

Senate Finance Committee
Interim Report
August 2020

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Senate Finance Committee

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86th Legislature

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August 7, 2020

The Honorable Dan Patrick
Lieutenant Governor of the State of Texas
Capitol Building, Room 2E.13
Austin, Texas 78701

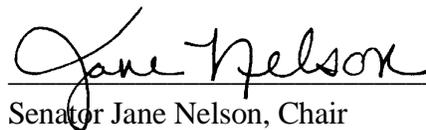
Dear Lt. Governor Patrick:

The Senate Finance Committee submits this report in response to the interim charges you have assigned to this Committee.

This report examines several topics, including research, cybersecurity, state investments, natural disaster funding, tax policy, and spending limits. The Committee met twice prior to the pandemic and took testimony on four charges covered in this report. Committee staff worked with agencies and stakeholders during the shutdown to gather information on charges relating to research and cybersecurity – issues that this Committee has worked on extensively over the years. The charge relating to performance-based contracting was withdrawn.

We appreciate the leadership you have displayed in asking this Committee to examine the issues above, and we trust the recommendations offered in this report will help guide our discussion next session on these important matters.

Respectfully submitted,



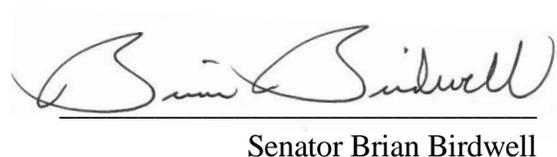
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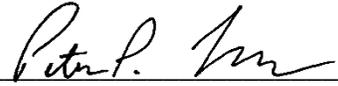


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The Honorable Dan Patrick
August 7, 2020



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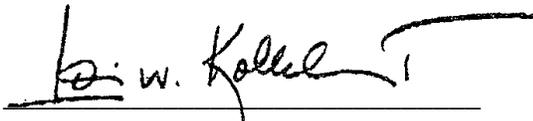
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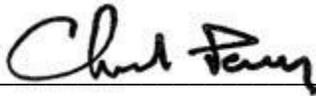
Senator Joan Huffman



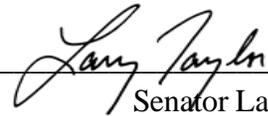
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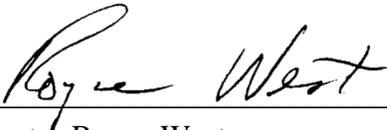
Senator Robert Nichols



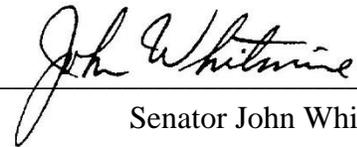
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Senator John Whitmire

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Investment of State Funds

Review the investment strategies and performance of funds invested through the Teacher Retirement System, the Permanent School Fund, and university funds. Make recommendations to better coordinate and leverage Texas' purchasing power to maximize investment income to the state. Examine the long-term facility plans of the Teacher Retirement System, and specifically review the facility space costs of the Investment Management Division.

Introduction and Background

The State of Texas has a robust, high performing set of investment funds, supporting obligations such as pension-based retirement systems as well as public and higher education. The Legislature is continually looking for ways to maximize its investments to provide sustainable revenue for present and future needs. Selected Texas investment funds are detailed in Figure 1.

Figure 1
Selected Major State Investment Funds

Fund	Created	Governance	Use	Value (Fiscal Year 2018)¹
Economic Stabilization Fund (ESF)	1987	Managed by the Comptroller of Public Accounts; appropriated by the Legislature.	To supplement state revenues on an as-needed basis.	\$6.7 Billion
Teacher Retirement System Pension Trust Fund (TRS)	1937	Board of Trustees	Provides retirement benefits for teachers and their beneficiaries.	\$157 Billion
Employee's Retirement System Pension Trust Fund (ERS)	1947	Board of Trustees	Provides retirement benefits for state employees and their beneficiaries.	\$29 Billion
Permanent School Fund (PSF)	1854	State Board of Education (SBOE) and School Land Board (SLB)	Generates revenue to support public primary and secondary education in Texas.	\$41 Billion
University of Texas/ Texas A&M Investment Management Corporation (UTIMCO)	1996	Board of Directors	Generates revenue to support public higher education in Texas.	\$45 Billion

The Senate Finance Committee met on February 25, 2020 to discuss its charge relating to investments. The hearing video, presentations and witness logs are online at: <https://senate.texas.gov/cmte.php?c=540>

Recent Reforms

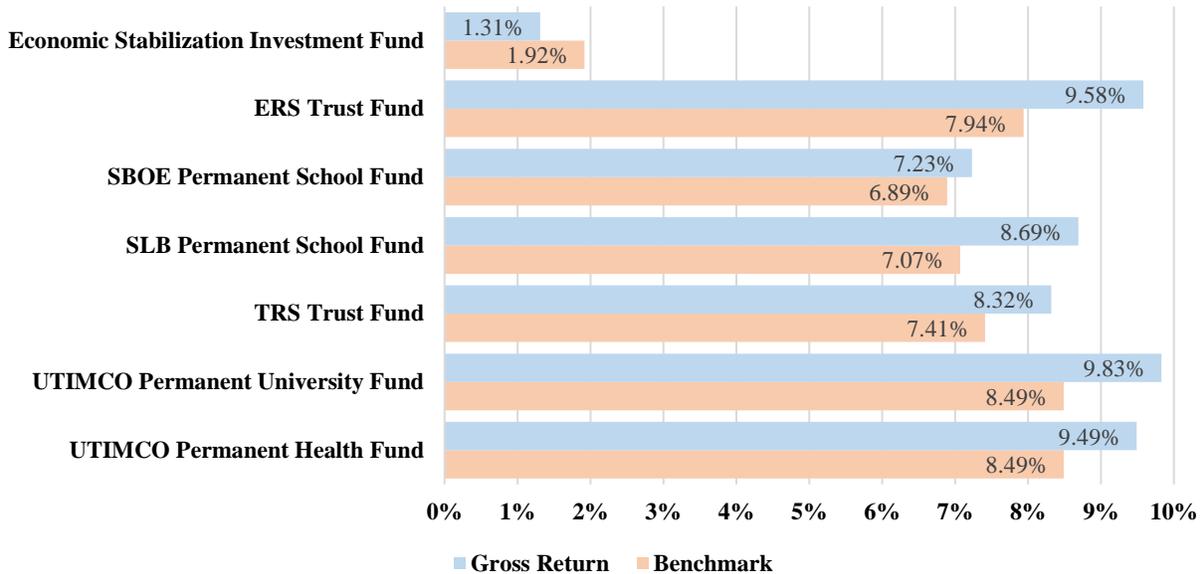
The Legislature has made significant changes to several investment funds to improve long-term performance and governance. Major legislation passed in the 86th Regular Legislative Session is summarized below:

- Senate Bill 69 increased the amount of the ESF the Comptroller is permitted to invest in the Texas Economic Stabilization Investment Fund (TESIF) to up to 75 percent of the ESF.² Less than halfway through the 2020-2021 biennium, the Office of the Comptroller reported the increased ability to invest the ESF had yielded an estimated 1.7 percent in additional earnings than the same funds would have earned in the general treasury pool.³ Investment of these funds using the prudent investor standard, as specified in the bill, will yield significant additional resources to bolster Texas' "Rainy Day Fund."
- Senate Bill 12 increased state, employer, and employee contributions to the TRS Pension Trust Fund over a five year period to put the Fund on a path to actuarial soundness.⁴ The graduated increases in contributions, specified in statute, demonstrate to members and financial markets that TRS is on a path to support its members into the future and had the impact of reducing the funding period for the Fund from 87 years to 29 years.⁵
- House Bill 4388 created a special account to invest certain funds from the SLB-managed portion of the PSF. The bill also requires a study on distributions from the PSF to the Available School Fund (ASF), which will include the history of distributions, an examination of current and alternative approaches to balance the needs and interests of present and future beneficiaries, and will offer options to maximize available revenue distributions for students in the public education system.⁶ The study is slated for completion in the Fall of 2020 and is expected to inform any additional legislative changes to the Fund's governance in the 87th Legislative Session.
- House Joint Resolution 151 increased the allowable annual transfer from SBOE or SLB to the PSF from \$300 million to \$600 million.⁷ This change will allow greater support from the state for public education in accordance with House Bill 3, the historic school finance legislation also passed by the 86th Legislature.
- Senate Bill 608 modified the governance of the School Land Board, by expanding the number of board members from three to five and requiring an annual joint meeting between the SLB and SBOE to better coordinate asset allocation.⁸

Investment Performance

Factors such as legal requirements; governance; additional sources of revenue; and, whether an investment fund is intended to guarantee debt obligations all combine to impact the investment strategy and performance of an individual fund. The Legislative Budget Board's annual Major State Investment Report includes multiple performance metrics for each fund; Figure 2 below represents gross returns for each fund compared to benchmarks for each in the same period.⁹

Figure 2
Gross Return and Benchmark, Fiscal Year 2018



The significant expansion through Senate Bill 69 of how much of the ESF can be actively invested will likely result in returns for the ESF aligning more closely with other major state investment funds in the future.

Challenges Ahead

General market volatility and fluctuations in oil and gas prices affect the Texas economy and the performance of its investment funds. During the writing of this report, the novel Coronavirus ("COVID-19") pandemic had begun to dramatically impact state, national and worldwide financial markets. While current market instability has significantly affected valuations of Texas' major state investment funds in the short-term, previous steps taken to diversify-investments to the degree permitted and appropriate for each fund's individual use are expected to insulate funds from dramatic shifts in value over the long-term. Beyond the impact of COVID-19, specific funds face additional challenges from other pressures, detailed below.

Pension Fund Structural Imbalance

The value of the TRS and ERS Pension Trust Funds grow through two means: contributions from members, agencies, and the state; and, returns on investments. The TRS Pension Trust Fund faced a troublesome financial forecast at the onset of the 86th Legislature, prompting lawmakers to enact significant reforms to the contribution structure through Senate Bill 12, which gradually increases state pension contributions from 7.5 percent to 8.25 percent of payroll in 2024; member contributions from 7.7 percent to 8.25 percent and public education employer contributions from 1.5 percent to 2 percent during the same period.¹⁰

Though considerably smaller than the TRS Pension Trust Fund, the ERS Pension Trust Fund faces similar structural challenges. In July 2020, the fund received \$114 million in contributions and paid out nearly \$221 million in monthly pension benefits – leaving a \$107 million difference to be covered by returns on investments.¹¹ However, experts report contributions to the fund and anticipated investment returns of 7 percent are unable to meet the long-term needs of beneficiaries and to keep the fund actuarially sound. The ERS Pension Trust Fund currently has an indefinite funding period and a depletion date of 2075.¹² The health of the ERS Pension Trust Fund is one of many factors credit rating agencies consider when evaluating the financial health of the state, and Texas has a vested interest in ensuring its beneficiaries are taken care of and its high credit rating stays intact.

Long-Term Agency Space Needs

The TRS Pension Trust Fund is the 6th largest pension fund in the United States and 13th largest in the world, serving more than 1.6 million members. The Investment Management Division's (IMD) 181 professional investment managers internally manage almost half of the Fund's assets. In 2008, TRS began a multi-year process of shifting some investments from external to internal management to reduce fees paid by the Fund. The shift expanded the number of employees in the IMD, and, given the limited available space in the existing TRS headquarters, the Division was moved into leased office space near downtown Austin. A second wave of shifting investments to internal management in 2018 again grew the number of employees in the Division, and, with the IMD's existing lease set to expire in 2021 and no space to expand in the same building, the agency signed a new lease beginning in 2021 for more space in the under-construction Indeed Tower in downtown Austin.¹³

News media reports about the planned relocation of state employees to brand new, Class A, leased office space in downtown Austin drew the attention of elected officials, including the Lt. Governor and members of the Senate Finance Committee. In response to concerns about the new lease, and with the unexpected availability of additional space at the current leased location, the TRS Board voted on February 20, 2020 to negotiate a lease renewal and expansion at IMD's current location and sublet the Indeed Tower office space when construction is complete. The agency reports the decision will result in savings of approximately \$9.1 million for the TRS Pension Trust Fund over the seven-year lease – assuming the Indeed Tower space can be sublet successfully. Moving forward, TRS is considering options for a new unified headquarters outside of downtown Austin and the potential sale or lease of the existing agency headquarters as an asset for the TRS Pension Trust Fund.¹⁴

Permanent School Fund Governance

The Texas Constitution requires the 15-member SBOE, with assistance from the Texas Education Agency (TEA), manage the financial assets of the PSF, which totaled \$34 billion in Fiscal Year 2018.¹⁵ Meanwhile, statute provides that the five-member SLB, with assistance from the General Land Office (GLO), manage the real assets of the PSF.¹⁶ Real assets of the Fund were valued at \$7.1 billion in Fiscal Year 2018, and include real estate and mineral interests.¹⁷

Funds managed by both the SBOE and SLB are distributed annually to the Available School Fund (ASF) to benefit current public school students. Historically, investment earnings from the SLB

were transferred to the SBOE before distribution to the ASF. In some instances, the SLB has opted to make separate, direct distributions to the ASF.¹⁸ While the investment of the PSF is undoubtedly yielding significant returns, the bifurcated management of the PSF's assets adds additional layers of decision making and operational cost. Disjointed management of the Fund could also be yielding less purchasing power when it comes to handling key expenses such as external management fees to brokers and investors. In an effort to reduce management fees and streamline governance, a bill was introduced during the 86th Legislative Session to unify management of the PSF under a structure similar to UTIMCO, however the bill did not pass.¹⁹ The study required by House Bill 4388 should offer additional analysis on management of the PSF as well as recommendations for further action.

Recommendations

The size of Texas' investment funds and the critical needs they support requires coordination and appropriate leveraging of resources to ensure the state is maximizing its investment returns, meeting its obligations, and preserving its financial standing both during typical market activity and during times of uncertainty. The following recommendations will bolster these efforts:

- Develop a plan to improve the financial forecast of the ERS Pension Trust Fund to ensure benefits for members and preserve the state's high credit rating.
- Consider reforms to statutory limits on TRS investments in real estate to increase transparency in any future real estate investments by the TRS Pension Trust Fund.
- Evaluate the efficiency of the current governance and investment structure of the PSF and consider alternative structures to reduce costs and streamline transfers to the ASF.
- Continue to monitor the impact of COVID-19 on markets and major state investment funds. Look for ways to further insulate the state from future global pandemics or similar events.

¹ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 2).

² S.B. 69, 86th Legislature, Regular Session, 2019.

³ Comptroller of Public Accounts Staff Presentation to Senate Finance Committee, February 25, 2020.

⁴ S.B.12, 86th Legislature, Regular Session, 2019.

⁵ Actuarial Impact of S.B.12, GRS Retirement Consulting, March 11, 2019.

⁶ H.B. 4388, 86th Legislature, Regular Session, 2019.

⁷ H.J.R. 151, 86th Legislature, Regular Session, 2019.

⁸ S.B. 608, 86th Legislature, Regular Session, 2019.

⁹ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 3). Legislative Budget Board Annual Report on Major State Investments, Fiscal Year 2017, https://www.lbb.state.tx.us/Documents/Publications/Policy_Report/4626_Major_State_Investment_Funds_FY_2017.pdf.

¹⁰ S.B. 12, 86th Legislature, Regular Session, 2019.

¹¹ Email from Employees Retirement System, July 20, 2020.

¹² Employees Retirement System, 2019 ERS Pension Valuation Summary, December 2019, <https://ers.texas.gov/About-ERS/Reports-and-Studies/ERS-Actuarial-Valuation-Reports/2019-ERS-Pension-Valuation-Summary-December-2019.pdf>

¹³ Teachers Retirement System Long Term Facilities Staff Presentation to Senate Finance Committee, February 25, 2020.

¹⁴ Id.

¹⁵ Texas Constitution, Art. VII, Sec. 5(f). Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 2).

¹⁶ Texas Natural Resources Code, Chapter 51, Subchapter I: Acquisition of Public School Land; Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pgs. 5 and 6).

¹⁷ Texas Education Agency Staff Presentation to Senate Finance Committee, February 25, 2020. General Land Office Staff Presentation to Senate Finance Committee, February 25, 2020.

¹⁸ State Board of Education Presentation to Senate Finance Committee, February 25, 2020 (pg. 6).

¹⁹ S.B. 2440, 86th Legislature, Regular Session, 2019.

Agency and Information Technology

Review current and prospective technology related purchases and upgrades in state agencies. Identify areas of overlap and make recommendations to eliminate duplication, improve efficiency, save costs, and improve performance. Review the state's major information technology infrastructure. Examine cybersecurity preparedness and reporting requirements for state and local governments and political subdivisions. Identify opportunities for expanded partnership and coordination between state and local officials. Compare state and local government prevention and response efforts with those of private businesses facing similar threats. Make recommendations for cost-effective ways to strengthen and protect consumer data and personal information against privacy breaches and ransomware threats.

Introduction and Background

Cyber attacks are a clear and present danger and a growing threat to all Texans. Every month, state agencies fend off billions of attempted cyber attacks. Hackers range from thieves to politically motivated assailants to nation states to individuals wanting to test their abilities -- all attempting to infiltrate state systems for various purposes, including ransom, identity and financial theft and to interfere with or disrupt elections and other governmental functions. Cyber attacks have resulted in significant costs to state and local governments, which is why Texas must continue to bolster and adapt its defenses to ever-changing threats. With aging information technology systems that are expensive to replace, Texas must be strategic in its investments and enact policies to ensure the state's protections are up to date. The COVID-19 pandemic, which unfolded during the writing of this report, has highlighted the need for adaptability and flexibility in the state's service delivery model through technology to make certain the state remains able to deliver needed services to Texans.

Cybersecurity and Information Technology Practices

The Department of Information Resources (DIR) and individual state agencies have shared responsibility for information technology acquisitions and protection. DIR supports state agencies by facilitating the purchase of hardware and software and helping guide cybersecurity practices; state agencies develop a plan suited to their more specific needs.

Data Center Services

Texas uses a data center services (DCS) model to deliver server, mainframe and print/mail infrastructure to state agencies. The DCS program supports 41 state agencies, institutions of higher education, and local entities with the latest hardware and software technology and/or security and disaster recovery services through a cost-sharing usage fee model. DIR manages the DCS program, and assesses a fee to customers by type and volume of service used. In the 2020-21 biennium, the DCS program is appropriated \$570 million, an increase of \$59.2 million from the previous biennium.¹ The increase in appropriations can be attributed to several large health and human services agencies shifting the purchase of licenses to the DCS program and ongoing expenses related to agency information technology projects.

Information Technology Contracting

As acquiring and implementing technological applications has grown increasingly sophisticated, Texas has implemented two distinct processes to aid agencies in contracting for assistance from

the private sector. The Contract Advisory Team (CAT) was created in 2001 to assist state agencies in improving contract management practices by reviewing the solicitation of contracts with a value of \$5 million or more. The CAT includes membership from the Comptroller of Public Accounts (CPA); DIR; Health and Human Services Commission (HHSC); Office of the Governor; and Texas Facilities Commission (TFC). The CAT reviews solicitations from a contract management and best practices perspective and provides recommendations, identifies risks and offers associated mitigation strategies.²

Wholly focused on information technology, the Quality Assurance Team (QAT) reviews and makes suggestions for all major information resources procurements over \$5 million and certain related amendments. Contracts 50 percent or more over budget or behind schedule require a cost-benefit analysis through the QAT to determine whether the project should be continued or cancelled.³ The QAT consists of staff from the CPA; Legislative Budget Board (LBB); State Auditor's Office (SAO); and DIR.⁴ From December 2018 to November 2019, the state's major technology project portfolio included 73 projects with an estimated total cost of \$1.43 billion.⁵

Organizational Structure

DIR plays an important role in both the acquisition of technology and related services and in safeguarding information technology systems used by the state. DIR facilitates the purchase of large volumes of hardware, software, and service purchases through the Cooperative Contracts Program. The program leverages the enormous purchasing power of the state to lower the cost of commodities for customers ranging from state agencies to local political subdivisions. In Fiscal Year 2019, the program provided an estimated cost avoidance of \$216 million to 4,900 unique customers.⁶

The Office of the Chief Information Security Officer (OCISO) at DIR offers leadership, policy direction, education, awareness, reporting and leadership of statewide initiatives. The OCISO also oversees the Network Security Operations Center at DIR, which provides monitoring, intrusion prevention services, alerting, incident response guidance and threat analysis for state agency customers. The Center also monitors agency compliance with state security standards and recommends corrective actions when weaknesses are identified.

The Texas Cybersecurity Council was established in 2013 to provide state and private sector leaders a forum to collaborate on cybersecurity matters. Led by a DIR-designated Cybersecurity Coordinator, the Council's objectives include increasing the number and quality of cybersecurity practitioners in the state and evaluating cybersecurity best practices for adoption within the private and public sector.⁷

Prioritization of Cybersecurity and Legacy Systems Projects

The 84th Regular Legislature (2015) tasked DIR with conducting a prioritization of agency cybersecurity and legacy modernization projects.⁸ The resulting Prioritization of Cybersecurity and Legacy System (PCLS) Report compiles information submitted by state agencies on existing and needed information technology infrastructure, modeling the impact of failure and probability of occurrence of failure.⁹ Though not all agencies submit qualified projects to DIR for inclusion in the report, it provides legislators with a useful summary of both agency needs and the urgency of those needs to meet technology, business, and cybersecurity standards. The 2018 PCLS report

included information on 67 projects from 27 agencies totaling an estimated funding request of \$482 million.

Texas Privacy Protection Advisory Council

The 86th Legislature (2019) established the Texas Privacy Protection Council comprised of members of the Senate, the House of Representatives, and appointees of the Governor, Lt. Governor, and Speaker of the House of Representatives to represent the private sector in areas such as consumer data analytics, virtual private networks and cloud data storage.¹⁰ The Council is tasked with studying laws governing privacy and protection of information linked to a specific individual, technological device, or household and make recommendations to the Legislature concerning privacy and protection of the information of Texans.

Protecting Data

The Texas Identity Theft Enforcement and Protection Act requires a person who conducts business in the state and owns or licenses computerized data that includes sensitive personal information to disclose any discovered breach to individuals whose personal information was or is reasonably believed to have been affected.¹¹ This disclosure must be made as quickly as possible. House Bill 4390, 86th Legislature, amended the act to require Texas residents be notified of a data security breach within 60 days of the determination that a breach has occurred. The amended act also requires that if a breach impacts more than 250 Texas residents, the business responsible for maintaining the information must provide notice of the incident to the Texas Attorney General within the same 60 day time period that governs notification of residents.¹²

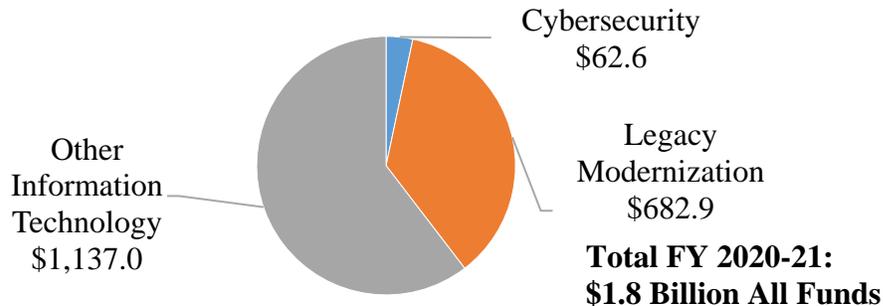
Investments

Information technology spending in the state budget is generally classified into three categories:

- Cybersecurity: the protection of computer systems from theft, disruption or misdirection of services;
- Legacy modernization: the replacement of obsolete or inefficient hardware or software;
- Other information technology projects: enhancements, process improvements, procurement of new systems and other information technology infrastructure upgrades.

Though projects are ultimately assigned into one category, many overlap in purpose. For example, replacing an outdated licensing system might be classified as legacy modernization but would likely offer enhanced cybersecurity to the agency and its customers. Recent state appropriations, by primary classification, are depicted in Figure 1 below.¹³

Figure 1
Cybersecurity, Legacy Modernization, and Other
Information Technology Appropriations
Fiscal Years 2020-21 (In Millions)



Recent Reforms

The Legislature has made significant changes to law and practices concerning cybersecurity, information technology, and related contracting. Major legislation passed in the 86th Regular Legislative Session is summarized below.

- Senate Bill 819 improves the effectiveness of statewide information technology by establishing a statewide Chief Data Officer at DIR and agency-level data management officers; authorizing DIR to establish a Digital Transformation Guide to assist agencies with digital initiatives and digitization efforts; and, requiring state agencies to consider developing new software applications as "cloud native."
- Senate Bill 64 bolsters cybersecurity in Texas by commissioning a study to incentivize cybersecurity higher education degree programs; bringing additional state agencies under DIR oversight; analyzing cybersecurity incidents across agencies for DIR review; improving electrical grid integrity by formalizing cybersecurity monitoring at the Public Utility Commission; and encouraging Information Security Officer services for small agencies and local governments.
- Senate Bill 65 focuses state procurement oversight on areas of highest risk; encourages information sharing between state agencies concerning vendor performance; cleans up and codifies existing guidelines for the QAT; and ensures contracts involving the most sensitive and confidential data are not transferred between vendors without QAT approval and legislative notification.
- Senate Bill 820 assists school districts with cybersecurity by requiring superintendents to designate a cybersecurity coordinator and requires coordinators to report to the state any attack or incident once discovered, and to notify parents if student data is impacted.
- Senate Bill 936 develops a framework for collaboration between the Public Utility Commission, electric utilities, and the Electric Reliability Council of Texas (ERCOT) to secure critical electric infrastructure from cyber threats.
- House Bill 1421 requires the Secretary of State to adopt rules defining best practices to reduce the risks related to electronic election data and systems and requires counties to notify the Secretary of State when data breaches occur.
- House Bill 2893 requires the State Board of Education (SBOE) to update the state technology curriculum to include coding, computer programming, computational

thinking, and cybersecurity for students in kindergarten through 8th grade. The bill also establishes a computer science strategic advisory committee to help increase computer science instruction and participation in public schools.

- House Bill 4390 strengthens current data breach notification laws and creates the Texas Privacy Protection Advisory Council to study data privacy laws. The bill requires DIR and the Cybersecurity Coordinator to certify training programs for state and local government employees. It also requires state and local government employees and state contractors to complete a certified program.

Recent Concerns and Challenges

The size and scope of Texas' information technology infrastructure and online presence make the state a significant target for cybercriminals. A sample of recently identified vulnerabilities and attacks, listed below, demonstrate the need for continued investment and vigilance to keep state systems and the data within fully operational and secure.

State Agency Incidents

In May 2020, in the midst of the COVID-19 pandemic and the accompanying virtual court proceedings, the Office of Court Administration (OCA), which serves as the information technology provider for the appellate courts and state judicial agencies, fell victim to a ransomware attack. OCA was able to successfully limit harm from the incident by quickly disabling affected websites and servers, and has been working with DIR and law enforcement to investigate the breach and perform necessary recovery. No ransom was paid. The same month, the Texas Department of Transportation (TxDOT) was hit by two ransomware incidents. These attacks also forced the technology administrators to shut down the systems to avoid further breaches.

Independent School District and Local Government Attacks

Several Texas school districts and local governments have been affected by hackers, including Jackson County, which was struck by a cyber attack in May 2019 which affected the computers and files (and backup files) of the county sheriff, district attorney, district clerk, and other key offices. The hackers responsible for the assault on Jackson County demanded ransom for the hostage data.¹⁴ Later the same year, the City of Carrollton lost some functionality after a cyber attack and ultimately received the assistance of the Texas Department of Emergency Management, Department of Public Safety, and DIR.¹⁵ Multiple independent school districts across Texas have also fallen victim to cyber attacks, several of which have cost millions of dollars in damage and/or ransom paid to restore functionality.¹⁶ Some cybercriminals are also sophisticated enough to attack multiple entities at once: in August 2019 a coordinated ransomware attack impacted over twenty Texas local governments, disabling and disrupting services. The State Operations Center (SOC) was activated and DIR was able to respond and assist with restoring business-critical services.

State Agency Policy Patchwork

As directed by statute, DIR has set a minimum baseline for cybersecurity standards for state agencies and institutions of higher education by administrative rule.¹⁷ First established in 2003, the rules are continually reviewed and updated to keep pace with technology changes, and detail the responsibilities of agency leadership, chief information security officers, and staff in maintaining cyber hygiene and responding to attacks. Each agency is also required by statute to develop and maintain an information security plan for protecting the security of the agency's

information.¹⁸ Agencies report their plans biennially, including a self-report of the agency's cyber maturity level according to 40 separate control standards outlined in the Texas Cybersecurity Framework.¹⁹ DIR aggregates the data from these self reports and produces a statewide cybersecurity maturity level for each control, compares agencies against one another, and identifies maturity trends. While DIR facilitates trainings and manages the Cybersecurity Framework, the day-to-day development and operation of information technology and cybersecurity is left to individual agencies. Depending on the size of the agency and the resources available, this arrangement can lead to a patchwork of policies and differing enforcement among state agencies which might be holding similarly sensitive data.

Consumer Data Protections Outside of Texas

Europe's General Data Protection Regulation (GDPR) took effect in May 2018. Any global business that sells to or has European Union (EU) customers is subject to the GDPR, which establishes rules regarding how companies treat the personal data of EU citizens, including those purchasing American products or services or living in the United States of America.

In 2018 the California Legislature passed the California Consumer Privacy Act (CCPA). The CCPA applies to any company that operates in California and either earns at least \$25 million in annual revenue; gathers data on more than 50,000 users; or, makes more than half its money from user data. For California residents, it creates personal rights over their data. The most significant categories are "the right to know" and "the right to say no," meaning users will be entitled to see what data companies have gathered about them, have that data deleted, and opt-out of those companies selling it to third parties. Also in 2018, Vermont began requiring data brokers to disclose to individuals which data is being collected and to permit them to opt-out of the collection.²⁰

Recommendations

Hackers continue to adapt to defenses. Texas must continually evaluate its technology, laws and, given limited resources, be strategic with its funds to continue bolstering the state's information technology and cyber defense capabilities. The following recommendations will help achieve this goal:

- Review laws to protect consumers' data held in the private sector.
- Identify and prioritize information technology needs with the greatest risk to personally identifiable information or other sensitive information.
- Promote greater agency participation in the survey used to create Prioritization of Cybersecurity and Legacy Systems Report at DIR.
- Evaluate ways to standardize data privacy and cyber policies across state government and encourage best practices.
- Review privacy laws enacted by other states to determine ways to strengthen consumer knowledge and power over how their personal information is used in the private sector.

- ¹ Legislative Budget Board Staff Presentation to Senate Finance Committee, scheduled for March 24, 2020.
- ² Comptroller of Public Accounts, Contract Advisory Team FAQ, <https://comptroller.texas.gov/purchasing/contracts/pod/faq.php>.
- ³ General Appropriations Act, 86th Legislature, Regular Session, Art. IX, Sec. 17.10 (c)(2).
- ⁴ Texas Government Code, Chapter 2054. General Appropriations Act, 86th Legislature, Regular Session, Art. IX, Sec. 9.01 and 9.02.
- ⁵ Department of Information Resources, Quality Assurance Team 2019 Annual Report, <https://qat.dir.texas.gov/2019QATAnnualReport.pdf>
- ⁶ Legislative Budget Board, Fiscal Size-up, 2020-21 Biennium (pg.136).
- ⁷ Department of Information Resources, Texas Cybersecurity Council, <https://dir.texas.gov/View-About-DIR/Information-Security/Pages/Content.aspx?id=133>
- ⁸ General Appropriations Act, 84th Legislature, Regular Session. Art. IX, Sec. 9.10
- ⁹ Department of Information Resources, Prioritization Of Cybersecurity and Legacy Modernization Projects Report to the Legislative Budget Board, October 1, 2018, <https://dir.texas.gov/View-Resources/Pages/Content.aspx?id=54>.
- ¹⁰ H.B. 4390, 86th Legislature, Regular Session, 2019.
- ¹¹ Texas Business and Commerce Code, Chapter 521.
- ¹² H.B. 4390, 86th Legislature, Regular Session, 2019.
- ¹³ Legislative Budget Board Staff Presentation to Senate Finance Committee, scheduled for March 24, 2020.
- ¹⁴ Victoria Advocate, "Hackers hold Jackson County computers for ransom for undisclosed amount of bitcoin", May 30, 2019, https://www.victoriaadvocate.com/counties/jackson/hackers-hold-jackson-county-computers-ransom-for-undisclosed-amount-of-bitcoin/article_046e6d1e-8316-11e9-97be-b70449000d28.html.
- ¹⁵ City of Carrollton, News & Updates, January 15, 2020, <https://www.cityofcarrollton.com/Home/Components/News/News/3800/27?date=20200122102859>.
- ¹⁶ San Antonio Express News, "Commentary: Cybersecurity breaches at Texas schools cost taxpayers millions", February 20, 2020, <https://www.expressnews.com/opinion/commentary/article/Commentary-Boosting-cybersecurity-risks-in-15071171.php>
- ¹⁷ Texas Administrative Code, Chapter 202.
- ¹⁸ Texas Government Code, Sec. 2054.133.
- ¹⁹ Department of Information Resources, Texas Cybersecurity Framework Control Objectives and Definitions, <https://pubext.dir.texas.gov/portal/internal/resources/DocumentLibrary/Texas%20Cybersecurity%20Framework%20Controls%20and%20Definitions.pdf>
- ²⁰ National Conference of State Legislatures, 2019 Consumer Data Privacy Legislation, January 3, 2020, <https://www.ncsl.org/research/telecommunications-and-information-technology/consumer-data-privacy.aspx#:~:text=Vermont%20in%202018%20enacted%20a,opt%20out%20of%20the%20collection>.

Spending Limit

Examine options and make recommendations for strengthening restrictions on appropriations established in Article VIII, Section 22, of the Texas Constitution, including related procedures defined in statute. Consider options for ensuring available revenues above the spending limit are reserved for tax relief.

Introduction and Background

The Texas Constitution includes four limitations on state appropriations. The limit on the growth of certain appropriations, or more commonly known as the spending limit, was approved by voters on November 7, 1978 as part of a tax relief package of seven constitutional amendments proposed to address rising property taxes and limit future government spending.¹

The Constitution specifies that "*in no biennium shall the rate of growth of appropriations from state tax revenue not dedicated by this constitution exceed the estimated rate of growth of the state's economy.*"² It directs the Legislature to pass laws to further define and implement this limitation.³

The Legislative Budget Board (LBB) is statutorily directed to meet on or before December 1 every year before a legislative session to adopt an estimated rate of growth in the Texas economy and the resulting spending limit for the next biennial budget.⁴ The Legislature may adopt a concurrent resolution with majority vote from each chamber to exceed the adopted spending limit.⁵ To date, the spending limit has only been extended once to provide property tax relief in 2007.⁶

The Senate Finance Committee met on December 3, 2019 to discuss its charge relating to the spending limit. The hearing video, presentations and witness logs are online at: <https://senate.texas.gov/cmte.php?c=540>

Elements of the Spending Limit

There are three elements of the spending limit:

Spending Limit Base

The first element is the base of the spending limit, which are appropriations subject to the limit. As delineated in the Constitution, only appropriations funded with *state tax revenue not dedicated by the constitution* are subject to the limit.⁷

Appropriations funded with tax revenue that do fall under the spending limit include:

- Sales tax (General Revenue portion);
- Motor vehicle sales tax (General Revenue portion);
- Franchise tax; and
- Cigarette and tobacco taxes.⁸

Appropriations funded with revenue that do not fall under the spending limit because they derive from tax revenue that is constitutionally dedicated or are funded with non-tax revenue include:

- Motor fuels taxes constitutionally dedicated for transportation (75 percent) and education (25 percent);

- 25 percent of oil and natural gas production taxes constitutionally dedicated for education;
- Sales and motor vehicle taxes constitutionally dedicated to transportation through the State Highway Fund;
- Fees, fines, and penalties;
- Federal revenue;
- Lottery proceeds; and
- Interest and investment income.⁹

The spending limit base may change over the biennium, based on adjustments to revenue and appropriated levels.¹⁰ Some tax changes may affect revenues used in state funding formulas, which could trigger changes to appropriated amounts and methods of finance. For example, pursuant to state law, the Foundation School Fund is appropriated to replace any lost revenue resulting from local property tax reductions.¹¹ Shifting the source of spending from local funds to General Revenue will create additional General Revenue appropriations subject to the spending limit.¹² This is viewed by some as discouraging tax relief. The Senate has previously proposed legislation aiming to incentivize tax relief by removing it from the funds subject to the spending limit.¹³

Reforming the Spending Limit Base

Many reforms have been offered to change the base of the spending limit. To simplify which funds are subject to the limit, there have been proposals to modify the base to mirror how funds are categorized in the state budget, i.e. General Revenue, General Revenue-Dedicated, Other Funds, Federal Funds, and All Funds. Some propose broadening the base by applying the limit to General Revenue and General Revenue-Dedicated funds, to as much as the entire All Funds budget including federal funds. Opponents contend that a broader base restricts state flexibility and that the spending limit should only apply to those funds within the Legislature's control.

Growth Rate

The second element of the spending limit, the rate of growth of the state's economy, has historically been measured using the rate of growth of Texans' *personal income*, as directed in statute.¹⁴ When considering what rate of growth to adopt prior to each legislative session, the LBB reviews estimates of the rate of growth of Texans' personal income from a variety of forecasting entities, including the Texas Comptroller, Moody's, and IHS Markit, among others.¹⁵

The LBB may adopt any forecasted growth rate and is not limited to any particular estimate.¹⁶ If the LBB does not adopt a spending limit, then the rate of growth of the state's economy will be considered to be zero, meaning there may not be any increase in overall state appropriations from state tax revenue not constitutionally dedicated in the next biennium.¹⁷

Reforming the Growth Rate

Over several sessions, legislative proposals have been offered to use measurements other than personal income in determining the rate of growth of the state's economy. One proposal calculates the rate of growth of the economy by compounding population and inflation growth rates, or in other words, population-times-inflation. Population-times-inflation growth estimates have been considered by the LBB for several sessions when adopting the rate of growth of the state's economy and the resulting spending limit. For the first time, rate of growth estimates using

population-times-inflation from forecasting entities were formally presented to the LBB as the Board considered adopting the rate of growth for the 2020-21 biennium.¹⁸ As a result, the LBB voted to adopt 9.89 percent as the estimated growth in the state's economy from the 2018-19 biennium to the 2020-21 biennium, which reflected estimates of population-times-inflation growth with additional room to account for state expenses due to Hurricane Harvey.¹⁹

Timeframe

The third element of the spending limit is the timeframe used to calculate the rate of growth of the state's economy, which is currently a *prospective* estimate of growth from the current biennium to the next.²⁰ For example, the LBB adopted a spending limit for the 2020-21 state budget using estimates for the rate of growth of the economy from the 2018-19 biennium to the 2020-21 biennium.²¹

Reforming the Spending Limit Timeframe

Instead of considering prospective estimates of growth in the state's economy, proponents of reform argue that an alternative timeframe serves to further limit state spending to the needs of the state – in which case current or past biennial growth may be used, or a combination or average of timeframes. Those in support of the current spending limit timeframe argue that past or current growth is not an indicator of future needs.

Recommendations

A strong spending limit is an essential tool to limit the growth in government spending and maintain fiscal responsibility. The Legislature should consider ways to strengthen the limit in a manner that truly reflects the growth of our economy while allowing Texas to meet the needs of its growing population, such as:

- Defining the rate of growth in the state's economy as population-times-inflation.
- Simplifying the spending limit base calculation.

¹ H.J.R. 1, 65th Legislature, 2nd Called Session, 1977.

² Texas Constitution, Art. VIII, Sec. 22.

³ *Id.*

⁴ Texas Government Code, Chapter 316, Subchapter A.

⁵ Texas Government Code, Chapter 316.008.

⁶ Senate Concurrent Resolution 20, 80th Legislature, Regular Session, 2007. Legislative Budget Board Staff Presentation to Senate Finance Committee, May 7, 2016 (pg. 12).

⁷ Texas Constitution, Art. VIII, Section 22.

⁸ Legislative Budget Board Staff Presentation to Senate Finance Committee, December 3, 2019 (pg. 4).

⁹ *Id.*

¹⁰ Legislative Budget Board Staff Presentation to Senate Finance Committee, May 17, 2016 (pg. 10).

¹¹ Texas Education Code, Chapter 48, Subchapter F, Section 48.251(c)(3).

¹² Legislative Budget Board Staff Presentation to Senate Finance Committee, May 17, 2016 (pg. 11).

¹³ S.J.R. 3, 84th Legislature, Regular Session, 2015.

¹⁴ Texas Government Code, Chapter 316.002(b).

¹⁵ See Technical Memorandum for Legislative Budget Board Meeting, November 16, 2018.

¹⁶ Legislative Budget Board Staff Presentation to Senate Finance Committee, May 17, 2016 (pg. 9).

¹⁷ Texas Government Code, Chapter 316.002(e).

¹⁸ See Legislative Budget Board Staff Memo to Board on Growth Rates of the State's Economy & Technical Memorandum for the Publication in the Texas Register, November 7, 2018. See Legislative Budget Board Staff Memo to Board Growth Rate Update, January 11, 2018.

¹⁹ Legislative Budget Board Meeting, January 11, 2018.

²⁰ Texas Government Code, Chapter 316.002(a)(1).

²¹ See Legislative Budget Board Staff Memo to Board on Growth Rates of the State's Economy & Technical Memorandum for the Publication in the Texas Register, November 7, 2018. See Legislative Budget Board Staff Memo to Board Growth Rate Update, January 11, 2018.

Higher Education Research Programs

Create a comprehensive list of research projects conducted by higher education institutions that are funded by state expenditures, including an inventory of funding streams and programs supporting identified research projects. Identify best practice methods to improve efficiency and coordination of research among university systems, eliminate duplication, and align research projects with the goals of the state.

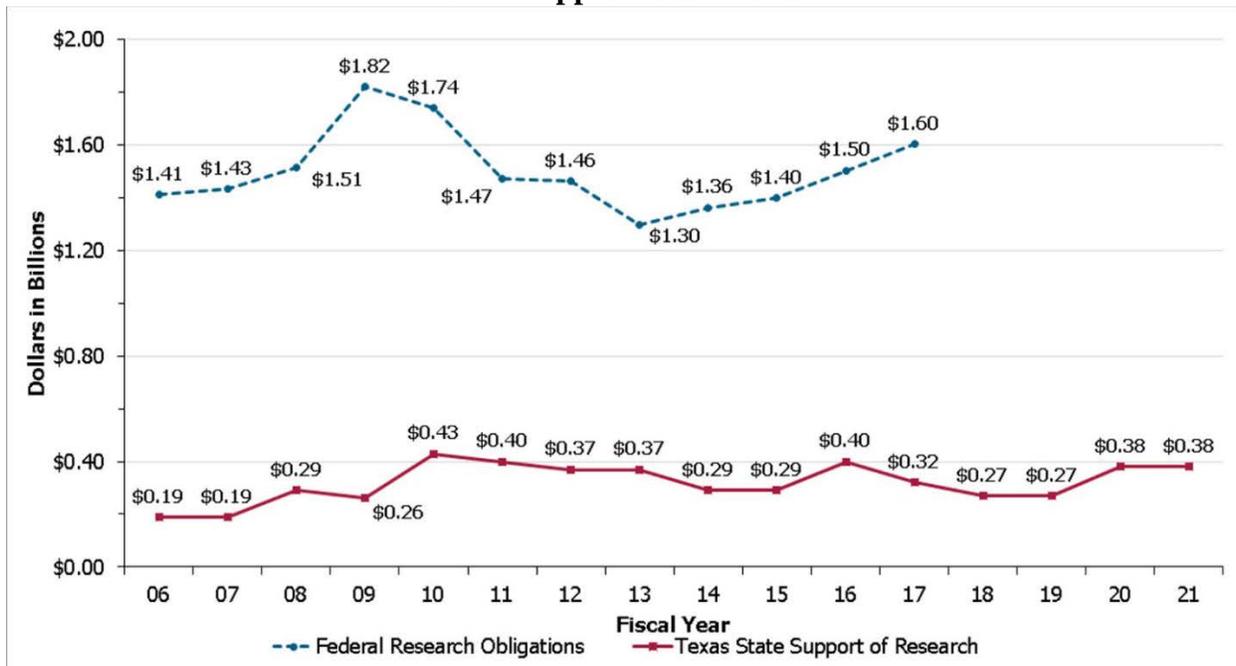
Introduction and Background

The General Appropriations Act provides significant funding for research across Texas' institutions of higher education.¹ The majority of state funding has historically been based on research expenditures as reported by the institutions. The Texas Higher Education Coordinating Board (THECB) provides guidance on the reporting of these expenditures and the Legislative Budget Board (LBB) is responsible for the calculations to allocate the state-funded research appropriations.

Dedicated state funding for research among higher education institutions was established in 2001 with the University Research Fund and the Texas Excellence Fund. Additional research funds have either replaced older funds or have been newly established since.

The two primary sources of funding for research come from the state and federal governments.² Figure 1 below shows federal and state research funding from Fiscal Year 2006 to Fiscal Year 2021. As shown, state funding for research has doubled over this time period.³

Figure 1
Federal Obligations for Science and Engineering Research and Development and Texas State Support of Research⁴



State Sources of Higher Education Research

There are many sources of higher education research funding included in the General Appropriations Act:

Texas Research University Fund (TRUF)

2020-21 Appropriation - \$147,075,794, General Revenue

The TRUF was created in 2015 and provides funds to the two Texas institutions classified as research universities (The University of Texas at Austin and Texas A&M University) to support research faculty. The allocation is based on a three-year average of total research expenditures.⁵

Core Research Support Fund (CRSF)

2020-21 Appropriation - \$117,111,410, General Revenue

The CRSF provides funds to institutions classified as an emerging research university. Currently, there are eight emerging research universities in Texas.⁶ The allocation is based 50 percent on a three-year average of total research expenditures and 50 percent on a three-year average of restricted research expenditures.

Texas Comprehensive Research Fund (TCRF)

2020-21 Appropriation - \$14,272,374, General Revenue

The TCRF was created in 2015 and provides funds to Texas public institutions that are neither research nor emerging research institutions to promote increased research capacity. The allocation is based on a three-year average of restricted research expenditures.⁷

Research Enhancement Formula

2020-21 Appropriation - \$84,545,434, General Revenue

The Research Enhancement Formula is provided to health-related institutions to fund medical and clinical research. Each institution receives \$1,412,500 in base funding and 1.18 percent of their research expenditures.⁸

Performance-Based Research Pilot Programs

2020-21 Appropriations - \$165,774,050, General Revenue

With the goal of improving outcomes and ensuring that research aligns with the goals of the state, last session the Legislature approved formula funding to The University of Texas Southwestern Medical Center, The University of Texas Health Science Center Houston, and The University of Texas Health Science Center San Antonio to enhance research capacity, assist in leveraging research grants and gifts, and support expansion of research operations. The formula includes a base match and a tiered performance incentive match in accordance with increased expenditures over the previous biennium.⁹

Texas Research Incentive Program (TRIP)

2020-21 Appropriation - \$35,000,000, General Revenue Trusteed Funds

TRIP was created in 2009 to provide emerging research universities matching funds to help leverage private gifts for enhanced research productivity and faculty recruitment.¹⁰

Autism Research Program

2020-21 Appropriation - \$7,800,000, General Revenue Trusteed Funds

The Texas Legislature established this funding in 2015 to provide grant support for autism research centers at both public and private institutions that provide evidence-based behavioral services and training.¹¹

Non-Formula Support for Research

2020-21 Appropriations - \$154,994,466, General Revenue, General Revenue-Dedicated, and General Revenue Trusteed Funds

Non-formula support items, formerly known as special items, are direct appropriations to institutions of higher education for specific programs, activities, centers or institutes.¹²

Available National Research University Fund (NRUF)

2020-21 Appropriation - \$50,225,534, Other Funds

The NRUF is a constitutionally authorized fund dedicated to assisting emerging research universities to attain status as a research, or Tier 1, university.¹³

Cancer Prevention & Research Institute of Texas (CPRIT)

Fiscal Year 2018 Awards - \$82,395,957, Other Funds

In 2007, voters approved Proposition 15 establishing CPRIT and authorizing \$3 billion in funding over the next 10 years to prevent and find cures and treatments for cancer. Last session the Legislature increased the authorized limit to \$6 billion with a new constitutional amendment approved by voters in 2019. Institutions, non-profit organizations, and private companies¹⁴ in Texas may apply for grants for cancer research, therapies, cancer prevention and control programs.

Governor's University Research Initiative (GURI)

Fiscal Year 2020 Awards - \$5,330,000, General Revenue - Dedicated

The Legislature established the Emerging Technology Fund (ETF) in 2005. It was intended to be used for research and development activities in emerging technology industries, and increase higher education applied technology research capabilities.¹⁵ The ETF was set to expire in 2015. Using the remaining balance, the Legislature repurposed those funds for GURI – a program designed to recruit researchers with Nobel laureates to Texas.

Texas Higher Education Research Projects

To satisfy the interim charge to inventory all research projects occurring across higher education, the Senate Finance Committee asked the staff of the LBB to survey all public institutions on higher education research projects during the 2020-21 biennium with expenditures in excess of \$1 million from state appropriations over the life of the project. The institutions reported a total of 451 research projects, with 63 percent of these being conducted at the health-related institutions, 31 percent at general academic institutions, and seven percent at four of the Texas A&M System Agencies. It is important to note that many of these projects are funded through a combination of university, federal and state funding. The list of projects only includes those that have utilized state funding. A list of the institutions, the number of research projects and funding amounts can be found in Appendix A at the end of this report. Any additional information regarding specific research projects can be made available upon request to the LBB.

The THECB does not oversee or direct institutions on how they should be conducting their research activities. On a limited basis, THECB facilitates institution-driven collaboration and coordination of certain research initiatives.¹⁶ However, this is not a wide-spread practice.

COVID-19 Related Research

In March of 2020, the COVID-19 pandemic reached Texas. Texas universities were at the foreground of research. The institutions were also asked in the survey to report all research projects related to COVID-19, regardless of size and funding source. The institutions reported on 339 projects, with 52 percent occurring at health-related institutions, 43 percent at general academic institutions, and five percent at three of the Texas A&M System Agencies. Examples of COVID-19 related research conducted by Texas institutions of higher education include vaccine development, manufacturing of viral transport media for COVID-19 testing, and COVID-19 modeling and forecasting. A list of the institutions and the number of COVID-related research projects can be found in Appendix B at the end of this report. Any additional information regarding specific research projects can be made available upon request to the LBB.

Recent Legislative Action

In 2019, the 86th Legislature took action on the following issues:

- Renewed CPRIT – House Joint Resolution 12 amended the Texas Constitution to increase the maximum general obligation bond amount from \$3 million to \$6 million.¹⁷ Texas voters passed the amendments on November 5, 2019.
- Pilot Program: Mission Specific Support – Performance Based Research Operations Formula – created new formulas at The University of Texas Southwestern Medical Center, The University of Texas Health Science Center Houston, and The University of Texas Health Science Center San Antonio.¹⁸
- Senate Bill 11 created the Texas Child Mental Health Care Consortium (TCMHCC) to leverage the expertise and capacity of Texas’ health-related institutions to address child and adolescent mental health challenges.¹⁹ As part of the Consortium’s efforts, 13 Texas health-related institutions are collaborating on selected multi-institutional research projects to advance mental healthcare for children and adolescents. This marks a new way of funding higher education research to further the Legislature’s goal of improving the state’s mental health system while maximizing state dollars.

Recommendations

Research plays a vital role in the advancement of our society. The 87th Legislature is headed into a difficult budget session given the downturn in the economy due to the pandemic. It is important, now more than ever, that we coordinate research resources across the institutions and avoid duplication – to make sure our state dollars stretch. Recommendations to further this goal include:

- Consider whether pilot programs for mission-specific formulas have met the Legislature’s expectation that the desired outcomes are produced.
- Re-evaluate the multiple funding sources for research to determine whether sources can be consolidated or streamlined.

- Consider ways to facilitate improved coordination of research among institutions to eliminate duplications, improve outcomes and ensure that research is aligned with goals of the state.

¹ General Appropriations Act, 86th Legislature, Regular Session, 2019.

² Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 1.

³ Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 2. Email sent from Legislative Budget Board on May 28, 2020 on research funding streams.

⁴ Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 2, Figure 1.

⁵ Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 3.

⁶ Legislative Budget Board Legislative Primer, *Financing Public Higher Education in Texas*, 2019, Pg. 33.

⁷ Legislative Budget Board Legislative Primer, *Financing Public Higher Education in Texas*, 2019, Pg. 32.

⁸ Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 4.

⁹ Id.

¹⁰ Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 3.

¹¹ Texas Higher Education Coordinating Board Report *Research Funding in Texas Overview FY2020*, Pg. 4.

¹² Id.

¹³ Legislative Budget Board Legislative Primer, *Financing Public Higher Education in Texas*, 2019, Pg. 30.

¹⁴ Cancer Prevention & Research Institute of Texas, Grants Funded, <http://cprit.state.tx.us/grants-funded>.

¹⁵ H.B. 1765, 79th Legislature, Regular Session, 2005.

¹⁶ Email from Texas Higher Education Coordinating Board, June 29, 2020.

¹⁷ H.J.R. 12, 86th Legislature, Regular Session, 2005. .

¹⁸ General Appropriations Act, 86th Legislature, Regular Session, 2019, (pg. III-268, III-269, and III-270).

¹⁹ S.B. 11, 86th Legislature, Regular Session, 2019.

Business Personal Property Tax

Study the economic dynamics of the current business personal property tax. Consider the economic and fiscal effects of increased exemptions to the business personal property tax, versus its elimination. Following such study, make recommended changes to law.

Introduction and Background

With a sensible regulatory and tax environment, Texas remains one of the most desirable places to do business. To remain competitive, it is important for the Legislature to continually review challenges facing Texas businesses – and one such challenge is the business personal property tax. The Senate Finance Committee met on December 3, 2019 to discuss its interim charge relating to the business personal property tax. The hearing video, presentations and witness logs are online at: <https://senate.texas.gov/cmte.php?c=540>.

Business Personal Property Tax in Texas

In 1981, Texas began taxing business tangible personal property¹, which is defined as any property used for business purposes "that can be seen, weighed, measured, felt, or otherwise perceived by the senses."² In 1995, the Legislature exempted property with a taxable value of less than \$500.³ That exemption has remained in place despite inflation.

Texas is one of 43 states that tax business personal property.⁴ Further, Texas is one of only nine states that fully tax business inventory, along with Oklahoma, Louisiana, Mississippi, Arkansas, Kentucky, West Virginia, Maryland, and Virginia.⁵ Five states partially tax, and 36 states generally exempt, inventories.⁶

Industries that rely heavily on inventory have identified the business personal property tax as a significant burden. In addition, small business owners report difficulties in compliance, given the complexities involved in reporting and assigning values to their assets. Texas law requires business owners to report business personal property to the appraisal district for assessment and taxation.⁷ This process can be costly for both taxpayers and the appraisal district.

The Committee received compelling data suggesting that the business personal property tax should be revisited, but solutions are not cheap. Further, property tax exemptions require a constitutional amendment, subject to a two thirds vote by the Legislature and voter approval.⁸ Some estimate the cost to the state of fully eliminating the business personal property tax could be over \$6 billion per biennium.⁹ Alternatives to fully eliminating the tax are exempting inventory, or the more scalable option of increasing the exemption.

Recommendations

Texas remains a national leader when it comes to establishing a hospitable environment in which businesses can succeed. The Legislature should evaluate the following ways to strengthen Texas' competitive advantage:

- Consider adjusting the current \$500 exemption to account for inflation and the cost of administering the tax.
- Streamline the process for compliance.
- Reduce reliance on the business personal property tax as the state budget allows.

¹ Texas Tax Code, Sec. 11.01(c).

² Texas Tax Code, Sec. 1.04(4).

³ H. B. 366, 74th Legislature, Regular Session, 1995.

⁴ Tax Foundation, “States Should Continue to Reform Taxes on Tangible Personal Property,” August 2019, <https://taxfoundation.org/states-moving-away-taxes-tangible-personal-property/>

⁵ Tax Foundation, “Does Your State Tax Business Inventory?,” <https://taxfoundation.org/business-tangible-personal-property-tax-business-inventory-tax-2020/>, accessed June 30, 2020.

⁶ Id.

⁷ Texas Tax Code. Sec 22.01(a).

⁸ Texas Constitution, Art. 8. Texas Constitution, Art. 17.

⁹ Texas Taxpayers and Research Association staff email to Senate Finance Committee, June 2020.

Natural Disaster Funding

Review federal, state, and local eligibility and receipt of disaster funds from Community Development Block Grants – Disaster Relief and the Federal Emergency Management Agency. Identify any barriers to the effective utilization of those funds and recommend any changes to statute, rule, or practice to promote the efficient deployment of those funds and expedite recovery by affected citizens, businesses, and communities.

Introduction and Background

Hurricane Harvey made landfall in Texas as a Category Four Hurricane on August 25, 2017 with wind speeds of over 130 miles per hour.¹ The storm resulted in over 60 inches of total rainfall, damaging over 300 miles of coastline and 41,500 square miles of land mass, impacting eight million Texans and causing more than \$125 billion in damage.² It is the most expensive natural disaster in American history. With Hurricane Harvey as a major budget driver, the Senate Finance Committee held six hearings leading up to the 86th Regular Session to determine the economic and financial impact of the storm.

In response, the 86th Legislature made unprecedented investments in the effort to recover, rebuild and prepare for the next disaster. Combined with federal aid, more than \$35.3 billion was designated to repair roads, bridges and buildings damaged by the storm; provide food, housing and other assistance for displaced residents; upgrade critical infrastructure; and cover other state and local costs.³

The Senate Finance Committee met December 3, 2019 to discuss its interim charge relating to natural disaster funding. The hearing video, presentations and witness logs are online at: <https://senate.texas.gov/cmte.php?c=540>.

Federal Funding

Texas received significant assistance from the federal government, with \$15.6 billion committed to the State of Texas.⁴ Additional funds were provided directly to individuals, businesses and local entities, including \$8.8 billion in flood claims from the National Flood Insurance Program, \$3.4 billion in Small Business Administration loans and \$1.6 billion in individual assistance.⁵ This report focuses on funding that flowed through the state budget, primarily from two federal agencies, the Federal Emergency Management Agency (FEMA) and the United States Department of Housing and Urban Development (HUD).

Federal Emergency Management Agency Resources

At the state level, TDEM oversees all FEMA assistance through a variety of different federal programs, including: Individual Assistance (IA), Public Assistance (PA), and the Hazard Mitigation Grant Program (HMGP). Texas received an estimated \$1.6 billion for IA⁶, to provide individual housing assistance, crisis counseling, case management, unemployment assistance, legal services, and benefits through the Supplemental Nutrition Assistance Program.⁷ The IA program requires a 25 percent non-federal match from a state or local government or other eligible entity, estimated at \$110 million.⁸ Texas also received an estimated \$5.2 billion for PA⁹, which includes programs for debris removal; emergency protective measures; and the repair or replacement of roads and bridges, water control facilities, buildings and equipment, utilities, parks,

and other facilities.¹⁰ PA programs require a 10 percent non-federal match from a governmental entity or certain qualifying non-profit organizations, estimated to be \$500 million.¹¹ Through the HMGP, which provides assistance to local governments to prevent or reduce long-term risk to life and property from natural disasters, Texas is estimated to receive \$1.1 billion.¹² HMGP requires a 25 percent non-federal match estimated at \$275 million.¹³

U.S. Department of Housing and Urban Development Resources

The Office of the Governor designated the General Land Office (GLO) to serve as the agency of record for all HUD funding, including Community Development Block Grants for Disaster Recovery (CDBG-DR), which can be used for a broad range of long-term recovery activities, including home construction, repair reimbursement, multifamily developments, infrastructure, planning, economic development, and buyouts.¹⁴

In December of 2017, in response to Hurricane Harvey, Texas received an award of \$57.8 million in CDBG-DR funding from Fiscal Year 2017 Continuing Resolution appropriations.¹⁵ Subsequently, CDBG-DR funds were provided through two additional allocations. The first allocation in February 2018 totaled \$5.024 billion for housing and economic revitalization in the most distressed areas¹⁶ The second allocation in August 2018 totaled \$5.035 billion for hazard mitigation projects and for Texas declared disasters in 2015 and 2016, however the GLO does not yet have access to the hazard mitigation portion totaling \$4.38 billion.¹⁷ To date, the federal commitment of CDBG-DR funding to Texas totals \$10.1 billion.

In June 2019, HUD approved the State of Texas Action Plan Amendment #3, bringing the total amount of CDBG-DR funding *received* to \$5.7 billion for long-term recovery efforts in response to impacts made by Hurricane Harvey.¹⁸

The City of Houston and Harris County leaders pressed Congress to send federal funds directly to those jurisdictions and to bypass the state. Instead, the federal government directed that, out of the \$5.7 billion received by the GLO, \$1.3 billion pass through to Houston and another \$1.2 billion go to Harris County.¹⁹ The remaining funds are administered by the GLO to assist the other 48 counties impacted along the Gulf Coast.²⁰

Challenges with the Harvey Response

Participation from several state agencies is required to manage response, recovery, and mitigation efforts. Along with the Office of the Governor, TDEM coordinated the state's disaster response – which marshalled resources across state government with over 70 agencies reporting costs associated with the storm. The GLO developed the state action plan relating to federal HUD funds. The Legislative Budget Board (LBB) and the Comptroller of Public Accounts tracked expenditures and receipts relating to Harvey.

Because the Legislature was not in session at the time of the hurricane, agencies used existing appropriations and transfers authorized by Article IX of the General Appropriations Act to meet cash flow needs. Those transfers totaled more than \$219 million.²¹ Additionally, the Office of the Governor provided \$89.6 million in short-term loans to state agencies.²² Agencies reported their Harvey costs to the LBB, which produced monthly reports for the Legislature on actual and estimated expenditures leading up to the session. This Committee worked to ensure that federal

funds were exhausted first, that duplications were avoided, and that General Revenue was treated as a payor of last resort. This proved challenging during the appropriations process as it became clear that not all agencies were seeking out federal reimbursement, citing the cumbersome FEMA administrative process and the potential delay in receiving federal funds. It was also apparent that the definition of a “Hurricane Harvey cost” was subjective and varied by agency.

During the February 2020 hearing, members and agency staff expressed frustration over the disparate protocols and policies across federal agencies to seek to reimbursements. As an example, GLO staff testified that a FEMA inspector may require a house to be elevated one foot above flood level while a HUD inspector requires that same property to be elevated by two feet.²³ Further, the bifurcation of federal funding across state agencies often left individuals and communities confused about where to go for the various types of federal assistance.

Concerns were also raised over HUD dollars passed through the GLO to the City of Houston and Harris County. At the February 2020 hearing, GLO staff testified that the agency had rebuilt or rehabilitated 675 homes with 810 under construction and another 850 approved on behalf of the 48 impacted counties outside of Harris County.²⁴ By that same hearing date, Houston had completed 21 housing projects at a cost of \$458,000 out of the \$1.3 billion the city received.²⁵ Houston had submitted 217 applications to the GLO and received approval for 154.²⁶ Harris County had expended \$1.5 million out of its \$1.2 billion, but no residential repair projects had been completed. Harris County submitted 268 applications and received approval for 127.²⁷ Because the funds for Houston and Harris County flow through the GLO, the state has oversight responsibility and will be held responsible if a federal audit determines funding should be reallocated or rescinded.

In April 2020, the GLO proposed a partnership with Houston and Harris County to accelerate the Houston Homeowner Assistance Program and the Harris County Homeowner Program. Houston did not accept the proposal. As a result, the GLO implemented a concurrent state-run housing repair program serving Houston residents. Harris County agreed to partner with the GLO, and efforts are being made to scale up repair activities. Four months after the hearing, Houston had completed 59 repair projects, but Harris County had yet to complete its first.²⁸

Another challenge faced by state lawmakers: the time it takes for federal reimbursements to be processed. Even as Harvey recovery efforts were under way, the state was still awaiting reimbursement from Hurricanes Ike and Dolly. TDEM testified that in 2019 the agency closed 4,742 previous projects – 2,000 relating to Harvey.²⁹ That included \$873 million worth of disaster projects pre-dating Harvey – spanning 16 major disasters dating back to 2007 and involving 953 sub-applicants, 357 cities, and 146 counties.³⁰ Because it will take years for certain Harvey-related projects to be approved by FEMA, the state will need to account for these dollars over the next several budget cycles.

Actions Taken by the 86th Legislature

During the 86th Regular Session, the Texas Legislature made substantial investments to ensure Texas could successfully recover from Hurricane Harvey and be better prepared for the next disaster. House Bill (HB) 1, the General Appropriations Act, and Senate Bill (SB) 500, the Supplemental Appropriations Act, appropriated over \$3.6 billion in natural disaster funding.³¹ HB 1 included \$3.5 million for first-responder strategic mapping; \$1.5 million for a full-time disaster response team at the GLO; and \$947,000 for mobile air monitoring units at the Texas Commission on Environmental Quality.³²

The vast majority of natural disaster funding appropriated by the Legislature was included in SB 500. Figure 1 below shows SB 500 appropriations for Hurricane Harvey listed by purpose.

Figure 1
SB 500 Hurricane Harvey Funding³³

Purpose	Administering Agency	SB 500 (millions)
Response reimbursement and repair funding	Department of Public Safety, GLO, Health and Human Services Commission, Texas A&M Forest Service, Texas Parks and Wildlife Department, Texas Workforce Commission	\$ 295
FEMA PA non-federal match	Texas Water Development Board / TDEM	\$365
FEMA HMGP non-federal match	Texas Water Development Board / TDEM	\$273
State Flood Plan implementation	Texas Water Development Board	\$47
Flood Infrastructure Projects	Texas Water Development Board	\$793
U.S Army Corps of Engineers – Coastal Barrier	GLO	\$200
School district compensation, relief, and property tax revenue losses in 2018-19	Texas Education Agency	\$ 807
School district property value loss in 2020-21	Texas Education Agency	\$636
Facilities damage recovery	Institutions of Higher Education	\$75
Repair and improvement of earthen dams	Texas Soil and Water Conservation Board	\$150
Total		\$3,641

Senate Bill 7

Through the passage of Senate Bill 7, the 86th Legislature created the Texas Infrastructure Resiliency Fund (TIRF) and deposited \$685.0 million for long-term recovery initiatives, including the implementation of a statewide flood plan directed by Senate Bill 8, statewide flood infrastructure projects and for the purpose of financing projects related to Hurricane Harvey through TDEM.³⁴ The TIRF is administered by the Texas Water Development Board (TWDB) and is overseen by the TIRF Advisory Board, consisting of the SWIFT advisory committee with the TDEM Director as a non-voting member.³⁵

The Legislature also created the Flood Infrastructure Fund (FIF), supported by \$793 million for geo-mapping, updating the State Flood Plan and flood mitigation projects.³⁶ To eliminate confusion over which agencies oversee the various sources of funding, TWDB launched a web portal at texasfloodclearinghouse.org to serve as a quick resource for all flood mitigation funding

available to communities in Texas. The Flood Infrastructure Clearinghouse Committee (FLICC) was established to ensure that applications are cross-checked across agencies to avoid duplications.

Other Initiatives by the 86th Legislature

The Legislature appropriated \$200 million to the GLO toward projects identified in the “Sabine Pass to Galveston Bay, Texas Coastal Storm Risk Management and Ecosystem Restoration” report published by the United States Army Corps of Engineers in May 2017.³⁷ These funds may be accessed by local project sponsors and counted towards the non-federal match requirement – estimated at roughly \$1.2 billion and due to the federal government 30 years upon completion of the projects, with interest.³⁸ Senate Bill 2212 requires local sponsors to submit a report the GLO and the Legislature detailing expenditures of state funds relating to these projects and the extent to which additional appropriations, or funds from other sources, are needed for the next biennium.

Under legislation approved by the Legislature and signed into law, TDEM is no longer a division of the Department of Public Safety and now functions as a stand-alone agency attached to the Texas A&M University System.³⁹ As a result of multiple bills last session, TDEM has been directed to produce 41 reports to the Legislature and provide quarterly reports via meetings with legislative offices, agency staff and stakeholders.

Assistance to Local Communities

The responsibility for covering the non-federal share of FEMA matching dollars has historically been the responsibility of local governments. The state made exceptions and covered the non-federal share of costs associated with the 2011 Bastrop Wildfires and the 2013 West, Texas fertilizer plant explosion. Because Harvey devastated entire communities along the Gulf Coast, the Legislature made the decision to use state dollars to cover most of the non-federal share for local entities. The state is covering 75 percent of the non-federal share with local governments covering the remaining 25 percent.⁴⁰ Throughout the appropriations process, legislators stressed that this was an extraordinary step that should not be assumed to be the new status quo.

Other state support to local governments included a \$50 million grant to the City of Houston from the Governor’s Trusted Programs.⁴¹

Conclusion

The Legislature responded to Hurricane Harvey with unprecedented investments to help rebuild the Gulf Coast and better prepare for future disasters. The sheer size of these investments demand strong oversight to ensure that these investments are being used for their intended purpose and that federal reimbursements are being tracked and reported. With COVID-19 adding billions in unforeseen costs to state agencies and the associated economic decline resulting in major losses in state revenue, it is vital that the Legislature receive a full accounting of these natural disaster expenditures.

The Harvey response re-affirmed that Texas maintains one of the most highly-developed and tested disaster response mechanisms in the country – and the processes established to track Harvey costs and federal aid are being replicated and improved upon as Texas confronts COVID-19. Lessons learned during Harvey reveal a need for improved dialogue with our federal and local partners to ensure that state, federal and local resources are coordinated. It also brought to light inconsistencies in the approach to federal reimbursements across agencies and reporting agency costs.

Recommendations

- Work with the federal government to streamline federal disaster aid and reduce confusion among the public about where to seek assistance.
- Discourage federal pass-throughs to cities and counties with the state bearing financial responsibility without strengthened tools to prevent misuse of those funds.
- Continue to provide strong oversight of disaster and infrastructure funding approved last session to avoid duplication of effort, fraud, and waste.
- Require agencies to work with TDEM to seek federal aid for FEMA-reimbursable costs and work with the LBB to streamline agency cost reporting for future disasters.

¹ General Land Office, “State of Texas Plan for Disaster Recovery: Amendment 3,” approved June 13, 2019.

² Id. Texas Comptroller of Public Accounts, Fiscal Notes, “A Storm to Remember: Hurricane Harvey and the Texas Economy,” accessed July 2, 2020.

³ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 5).

⁴ See Harvey-related 2018 Estimated Expenditure Report, available upon request. *Note:* Federal commitment is subject to rescissions by Congress or reallocation of funds by the federal administrative agency.

⁵ Texas Division of Emergency Management Presentation to the Senate Finance Committee, February 25, 2020. Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 5). Federal Emergency Management Administration, Texas Hurricane Harvey Recovery Guide, August 2018.

⁶ Legislative Budget Board Staff Presentation to Senate Finance Committee, “Natural Disaster Response Funding,” February 2020 (pg. 5).

⁷ See Federal Emergency Management Agency, “Individual Assistance Program and Policy Guide,” March 2019.

⁸ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 5).

⁹ Id.

¹⁰ See Federal Emergency Management Agency, “Public Assistance Program and Policy Guide,” June 1, 2020.

¹¹ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020, (pg. 5).

¹² Id. Federal Emergency Management Agency <https://www.fema.gov/hazard-mitigation-grant-program>, accessed July 2, 2020.

¹³ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (page 5).

¹⁴ General Land Office Staff Presentation to Senate Finance Committee, February 25, 2020.

¹⁵ Federal Register, Vol. 82, No. 247, December 27, 2017.

¹⁶ Federal Register, Vol. 83, No. 28, February 9, 2018.

¹⁷ Federal Register, Vol. 83, No. 157, August 14, 2018. Federal Register, Vol. 84, No. 169, August 30, 2019.

¹⁸ General Land Office, “State of Texas Plan for Disaster Recovery: Amendment 3,” approved June 13, 2019.

¹⁹ See Summary of Community Development Block Grant in the State of Texas (Legislative Budget Board document, available upon request).

²⁰ Id.

²¹ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 4).

²² Id.

²³ General Land Office Staff Presentation to Senate Finance Committee, February 25, 2020.

²⁴ Id.

²⁵ Id.

²⁶ Id.

²⁷ Id.

²⁸ Email from General Land Office to Senate Finance Committee, July 1, 2020.

²⁹ General Land Office Staff Presentation to Senate Finance Committee, February 25, 2020.

³⁰ Id.

³¹ General Appropriations Act, 86th Legislature, Regular Session, 2019. S.B. 500, 86th Legislature, Regular Session, 2019.

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- ³² General Appropriations Act, 86th Legislature, Regular Session, 2019.
- ³³ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020, (pg. 6).
- ³⁴ S.B. 500, 86th Legislature, Regular Session, 2019.
- ³⁵ S.B. 7, 86th Legislature, Regular Session, 2019.
- ³⁶ Legislative Budget Board Staff Presentation to Senate Finance Committee, February 25, 2020 (pg. 7).
- ³⁷ S.B. 500, 86th Legislature, Regular Session, 2019. “Sabine Pass to Galveston Bay, Texas Coastal Storm Risk Management and Ecosystem Restoration, Final Integrated Feasibility Report – Environmental Impact Statement,” U.S. Army Corps of Engineers, Galveston District, Southwestern Division, May 2017.
- ³⁸ U.S. Army Corps of Engineers Letter, December 2017,
https://planning.erdc.dren.mil/toolbox/library/ChiefReports/SabinePasstoGalvestonTX_2017.pdf.
- ³⁹ H.B. 2794, 86th Legislature, Regular Session, 2019.
- ⁴⁰ S.B. 7, 86th Legislature, Regular Session, 2019.
- ⁴¹ Governor’s 2018 Report to the People of Texas, (pg.35).

Research Projects Data

Pursuant to the Senate Finance Committee's request, this page contains a list of research projects that have received more than \$1 million in state appropriations over the lifetime of the project as reported by institution. Note: the volume and value of projects is based on self-reported data from institution and in some cases includes research infrastructure and talent development investments in addition to research activities.

Agency Number	Institution	Type of Institution	Number of Projects	FY 2020 (Actual)	FY 2021 (Budgeted)	Biennium Total
729	UT Southwestern	HRI	186	\$ 88,366,801	\$ 83,471,667	\$ 171,838,468
733	Texas Tech University	GAI	36	\$ 36,058,848	\$ 37,256,767	\$ 73,315,615
711	TAMU	GAI	30	\$ 22,471,488	\$ 44,952,854	\$ 67,424,341
556	Texas A&M Agrilife Research	TAMUS Agency	21	\$ 39,619,635	\$ 39,619,635	\$ 79,239,271
723	UTMB	HRI	19	\$ 9,489,947	\$ 9,189,125	\$ 18,679,072
745	UT HSC San Antonio	HRI	16	\$ 44,201,431	\$ 50,099,838	\$ 94,301,269
730	University of Houston	GAI	15	\$ 15,740,230	\$ 16,040,888	\$ 31,781,118
744	UT HSC Houston	HRI	13	\$ 37,731,673	\$ 37,815,119	\$ 75,546,792
739	TTU HSC	HRI	12	\$ 6,121,646	\$ 4,819,158	\$ 10,940,804
721	UT Austin	GAI	12	\$ 61,414,038	\$ 52,183,413	\$ 113,597,451
738	UT Dallas	GAI	11	\$ 26,900,337	\$ 26,752,252	\$ 53,652,589
724	UTEP	GAI	11	\$ 9,478,310	\$ 9,546,611	\$ 19,024,921
774	TTU HSC El Paso	HRI	9	\$ 4,196,657	\$ 6,147,919	\$ 10,344,576
763	UNT HSC	HRI	8	\$ 9,958,029	\$ 20,648,237	\$ 30,606,265
506	UT MD Anderson	HRI	7	\$ 23,339,979	\$ 23,339,980	\$ 46,679,959
709	TAMU HSC	HRI	6	\$ 16,884,611	\$ 16,250,000	\$ 33,134,611
752	UNT	GAI	6	\$ 5,772,132	\$ 5,800,544	\$ 11,572,676
712	Texas A&M Engineering Experiment Station	TAMUS Agency	5	\$ 54,738,040	\$ 4,738,039	\$ 59,476,079
714	UT Arlington	GAI	5	\$ 9,096,843	\$ 10,216,656	\$ 19,313,499
715	PVAMU	GAI	3	\$ 4,229,274	\$ 3,943,051	\$ 8,172,325
732	TAMU-K	GAI	3	\$ 1,201,845	\$ 1,201,845	\$ 2,403,690
727	Texas Transportation Institute	TAMUS Agency	3	\$ 2,736,000	\$ 2,736,000	\$ 5,472,000
785	UT HSC Tyler	HRI	3	\$ 2,675,554	\$ 2,495,554	\$ 5,171,108
748	UT RGV School of Medicine	HRI	3	\$ 7,859,794	\$ 8,016,322	\$ 15,876,116
743	UT San Antonio	GAI	3	\$ 2,130,727	\$ 1,625,000	\$ 3,755,727
760	TAMU- CC	GAI	2	\$ 5,680,120	\$ 3,325,000	\$ 9,005,120
713	TAMU-Tarleton	GAI	1	\$ 494,928	\$ 445,435	\$ 940,363
576	Texas A&M Forest Service	TAMUS Agency	1	\$ 1,389,558	\$ 1,485,341	\$ 2,874,899
757	WTAMU	GAI	1	\$ 369,704	\$ 432,844	\$ 802,548
773	Angelo State Universtiy	GAI	0	\$ -	\$ -	\$ -
789	Lamar Institute of Technology	GAI	0	\$ -	\$ -	\$ -
787	Lamar State College-Orange	GAI	0	\$ -	\$ -	\$ -
788	Lamar State College-Port Arthur	GAI	0	\$ -	\$ -	\$ -
734	Lamar University	GAI	0	\$ -	\$ -	\$ -
735	Midwestern State University	GAI	0	\$ -	\$ -	\$ -
753	Sam Houston State	GAI	0	\$ -	\$ -	\$ -
755	Stephen F. Austin State University	GAI	0	\$ -	\$ -	\$ -
741	Sul Ross State RGC	GAI	0	\$ -	\$ -	\$ -
756	Sul Ross State University	GAI	0	\$ -	\$ -	\$ -
761	TAMIU	GAI	0	\$ -	\$ -	\$ -
764	TAMU - Texarkana	GAI	0	\$ -	\$ -	\$ -
770	TAMU- CTX	GAI	0	\$ -	\$ -	\$ -
710	TAMU System	System Office	0	\$ -	\$ -	\$ -
751	TAMU-C	GAI	0	\$ -	\$ -	\$ -
718	TAMU-G	GAI	0	\$ -	\$ -	\$ -
749	TAMU-SA	GAI	0	\$ -	\$ -	\$ -
555	Texas A&M Agrilife Extension	TAMUS Agency	0	\$ -	\$ -	\$ -
716	Texas A&M Engineering Extension Service	TAMUS Agency	0	\$ -	\$ -	\$ -
557	Texas A&M Veterinary Diagnostic Laboratory	TAMUS Agency	0	\$ -	\$ -	\$ -
575	Texas Division of Emergency Management	TAMUS Agency	0	\$ -	\$ -	\$ -
717	Texas Southern University	GAI	0	\$ -	\$ -	\$ -
758	Texas State System	System Office	0	\$ -	\$ -	\$ -
754	Texas State University	GAI	0	\$ -	\$ -	\$ -
768	Texas Tech System	System Office	0	\$ -	\$ -	\$ -
731	Texas Woman's University	GAI	0	\$ -	\$ -	\$ -
71F	TSTC Fort Bend	GAI	0	\$ -	\$ -	\$ -
71B	TSTC Harlingen	GAI	0	\$ -	\$ -	\$ -
71E	TSTC Marshall	GAI	0	\$ -	\$ -	\$ -
71G	TSTC North TX	GAI	0	\$ -	\$ -	\$ -

719 TSTC System	System Office	0	\$	-	\$	-	\$	-
71D TSTC Waco	GAI	0	\$	-	\$	-	\$	-
71C TSTC WTX	GAI	0	\$	-	\$	-	\$	-
759 University of Houston - Clear Lake	GAI	0	\$	-	\$	-	\$	-
765 University of Houston - Victoria	GAI	0	\$	-	\$	-	\$	-
784 University of Houston-Downtown	GAI	0	\$	-	\$	-	\$	-
771 UNT Dallas	GAI	0	\$	-	\$	-	\$	-
769 UNT System	System Office	0	\$	-	\$	-	\$	-
742 UT Permian Basin	GAI	0	\$	-	\$	-	\$	-
746 UT RGV	GAI	0	\$	-	\$	-	\$	-
720 UT System	System Office	0	\$	-	\$	-	\$	-
750 UT Tyler	GAI	0	\$	-	\$	-	\$	-

COVID-19 Research Projects

Pursuant to the Senate Finance Committee's request, this page contains a list of research projects related to COVID-19. *DISCLAIMER: Funding not included in this analysis as proposals are still awaiting funding decisions and institutions did not report uniform funding data.*

Agency Number	Institution	Type of Institution	Number of Projects
729	UT Southwestern	HRI	58
723	UTMB	HRI	44
721	UT Austin	GAI	41
730	University of Houston	GAI	34
709	TAMU HSC	HRI	26
754	Texas State University	GAI	22
744	UT HSC Houston	HRI	14
774	TTU HSC El Paso	HRI	14
743	UT San Antonio	GAI	10
760	TAMU- CC	GAI	10
785	UT HSC Tyler	HRI	10
724	UTEP	GAI	9
556	Texas A&M Agrilife Research	TAMUS Agency	9
711	TAMU	GAI	7
712	Texas A&M Engineering Experiment Station	TAMUS Agency	6
738	UT Dallas	GAI	4
506	UT MD Anderson	HRI	4
745	UT HSC San Antonio	HRI	4
757	WTAMU	GAI	3
714	UT Arlington	GAI	2
733	Texas Tech University	GAI	2
752	UNT	GAI	2
763	UNT HSC	HRI	2
746	UT RGV	GAI	1
727	Texas Transportation Institute	TAMUS Agency	1
717	Texas Southern University	GAI	0
731	Texas Woman's University	GAI	0
734	Lamar University	GAI	0
735	Midwestern State University	GAI	0
741	Sul Ross State RGC	GAI	0
742	UT Permian Basin	GAI	0
750	UT Tyler	GAI	0
753	Sam Houston State	GAI	0
755	Stephen F. Austin State University	GAI	0
756	Sul Ross State University	GAI	0
759	University of Houston - Clear Lake	GAI	0
765	University of Houston - Victoria	GAI	0
771	UNT Dallas	GAI	0
773	Angelo State Universtiy	GAI	0
784	University of Houston-Downtown	GAI	0
787	Lamar State College-Orange	GAI	0
788	Lamar State College-Port Arthur	GAI	0
789	Lamar Institute of Technology	GAI	0
739	TTU HSC	HRI	0
748	UT RGV School of Medicine	HRI	0
710	TAMU System	System Office	0
713	TAMU-Tarleton	GAI	0

715 PVAMU	GAI	0
718 TAMU-G	GAI	0
732 TAMU-K	GAI	0
749 TAMU-SA	GAI	0
751 TAMU-C	GAI	0
761 TAMIU	GAI	0
764 TAMU - Texarkana	GAI	0
770 TAMU- CTX	GAI	0
71B TSTC Harlingen	GAI	0
71C TSTC WTX	GAI	0
71D TSTC Waco	GAI	0
71E TSTC Marshall	GAI	0
71F TSTC Fort Bend	GAI	0
71G TSTC North TX	GAI	0
719 TSTC System	System Office	0
720 UT System	System Office	0
758 Texas State System	System Office	0
768 Texas Tech System	System Office	0
769 UNT System	System Office	0
555 Texas A&M Agrilife Extension	TAMUS Agency	0
557 Texas A&M Veterinary Diagnostic Laboratory	TAMUS Agency	0
575 Texas Division of Emergency Management	TAMUS Agency	0
576 Texas A&M Forest Service	TAMUS Agency	0
716 Texas A&M Engineering Extension Service	TAMUS Agency	0



The Senate of The State of Texas

SENATE COMMITTEES:

VICE CHAIR
Higher Education

MEMBER
Education
Finance
Transportation

Senator Royce West

District 23

President Pro Tempore

2006

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August 7, 2020

Chairwoman Nelson,

Thank you and your staff for the work put into this Interim Report. I am happy to add my signature to it with one exception. I do not support changing the rate of growth in the state's economy as it relates to the spending limit from current practice to population-plus-inflation, as I believe it would overly restrict the state's ability to keep up with real costs associated with our growing state.

Sincerely,

A handwritten signature in black ink that reads "Royce West".

Royce West
State Senator - District 23

