
Meteorological & Atmospheric Sciences	\$5M	2	NASA
Civil Engineering	\$1.3M	1	federal pass through
Unmanned Aerial Vehicles	\$1.2M	1	federal pass through
Power Systems & Electric Vehicles	\$1.2M	1	federal pass through



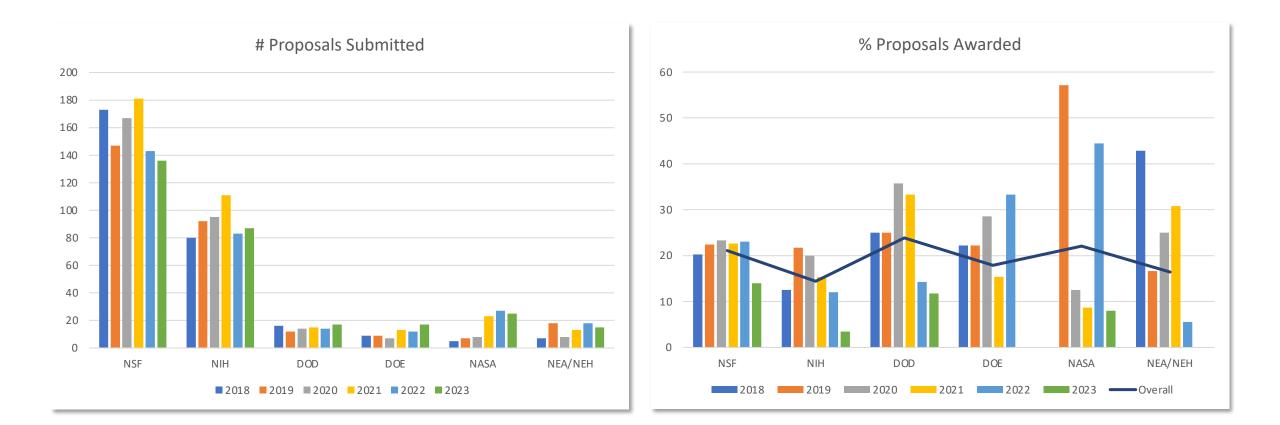
55

SUCCESS IN FEDERAL FUNDING UTSA Federal Research Expenditures





SUCCESS IN FEDERAL FUNDING



Key Take-Aways

UTSA R1 Culture – To Reach our Next Goals in our Journey

- Produce new knowledge that changes our lives and the world
- Seek recognition for faculty and bring recognized faculty onto our Teams
- Graduate next generation of experts (PhD)
- Increase position in federally-funded research
- Increase position in NSF and NIH funding



At Your Table: Be a Futurist

Imagine it's 2035 and UTSA has just been named the 85th member of the Association of American Universities (AAU), a designation that is reserved for North America's leading research universities. UTSA achieved this designation for its track record for securing federal grants, interdisciplinary research centers targeting some of society's most pressing challenges, housing some of the nation's top researchers, including a Nobel Laureate. Admission into UTSA's undergraduate and graduate programs is increasingly competitive as students seek to launch their research careers at an institution that is distinguished by its productivity, its location in the bustling "Austintonio" metroplex, and its international reputation for excellence in mentoring. The research infrastructure boasts some of the most unique facilities, equipment, and computing resources in the nation.

Think about all the attributes of this UTSA Future and make two lists (choose a Recorder):

- 1. What are 100 things researchers will need help with in this "evolved" UTSA?
- 2. What are 100 ways researchers could help each other in this "evolved" UTSA?

Report the number of ideas you generated, and the 5 most innovative.

There will be **PRIZES** for the most complete and innovative responses!

UTSA, BOLD FUTURES

CREATING FUTURES