

# **TEXAS A&M UNIVERSITY REFERENCE PACKET**

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# TEXAS RESEARCH UNIVERSITY FUND

The Texas Research University Fund (TRUF) allows Texas A&M to compete with other national universities in recruiting and maintaining outstanding faculty.



#### **IMPACT**

- In addition to the Governor's University Research Initiative (GURI), this fund allows Texas A&M to recruit and retain leading researchers like Lane Barker, Ph.D., and Pablo Tarazaga, Ph.D.
- Texas A&M's 2nd largest source of General Revenue.

#### **FACTS**

- Created by the Texas Legislature in 2015 to provide "funding for eligible research universities to support faculty to ensure excellence in instruction and research." \*
- Texas' research universities with total research expenditures above \$450 million are eligible for support from TRUF.
- Funds are distributed based on a three-year average of total research expenditures.

**REQUEST** 



Maintain or enhance the TRUF formula rate.

### FUNDING IN ACTION



Professor Lane A.
Baker, Ph.D., (Class of '01) is among the world's leading analytical chemists, currently developing new electrochemical methods to conduct

nanoscale analysis and imaging. The Society for Electroanalytical Chemistry honored Baker with the 2023 Charles N. Reilley Award to recognize his significant contributions to the discipline.



Professor Pablo
Tarazaga, Ph.D.,
was elected as a
2022 fellow by the
American Society
of Mechanical
Engineers. Only 5%
of the society's 60,000

members have earned such fellowships. Tarazaga's research focuses on structural dynamics, adaptive structures and smart infrastructure.

# FOR MORE INFORMATION, CONTACT:



# **ENROLLMENT PROFILE (FALL 2022)**

#### **FACTS**

- Texas A&M's Fall 2022 total enrollment increased 2.1% from 73,283 the previous year to 74,829 (includes Health Science Center and branch campuses in Galveston and Doha, Qatar).
- The College Station campus had the greatest **increase of 1,328 students** for a total of **68,461**.
- Graduate and professional student enrollment increased by 705 students from the previous year with a total of 16,560 (includes Health Science Center and branch campuses in Galveston and Doha, Qatar).
- In Fall 2022, there was a **10.6% decrease** in transfer students from the previous year.



"Overall university enrollment remains strong with continued demand for a degree from Texas A&M University, both by students and those that seek to employ them. We continue to serve more students from Texas than any other public university, and our international student enrollment has returned to pre-COVID levels."

 Joseph P. Pettibon II, Vice President for Enrollment and Academic Services



"Employers regularly report Aggie graduates to be among their best hires, and they compete well in the job marketplace. The excellent academic programs and the way Aggie students experience their education outside the classroom makes them more career ready and prepares them to be leaders."

- Alan Sams, Interim Provost and Vice President for Academic Affairs



# TEXAS A&M RANKINGS AMONG TEXAS PUBLIC UNIVERSITIES

### **#1 Best Value School**

- U.S. News & World Report, 2022

### **#1 Best Value in Texas**

- Money Magazine, 2022

# #1 in Undergraduate Degrees Awarded

- Texas Higher Education Coordinating Board Almanac, 2021

### **#1 Best College in Texas**

- Money Magazine, 2022

## **#1 Best College for Veterans**

- College Factual, 2022

#### #1 in Enrollment

- Texas Higher Education Coordinating Board Almanac, 2021

#### #1 Transfer Graduation Rate

 Texas Higher Education Coordinating Board Almanac, 2021

# #1 Public University in Texas for Return on Investment

- Payscale, 2022

# ASK THE STUDENTS

According to the Wall Street Journal's 2022 College Rankings, **almost 90%** of surveyed Texas A&M students:

- Would choose Texas A&M again
- Describe the people and environment as inspiring
- Say Texas A&M is worth the investment



"When I receive my degree, I'll have that recognition of 'I did it!' I went through the struggles, the satisfactions, I got to this point and I can go further and find my full potential."

Alexandra Chapa '25
 Majoring in Construction Science



Watch Chapa's story tx.ag/leg2023





## **ECONOMIC VALUE TO TEXAS**

Texas A&M creates a significant positive impact on the Texas business community and generates a return on investment to its major stakeholder groups – students, taxpayers and society.

# INCOME AND JOBS IMPACTS 2021

(UFY 2019-2020 data)

- \$1.4 billion + 15,330 jobs: Texas A&M's start-up and spin-off company income impact
- \$1.2 billion + 17,770 jobs: Texas A&M's research spending income impact
- \$513.3 million + 10,000 jobs: Texas A&M's operations spending income impact
- \$267.4 million + 5,560 jobs: Texas A&M's student spending income impact
- \$151.7 million + 3,440 jobs: Texas A&M's visitor spending income impact
- \$139.6 million + 2,000 jobs: Texas A&M's construction spending income impact

TOTAL TEXAS A&M
INCOME IMPACT
\$3.7 BILLION + 54,170 JOBS



#### **FORMER STUDENTS**

The "Agricultural and Mechanical College of Texas," later renamed Texas A&M, was created by the Texas state legislature on April 17, 1871. For 151 years Texas A&M students have been learning and gaining the knowledge and skills they need to launch careers and solve challenges across the globe. Today, tens of thousands of former students are employed in Texas.

TOTAL TEXAS A&M FORMER STUDENT INCOME IMPACT \$6.2 BILLION + 77,511 JOBS

**GRAND TOTAL IMPACT** 

\$9.9 billion\* + 131,600 jobs



# CYCLOTRON INSTITUTE

"The Cyclotron Institute represents the best of government, academia, industry, medicine and philanthropy at work for the greater good."

- Dr. Sherry J. Yennello, Director of the Cyclotron Institute

### **IMPACT**

The Cyclotron Institute enables basic research, educates students in accelerator-based science and technology, and provides technical capabilities for a wide variety of applications in space science, materials science, analytical procedures and nuclear medicine.

Researchers are using the K150 Cyclotron to produce radioactive isotopes that are central to therapeutic nuclear medicine. The institute focuses on an important isotope, At-211, which enables targeted alpha therapy for cancer treatment. Seven shipments of At-211 have been sent to MD Anderson for development of radiophamaceuticals.

Additionally, the K550 and K150 cyclotrons are used to test electronics components.





#### **FACTS**

- Operating for over 55 years.
- Jointly supported by the U.S. Department of Energy and the State of Texas as a major technical and educational resource for the state, nation and world.
- Provides the **primary infrastructure support** for the university's graduate programs in nuclear chemistry and nuclear physics.
- Nearly 100 electronic components of SpaceX's

  Crew Dragon capsule were tested at the Texas

  A&M Cyclotron Institute, in preparation for its historic May 30, 2020, trip as the first crewed spacecraft launched from American soil since 2011.
- Clients include Boeing, Lockheed-Martin, NASA, the Jet Propulsion Laboratory, the U.S. Department of Defense and the U.S. Navy Laboratories.
- Generated **over \$11.75 million in external grants** for 2022.

# FOR MORE INFORMATION, CONTACT:



# TEXAS SEA GRANT PROGRAM

The Texas Sea Grant Program supports healthy coastal ecosystems, sustainable fisheries and aquaculture, resilient communities and economies, and workforce development.



### **FACTS**

- Texas Sea Grant generates income for the Texas economy and leverages funding from the National Oceanic & Atmospheric Administration (NOAA) to receive matching fund from the state of Texas.
- Every state dollar invested in Texas Sea Grant returns more than \$20 to the Texas economy.

"These research investments will generate substantial social, economic and environmental impacts, help develop the workforce and contribute to the sustainability of Texas' natural and built environments."

-Dr. Pamela Plotkin, Director, Texas Sea Grant

# REQUEST > \$3

\$324,534 for the biennium (FY24-25)

#### **2021 IMPACT**

- Restored **1,009 acres** of coastal wetlands, dunes, prairies and oyster reefs.
- Supported the first three oyster farming businesses in this new Texas industry, creating eight jobs valued at \$366,080.
- Trained 133 shrimp fishermen to properly install and use turtle excluder devices to comply with federal regulations, reduce non-compliance fines, increase their catch, decrease bycatch of endangered sea turtles, and enable them to access markets and consumers seeking sustainably harvested shrimp.
- Educated **6,649 K-12 students** and **315 teachers** in Texas coastal communities about Texas' coastal resources.
- Trained **584 fishermen**, **seafood processors**, **and aquaculture industry personnel** to modify their practices to increase the sustainability of their fisheries and the safety of Texas' seafood supply.
- Transferred technology to the Texas shrimp industry to save the industry \$4,262,053 in fuel savings.

# FOR MORE INFORMATION, CONTACT:



## **COLONIAS PROGRAM**

The Colonias Program partners with public and private organizations to develop and deliver resources for Texas' most economically distressed and isolated rural communities. Texas Colonias are primarily located in counties bordering Mexico, and most residents lack one or more critical services such as running water, electricity, health care, education and workforce development.

#### **FACTS**

- Since 1991, the program has leveraged local, regional and national resources to help meet the needs of residents.
- It works to improve the lives of rural residents through partnerships with local organizations in six critical areas:
  - Affordable housing and community facilities
  - Civil infrastructure systems
  - Economic development
  - Education and workforce development
  - Health and human services
  - Planning and design of rural-tourban environments



# REQUEST \$676,966 for the biennium (FY24-25)

#### **IMPACT**

- Serves nearly half a million Texans in 2,294 Colonias to create livable, resilient, sustainable solutions to the challenges faced by the residents of these unincorporated, unregulated substandard settlements.
- Program leadership, working in collaboration with local organizations and the U.S. military, helped Webb County secure \$375 million in infrastructure grant funding.
- As part of the military's Innovative Readiness Training missions, Nueces County received \$6.4 million dollars in engineering projects and an additional \$3 million for medical projects for its Colonias.
- Helped secure and distribute **16 mobile health clinics and units** along the Texas-Mexico border providing better access to health care services for Colonias' residents.
- Worked with the University of Texas at El Paso to provide **COVID-19 vaccine information** to Colonias' residents.
- Provides health care workforce training and certification through its **Colonias Program Academy.**

# FOR MORE INFORMATION, CONTACT:



## **ENERGY RESOURCES PROGRAM**

The Energy Resources Program (ERP) was created to provide the state with a concentration of expertise in research, teaching and public service directed at continuously developing solutions to Texas' and the nation's changing energy and environmental challenges. The ERP accelerates advanced and emerging technologies in both renewable and traditional sources of energy by cultivating innovative strategies to maintain the State's leadership in wind power, renewable energy technologies, natural gas production and distribution and critical issues associated with water use and energy production.

#### **FACTS**

- Texas produces more electricity than any other state.
- Energy is critical to the state's economy and its citizens' well-being.
- Texas is the top U.S. producer of both crude oil and natural gas.
- In 2021, the state accounted for 42.6% of the nation's crude oil production and 25.4% of its marketed natural gas production.
- Texas leads the nation in wind-powered generation and produced about 26.3% of all U.S. wind-powered electricity in 2021.
- Texas wind turbines have produced more electricity than the state's nuclear power plants since 2014.



#### **IMPACTS**

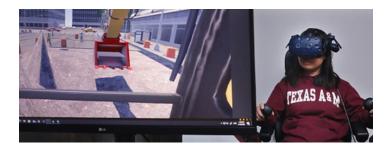
- Established in 1976, the program has played a key role on energy-related projects funded by federal agencies and external entities.
- Supports efforts to educate the Texas workforce in all energy-related areas.
- The overall return on the ERP investment, as measured by the additional external funds generated, is about \$268 to \$1.
- In the last five years, ERP funds have been used, in part, to bring over \$415 million in funding to the state of Texas for research and education at Texas A&M.



# FOR MORE INFORMATION, CONTACT:



# **FUNDING TO ESTABLISH A VIRTUAL PRODUCTION INSTITUTE**



### **OVERVIEW**

- The augmented reality (AR), virtual reality (VR), sensors, display technology, and real-time 3D graphics and simulation are rapidly driving solutions for various industries.
- The AR/VR and extended reality (XR) market reached \$28 billion globally in 2021.¹
- The Texas A&M Virtual Production Institute, part of the newly created *School of Performance, Visualization & Fine Arts*, will be an interdisciplinary ecosystem in which students learn the art and science of the development and applied use of AR, VR and XR.
- It will meet industry needs in media and entertainment, product and architectural design, training for healthcare and military, and digital twins in manufacturing and aerospace.
- State funding will be used for hardware, software and faculty and instructors to teach students using the latest technology that will prepare them for an expanding Texas job market.
- Funding will enable Texas A&M to acquire and install the necessary equipment for **performance capture**, large-scale mixed-reality environments, technology-infused classrooms, and high-performance computing and instrumentation.

**REQUEST** 



\$50 million (FY 23-24)

#### **IMPACT**

- Prepares Texas workforce for what is projected to be an \$8.6 billion industry in the U.S. in 2023.¹
- Supports Texas' existing and rapidly growing \$1.95 billion moving image industry.²
- Partnerships with private industry.
- Addresses workforce gap in content creators and technologists to advance these systems.
- Strengthens multiple sectors of Texas' economy by enabling industries to tap into innovation solutions driven through VR/AR production.



# FOR MORE INFORMATION, CONTACT:

<sup>1</sup> Augmented reality (AR), virtual reality (VR), and mixed reality (MR) market size worldwide in 2021 and 2028, Statista 2022

 $<sup>1\</sup> Extended\ Reality\ (XR):\ AR/VR,$  and MR in the United States - statistics and facts, Statista 2022

<sup>2</sup> Texas Moving Image Industry Incentive Program, 2022



## INSTITUTIONAL ENHANCEMENT

Providing a high-quality, accessible education is a priority for Texas A&M University, and we are consistently highly ranked for our value. In fact, Texas A&M ranks No. 1 Best Value School nationally by *U.S. News & World Report* and in Texas by *Money Magazine*. Institutional Enhancement funding from the state enables Texas A&M to continue providing a transformational education to students as our enrollment increases. With goals of 95% first-year student retention and 65% four-year graduation rates, continued state support remains critical.



### **IMPACT**

Institutional Enhancement funding has enabled Texas A&M University to:

- Increase first-year student retention by 2.5% (now 94.6%) and four-year graduation rates by 3.4% (now 59.6%) across the university.
- Increase first-year student retention by 5.8% (now 92.4%) and four-year graduation rates by 2.7% (now 53%) for **first-generation students**.
- Increase first-year student retention by 6% (92.6%) and four-year graduation rates by 2.8% (now 53%) for students from families making less than \$60,000 a year.
- Increase first-year student retention by 5.3% (93.9%) and four-year graduation rates by 3.7% (now 53.3%) for **Hispanic students**.
- Increase faculty size from 3,273 to 3,607.

# REQUEST



\$52.25 million for the biennium (FY24-25)

#### **FACTS**

- Since receiving the initial Institutional Enhancement Funding, Texas A&M University has **added more than 4,000 students** and invested in the following:
  - Student Success Initiative to improve graduation and retention rates, and reduce and eliminate disparities for for first generation and under-represented students
  - Enhancements to graduate programs
  - Development of key focus areas in data science/artificial intelligence, biology and nutrition, technology commercialization, early childhood education, neuroscience and expanded diversity support
  - Academic innovation for instructional design and enhanced online learning, and teaching innovation grants that target areas such as interdisciplinary programs, active learning, teaching in large classes and distance education
  - Targeted faculty hires in colleges/programs impacted by student growth

# FOR MORE INFORMATION, CONTACT: