# INTERIM REPORT

*to the 87th Texas Legislature*

HOUSE COMMITTEE ON
HIGHER EDUCATION

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JANURARY 2021

**HOUSE COMMITTEE ON HIGHER EDUCATION**
**TEXAS HOUSE OF REPRESENTATIVES**
**INTERIM REPORT 2020**

**A REPORT TO THE**
**HOUSE OF REPRESENTATIVES**
**87TH TEXAS LEGISLATURE**

**CHRIS TURNER**
**CHAIRMAN**

**COMMITTEE CLERK**
**JULIE YOUNG**

Committee On
Higher Education

January 4, 2021

Chris Turner
Chairman
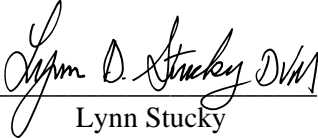
P.O. Box 2910
Austin, Texas 78768-2910

The Honorable Dennis Bonnen
Speaker, Texas House of Representatives
Members of the Texas House of Representatives
Texas State Capitol, Rm. 2W.13
Austin, Texas 78701

Dear Mr. Speaker and Fellow Members:

The Committee on Higher Education of the Eighty-sixth Legislature hereby submits its interim report including recommendations and drafted legislation for consideration by the Eighty-seventh Legislature.

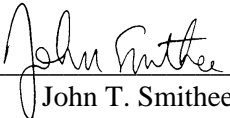Respectfully submitted,

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Chris Turner

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Lynn Stucky

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Lorraine Birabil

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Donna Howard

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Leo Pacheco

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Matt Schaefer

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John T. Smithee

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Armando Walle

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Terry M. Wilson

Vice Chair: Lynn Stucky
Members: John Smithee, Donna Howard, Armando Walle, Angie Chen Button, John Frullo,
Matt Schaefer, Terry Wilson, Leo Pacheco, Lorraine Birabil

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# INTRODUCTION

The Honorable Dennis Bonnen, Speaker of the House of Representatives, appointed eleven members of the 86th Legislature to serve on the House Committee on Higher Education. The following members were appointed to the committee: Chairman Chris Turner, Vice-Chair Lynn Stucky, Rep. John Smithee, Rep. Donna Howard, Rep. Armando Walle, Rep. Angie Chen Button, Rep. John Frullo, Rep. Matt Schaefer, Rep. Terry Wilson, Rep. Leo Pacheco, and Rep. Eric Johnson. Following his resignation from the House and a subsequent special election, Representative Eric Johnson was replaced by Representative Lorraine Birabil on the Committee.

Pursuant to House Rule 3, Section 14 (86th Legislature), the Committee has jurisdiction over all matters pertaining to:

(1) education beyond high school;
(2) the colleges and universities of the State of Texas; and
(3) the following state agencies: the Texas A&M Engineering Experiment Station, the Texas A&M Engineering Extension Service, the Texas Higher Education Coordinating Board, the Texas Guaranteed Student Loan Corporation, the Prepaid Higher Education Tuition Board, and the Texas A&M Transportation Institute.

During the interim, Speaker Dennis Bonnen issued five interim charges to the committee to study and report back with facts, findings, and recommendations. The House Committee on Higher Education has completed its interim work and has adopted the following report.

# INTERIM STUDY CHARGES

1. Monitor the agencies and programs under the Committee's jurisdiction and oversee the implementation of relevant legislation passed by the 86th Legislature. Conduct active oversight of all associated rulemaking and other governmental actions taken to ensure intended legislative outcome of all legislation, including the following:

    - HB 449, HB 1735, and SB 212, which relate to sexual harassment, sexual assault, dating violence, and stalking at public and private postsecondary educational institutions. Monitor the process by which institutions of higher education adopt policies on sexual assault prevention, victim outreach programs, and disciplinary hearings. Monitor rules and regulations at the federal level that could necessitate changes to state law.

    - HB 1638 (85R), which relates to statewide goals for dual credit programs. Review best practices for providing opportunities to high school students to earn college credit while ensuring that courses taken reflect authentic, college-level rigor.

    - SB 18, which relates to the protection of expressive activities at public institutions of higher education. Monitor the process by which institutions of higher education implement policies to protect the expressive rights of persons guaranteed by the constitutions of the United States and of this state.

    - SB 25, which relates to measures to facilitate the transfer, academic progress, and timely graduation of students in public higher education. Monitor the process by which the Higher Education Coordinating Board adopts rules via negotiated rulemaking. Monitor the progress of institutions developing recommended course sequences and the progress of the feasibility study to implement statewide meta majors.

    - SB 16, which relates to a student loan repayment assistance program for peace officers. Monitor the process by which the Higher Education Coordinating Board implements the loan repayment program and administers the grants to eligible peace officers.

2. Evaluate current and future capital infrastructure needs at Texas public universities, health related institutions, and Texas State Technical Colleges in preparation for potential legislation to be considered by the 87th Legislature. Identify and evaluate alternatives to tuition revenue bonds for the State's funding of higher education capital infrastructure needs, including options for addressing deferred maintenance needs at aging campuses.

3. Review progress toward the goals of the 60X30TX plan, including institutional strategies for responding to diverse and rapidly changing workforce needs and demands, including workforce education, industry certification, and degree programs to address healthcare shortages. Specifically review community colleges' capacity to meet the goals of 60X30TX, including a review of taxing districts and service areas versus geographic

areas of need. Review the Tri-Agency Workforce Initiative's work-based learning, industry-aligned internships, and industry credential initiatives. Consider whether legislative action may be needed to expand work-based learning and recruitment efforts for adults who have previously completed some college level coursework.

4. Study the prevalence of online courses and degrees in higher education. Examine how institutions providing online courses and programs are accredited, particularly courses and programs originating from states other than Texas. Evaluate how students whose courses and degrees are primarily online perform in terms of persistence and degree completion versus students who take courses in traditional classroom settings. Study labor market outcomes for students with primarily online courses and degrees versus more traditional programs.

5. Monitor the State Auditor's review of agencies and programs under the Committee's jurisdiction. The Chair shall seek input and periodic briefings on completed audits for the 2019 and 2020 fiscal years and bring forth pertinent issues for full committee consideration.

### *Impact of Covid-19 Pandemic on Interim Hearings*

The Committee held one interim hearing on February 11, 2020. As a result of the global COVID-19 pandemic, the Committee was unable to hold additional hearings during the interim. In lieu of in-person hearings, the Committee issued Requests for Information (RFIs). The RFIs were posted on the House Committee website, and responses to those requests were posted on upon receipt.[1] This process allowed the Committee to gather information in response to the interim charges, as well as additional information regarding the impact of the pandemic on institutions of higher education. Several responses are included in this report and may be summarized for brevity and to eliminate redundancy.

# Interim Charge One

1. Monitor the agencies and programs under the Committee's jurisdiction and oversee the implementation of relevant legislation passed by the 86th Legislature. Conduct active oversight of all associated rulemaking and other governmental actions taken to ensure intended legislative outcome of all legislation, including the following:

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   - SB 16, which relates to a student loan repayment assistance program for peace officers. Monitor the process by which the Higher Education Coordinating Board implements the loan repayment program and administers the grants to eligible peace officers.

During the hearing on February 11, 2020, the Committee heard testimony and updates on HB 449, HB 1735, SB 212, SB 16 and SB 18. In addition, the Committee added SB 38 to the hearing agenda, a measure that relates to the offense of hazing and is explained in further detail below.

# House Bill 449

Author: Representative Chris Turner
Senate Sponsor: Senator Kirk Watson

Prior to the passage of HB 449[2], stakeholders expressed concerns that a student who was ineligible to reenroll at an institution of higher education due to a serious code of conduct violation, including committing sexual assault or other violent acts, may enroll at a new institution without that institution being made aware of the violation. Additionally, there was concern that a student may choose to withdraw from an institution rather than be subject to a disciplinary process; one which could result in suspension or expulsion.

To address this concern, HB 449 amended Texas Education Code, Chapter 51 by adding Section 51.9364, Certain Notations Required on Student Transcripts. Section 51.9364 requires a Texas public, private, and independent institutions of higher education to add a notation to the transcript of a student who is ineligible to reenroll at the institution. HB 449 also requires institutions to complete the investigatory process if a student withdraws pending disciplinary charges that may result in the student becoming ineligible to reenroll. Financial and academic reasons resulting in ineligibility to reenroll are exempt from the notation requirement. HB 449 also creates a mechanism to remove the notation if the student becomes eligible to reenroll or the institution determines that good cause exists to remove it.

## *Implementation: HB 449*

The Negotiated Rulemaking Committee on Certain Notations on Student Transcripts met on September 25, 2019 at the Texas Higher Education Coordinating Board (Coordinating Board).[3] The proposed rule was published in the October 18, 2019 edition of the Texas Registrar for a 30-day public comment period that expired on November 17, 2019. The proposed rule was adopted at a special called board meeting on December 11, 2019.

## *Committee Action*

The Committee met on February 11, 2020 to hear testimony on HB 449. Dr. Wanda Mercer, Associate Vice Chancellor for Student Affairs, University of Texas System (UT System), and David Halpern, Assistant General Counsel, Texas A&M University System (TAMUS), provided testimony. Paula Arredondo, Executive Registrar, Texas State Technical College (TSTC), and Dr. Stacey Silverman, Deputy Assistant Commissioner, Texas Higher Education Coordinating Board, served as resource witnesses.

Dr. Mercer said that she found the rulemaking process to be very productive and that the UT System had been adding a notation regarding disciplinary issues for years. She highlighted the diverse representation of the rulemaking committee and how helpful it was to have staff from the bill author's office present during the rulemaking process to discuss the spirit and intent of the law.

Dr. Mercer further explained that during the process, concerns were expressed about varying levels of offenses which resulted in expulsion or suspension, the need for online courses to be

considered, and how the notations would affect employers and the need to sensitivity in these areas. Dr. Mercer stated she believed the committee stuck to the letter and rule of the law in noting that if a student was suspended and could not re-enroll, whether online or not, it should be noted regardless of whether the student had been entirely online or on campus. She explained that a number of decisions still remained with each individual campus, such as what infractions result in suspension, exactly how a notation is made and the process for removal of a notation. She testified that it was helpful to allow individual campuses to make these decisions. She explained that campuses had shared what they did if a notation existed on a transcript and how their decision was based on a number of factors and that they were satisfied that this decision remained with them.

David Halpern with Texas A&M University System (TAMUS) provided legal counsel to members of the rulemaking committee. In his testimony, he explained that TAMUS member institutions were required to ask questions of applicants relating to non-juvenile criminal convictions or other postsecondary offenses, which were adjudicated at another institution or were pending. These questions were designed to include criminal offenses as well as offenses that have been substantiated at any postsecondary institutions which involve serious crimes of violence or sexual misconduct.

Chairman Turner asked whether applicants had been found to be truthful in response to these questions and Mr. Halpern explained that the transcript notation system would provide institutions with information critical to verify representations made by applicants. Mr. Halpern shared that in 2018, the System received a large number of affirmative responses by applicants which, upon further investigation, turned out to be false positives due to applicants reporting online via a mobile phone or other medium which caused some error in reporting.

When the panel was asked whether there was an issue with the bill that may need to be addressed legislatively, Dr. Mercer responded that individual constituencies might have their own issue to bring forth but for now it was necessary to monitor implementation of the bill.

## House Bill 1735
Author: Representative Donna Howard
Senate Sponsor: Senator Kirk Watson

HB 1735[4] creates new requirements for institutional policies on sexual misconduct and authorizes a civil penalty for non-compliance. The substantive changes necessitated by the law went into effect on August 1, 2020.

## Senate Bill 212
Author: Senator Joan Huffman
House Sponsor: Representative Geanie Morrison

SB 212[5] requires employees of public and private higher education institutions to report sexual harassment, sexual assault, dating violence, or stalking against a student or employee to the institution's Title IX coordinator. The bill creates a criminal offense for failure to report an incident or making a false report.

## Implementation: HB 1735 and SB 212

House Bill 1735 and Senate Bill 212 relate respectively to the reporting of and the development of policies regarding certain incidents of sexual harassment, sexual assault, dating violence, and stalking at public and private institutions of higher education. Each bill amends sections of Chapter 51 of the Texas Education Code. SB 212 requires the Coordinating Board to adopt reporting rules. HB 1735 requires the Commissioner of Higher Education to establish an advisory committee to make recommendations to the Coordinating Board regarding rules necessary to implement and enforce certain provisions of the new legislation and develop recommended training for Title IX coordinators at postsecondary educational institutions.

## Negotiated Rulemaking

The Negotiated Rulemaking Committee on Sexual Assault/Harassment[6] met on September 23, 2019 and October 16-17, 2019.[7] The committee provided the Coordinating Board with recommended rules regarding incidents of sexual misconduct at institutions of higher education. The Title IX Training Advisory Committee[8] met electronically and endorsed the recommended rules regarding incidents of sexual misconduct at institutions of higher education. The legislation required that the Coordinating Board have rules in place by January 1, 2020. The proposed rules were published in the Texas Register on November 1, 2019[9] and November 8, 2019[10], with the 30-day comment period ending on December 1, 2019 and December 8, 2019.

The committee received comments from Doctors Hospital at Renaissance, Ltd (DHR) and UT Austin. DHR recommended language that required the reporting of incidents only when the employee receiving the information has reason to believe the information is reliable. Coordinating Board staff recommended this change not be made. The committee determined an employee should promptly report the incident to the institution's Title IX coordinator or deputy Title IX coordinator, if the employee "reasonably believes" that the incident constitutes sexual harassment, sexual assault, dating violence, or stalking.

UT Austin provided several suggestions, including excluding volunteers from the reporting requirement, adding a definition of "domestic violence," clarifying that staff/faculty may speak with "confidential employees" with the same expectation of privacy students receive, and adding the word "final" to clarify that the obligation to provide information to another institution is in relation to a final determination.

Of these suggestions proposed via comments, Coordinating Board staff concurred with UT Austin's clarification of a "final" determination.

On December 10, 2019 the committee met via conference call. During the call, they reached consensus to accept the change made by the Coordinating Board staff in response to the comments.

*Committee Action*

The Committee heard testimony on HB 1735 and SB 212 during its February 11, 2020 hearing. Dr. Stacey Silverman, Assistant Commissioner, Coordinating Board; David Halpern, General Counsel, Texas A&M University System; Krista Anderson, Title IX Coordinator, University of Texas System; Nelly Herrera, Deputy General Counsel, Texas State University System; Rachel Rolf, Independent Colleges and Universities of Texas (ICUT); and Katherine Strandberg, Senior Policy Advisor, Texas Association Against Sexual Assault (TAASA) testified.

Dr. Stacey Silverman explained the negotiated rulemaking process and stated that the agency utilized the negotiated rulemaking process to develop the recommended training for postsecondary Title IX Coordinators. Dr. Silverman testified that the rulemaking committee for HB 1735 ad SB 212 was comprised of a variety of directors of Title IX compliance, Title IX equity and diversity officers, a campus chief of police, general counsels, and a policy director for the Texas Association Against Sexual Assault (TAASA) and that the recommended training was currently posted on the Coordinating Board website as a resource to institutions.

David Halpern, who served as co-chair of the training advisory committee with Krista Anderson, system-wide Title IX Coordinator for the UT System, explained the rulemaking committee's compressed two-day schedule. He also addressed the committee's three distinct audiences for the training: responsible employees, confidential employees and student advocates, and the Title IX coordinators and deputies. Mr. Halpern stated that he believed all systems were in the process of implementing these trainings across all of their member institutions to ensure compliance starting on January 1, 2021.

During her testimony, Krista Anderson explained her role as primary technical writer for adapting reporting templates for general applicability statewide, supplemental training materials for administrative reporting templates and supplemental curriculum on how to use the templates. Ms. Anderson stated that as a result of creating the templates for the training advisory committee, it was discovered that administrative reports were only required to include reports submitted by employees required to report on sexual harassment, sexual assault, dating violence, and stalking to a Title IX Coordinator. In order to provide consistency and accuracy of the reporting provision, this language was adopted for the reporting template to be used statewide. She further explained that reports were submitted by those who were not mandated to report, including victims and survivors, friends, parents, and fellow students. As a result, institution report data in the Title IX Coordinator reports and the mandated Chief Executive Officer (CEO) annual reports would not be comprehensively reflected but would be accurate, consistent and thorough in accordance with the required reporting provisions in SB 212. She stated that institutions could take steps to provide additional data and trends through institutional reports or through other means at an institution's discretion.

Representative Schaefer asked Krista Anderson to define the level of person who would be receiving reports and who that person would be required to report to. He also asked how many persons this would be at a junior college, referencing the Title IX Coordinator and Deputy Title IX Coordinator. He also asked whether the alleged victim would have a choice whether an investigation was conducted or not. Krista Anderson responded that the alleged victim would

have the right to participate or submit a complaint based on what information had already been submitted by a third party. The institution would then need to discern the seriousness of the allegations and whether there were other considerations regarding safety and whether or not there was a threat to others. Representative Schaefer asked for an example of when an investigation may proceed without the victim's consent. Krista Anderson responded that this could occur if a person may have been threatening acts of violence or other serious behavior towards other people. Representative Schaefer asked if it could be done if offensive language was all that was used. David Halpern indicated that if the issue would invite an analysis of a hostile work or educational environment, it could form the basis of a complaint that required an investigation of sexual harassment. He proceeded to give examples of reporting an alleged sexual predator, where one person reported being victimized and stated that they knew other people who had been victimized and went on to explain that there may be a potential threat to other members of the community based on persistence or pervasiveness.

Nelly Herrera explained that the committee kept in mind the need to stay true to the law and the intent of the Legislature. She explained that the Negotiated Rulemaking Committee felt the presence of legislative staff during this rulemaking was extremely helpful in ensuring that the bill remained true to these parameters.

Rachel Rolf provided the perspective from Independent Colleges and Universities of Texas (ICUT). Many ICUT institutions are small and did not have the same level of resources as larger institutions. She explained that as a result, several institutions' Title IX Coordinators have several roles. With this in mind, the administrative reporting templates and training resources developed by the committees, respectively, would be very helpful to the member institutions.

Sharing information among participants on a sexual assault response team or other campus group charged with supporting students or managing high risk circumstances was critical, she explained, stating that information silos were dangerous and could result in institutions failing to identify problems or to timely address student need.

Confidentiality could pose a challenge for ICUT institutions with respect to religious schools. For religious schools, the legislation does provide that institutions could designate employees who students could speak to about their concerns confidentially but that ICUT institutions did not have the same flexibility to do the same for employee concerns. Small campuses made it particularly difficult to truly de-identify information, and individuals may be readily able to identify themselves or their friends or colleagues in the data even if it contained no personal identifiers. Religious institutions expressed concerns about how the new law would impact the Sacrament of Reconciliation on campuses and obligations priests have under their religious rules to keep information strictly confidential.

Katherine Strandberg, with the Texas Association Against Sexual Assault (TAASA), explained that new trainings, while focused on institutional liability and reporting requirements, may not be centered on survivor needs. Trainings deal very closely with the ins and outs of mandatory reporting but excluded information about how to interact with a survivor who was disclosing an assault. TAASA's community partners were worried trainings did not offer robust enough guidance on dating violence, which they viewed as both a serious problem on college campuses

and well within the mandate of the new laws. TAASA offered to add this component to trainings and institutions were open to this but as it was not mandated, it was unclear whether this aspect of training would be provided in all institutions. TAASA needed the support of institutions and the Coordinating Board in order to add this curriculum to staff trainings, she stated.

Ms. Strandberg affirmed that TAASA appreciated that SB 212 set clear requirements for employees to intervene in known violence or harassment and ensured that such events will not be ignored or covered up. During the drafting of the bill, she explained that TAASA and the author's office took steps to balance those requirements with students' ability to seek support confidentially. Sexual assault deprives victims of autonomy and control, she stated, and institutional reporting of that crime should not echo the assault itself. As such, she explained, TAASA wanted to be sure that survivor autonomy and choice was still at the center of this law in implementation.

# House Bill 1638 (85R)
Author: Representative Ryan Guillen
Senate Sponsor: Senator Royce West

HB 1638 (85R), which relates to statewide goals for dual credit programs. Review best practices for providing opportunities to high school students to earn college credit while ensuring that courses taken reflect authentic, college-level rigor.

### *Dual Credit: An Overview*

*The following overview was provided by Coordinating Board*:[11]

> Student participation in dual credit has been steadily increasing through the years. The number of students participating in dual credit in fall 2017 was 151,669, a 753 percent increase since fall 2000. The growth continues. Over the last ten years, dual credit participation has increased 57 percent. Overall, dual credit participation represented 10 percent of higher education enrollment in 2017. Hispanic and African American students are increasingly participating in dual credit which is consistent with student enrollment of Texas public high schools.

> Academic and career and technical education (CTE) courses are offered to high school students for dual credit. Academic dual credit can be applied toward the core curriculum or to other specific degree program requirements of an academic associate degree or baccalaureate degree. CTE dual credit can only be applied toward the requirements for a Workforce Certificate or Applied Associate Degree, and will probably not be applicable to an academic associate or baccalaureate degree program.

> State law allows both school districts and institutions of higher education to obtain state funding for dual credit courses. The state funds school districts based on students' average daily attendance and districts can count time spent on dual credit toward student enrollment. Institutions of higher education receive state formula funding for contact or semester credit hours of instruction, respectively.

Decisions about who pays tuition, fees and other costs for dual credit are made at the local level, and it varies from district to district. Some school districts pay for the students, either out of local funds or from their high school allotment, while other districts require students and parents to pay out of pocket. Public institutions of higher education are allowed to waive all, part, or none of the mandatory tuition and fees for dual credit courses (Texas Education Code, Section 54.216).

## *Background*

House Bill 1638[12] (85th Legislature, Regular Session) requires the Texas Higher Education Coordinating Board (Coordinating Board) and the Texas Education Agency (TEA) to collaboratively develop statewide goals for dual credit programs in Texas. These goals provide guidance to institutions of higher education (IHEs) and independent school districts (ISDs) on components that must be in place to ensure quality dual credit programs are provided to Texas high school students. These statewide goals address enrollment in and acceleration through postsecondary education, performance in college-level coursework, and strong academic advising.

## *RFI Responses*

**Committee Member Questions:**

1. **What challenges have institutions faced with dual credit prior to and as a result of the pandemic?**

2. **How have institutions addressed these challenges?**

3. **What changes, if any, are needed to ensure that students have opportunities to earn college credit which fulfills the criteria outlined above?**

[Answers to questions 1 and 2 of HB 1638 have been combined in order to maintain continuity.]

Prior to the pandemic, some institutions shared concerns regarding dual credit, specifically issues related to competitive difficulties, staffing and course quality. Four-year institutions reported competitive difficulties with dual credit due to lower-priced courses at community colleges and the University of Texas OnRamps program.

Staffing concerns for many institutions centered on ensuring instructors meet the same qualifications as those required at the college level. This was reported to be a continuous challenge due to the cost of training and credentialing instructors. However, some colleges addressed this challenge by providing their own instructors where the high schools did not have qualified instructors.

Several institutions expressed that a major challenge was a lack of college-level rigor or variance in dual credit experiences across the state. Proposed solutions to address the course quality and

availability issue included finding, offering, and communicating the best focus areas for a sub-region of the state, i.e., four-year degree programs and pathways that can be identified and pursued by high school students with the highest efficiency for graduation.

For many institutions during the pandemic, required class observations of courses that switched to an online modality created a new challenge. To address this, at some institutions, class observations are conducted via Zoom as long as the dual credit course has a presence in the college's Learning Management System (LMS).

The pandemic also revealed significant communication challenges. Institutions reported difficulty communicating effectively with ISDs to determine the modalities and offerings that would meet the needs of districts. For some community colleges, their dual credit program requires completion of several enrollment forms and parental permission. Obtaining these forms from school districts proved challenging, resulting in delays enrolling students. Institutions widely reported that students were not actively engaged, and many did not respond to phone calls or email messages. To address these challenges, institutions have been working to maintain and re-establish communication and ties to their regional ISDs and community colleges via phone, Zoom and email. Institutions have also continued calling students regarding their fall enrollment plans (despite high school campus closures) as well as both students and parents to communicate all of the necessary dual credit information.

Access to Wi-Fi and hotspots, as well as hardware and software, presented yet another challenge for students and instructors. The pandemic required a rapid transition to virtual learning with many institutions going fully online within a span of only a few weeks. Institutions found that many students did not have access to computers or the internet. Many ISDs and higher education institutions worked to provide students with hotspots, technology and software to address gaps in equity. This came at a considerable cost to their budgets.

Alamo Colleges reported that prior to COVID-19, Instructional Material (IM) fees primarily covered textbooks/course reading material, but presently and going forward, IM fees will have to consider the costs of mobile technology and software for courses at a greater rate. If a mechanism doesn't exist for IHE and ISD partners to use the same devices and/or the same LMSs, Alamo Colleges expressed concern that the potential challenges would increase. For example, they reported one such challenge with a partner ISD which resulted in students receiving multiple devices in order to have the ability to take a dual credit course.

One recommendation to assist in the ease of the online modality for students was for higher education institutions to adjust college assignments to allow students to submit assignments via cellular phone if needed and provide support to students and teachers on similar alternate methods of submitting assignments.

Financial concerns for students whose personal or family employment was lost due to the pandemic also caused significant detrimental changes to student engagement. Some students were either forced to take on other responsibilities at home or work longer hours to help make ends meet.

The rapid shift to online learning mid-semester proved challenging for students and instructors. Synchronous learning, where a group of participants is engaged in learning at the same time and can interact with one each another (whether it be in a classroom or in an online format), is often the method for online delivery. Asynchronous learning, where videos or lectures are pre-recorded, does not provide the ability to interact but does permit the learner to attend class on their own schedule and reduces the total amount of time spent online due to the elimination of interaction.[13]

Both methods have benefits and drawbacks. Students sharing devices with siblings who have limited time to commit to coursework can benefit from asynchronous learning, but students who need more in person support and students with disabilities may benefit more from having immediate support and interaction. To address these challenges, Houston Community College (HCC) reported that they are currently developing some 3D immersion videos for instructional purposes as well as exploring how to put the students in the virtual environment with immersion technology. Virtual simulation for lab-based courses that have previously required hands-on and face-to-face instruction is under review at HCC as another measure to ensure student opportunity to earn college credit while in high school.

Variable start dates for school districts also contributed to uncertainty with course planning and enrollment for higher education institutions. Institutions such as Texas Tech University (TTU), which works with Texas OnRamps, developed procedures to ensure that high school students are able to enroll in courses regardless of fall term start dates. HCC developed flexible scheduling to meet the various needs of students and elected to offer four different sessions to the various ISDs.

Many institutions reported providing extensive online training on LMS to assist faculty and work with ISDs on both modalities of learning. HCC also provided faculty with pedagogy for teaching in a virtual setting and matched faculty with mentors for continual support. Continuing to provide more support to teachers during transition to online teaching modalities/formats was recommended by institutions.

Services for students with learning disabilities was reported as a challenge prior to and during the pandemic. The variation in policy regarding institutions of higher education disability support services (IHE DSS) and Section 504 of the Rehabilitation Act for K-12 education creates great concern for student support and faculty development. Institutions reported they were continuing to work to ensure all students were receiving needed services but the challenge does exist and is felt by college support services as well as the K-12 system.

Texas State Technical College (TSTC) reported obstacles developing potential new partnerships with ISDs, explaining that all inquiries regarding the 2020–2021 school year were impacted by the pandemic. All requests for off-site instruction, which require credentialing, were placed on hold but would be explored next school year. TSTC reported that deciding factors for this decision included, high school campuses no longer being accessible to TSTC Department Chairs for the evaluation of facilities, and the College's decision to place a hold on all employee travel. Across the board, school districts pivoted operations in an effort to conclude their Spring 2020 semester requirements. As a result, dual enrollment efforts, to include recruitment for the

upcoming year, were temporarily paused. New ISD partnerships seeking an inaugural year with TSTC were also affected by this suspension. Accordingly, overall projected enrollment for Fall 2020 decreased significantly.

Another major challenge TSTC faced was the required amount of lab hours for many of their technical course offerings, specifically hours that must be met on TSTC or ISD campuses. To ensure the health and safety of each student by maintaining proper COVID-19 safety protocols, TSTC modified their instruction delivery by creating smaller cohort sizes, multiple sections, and modified days and meeting times to comply with social distancing guidelines. Instructional Continuity Plans and grading policies were established to provide students with options to complete the required face-to-face lab time when the high schools canceled face-to-face instruction. Operational policies varied by ISD and local health ordinances. Many students did not understand that dual credit courses needed to be completed, per TSTC guidelines, even though their high school courses had ceased. This served as a learning experience and operations guide for the TSTC's Dual Enrollment team.

E3 Alliance's response illustrated a disparity for students from underserved backgrounds caused by state policy and dual credit program limitations, and explained that changes made due to the pandemic have actually helped eliminate or reduce these barriers. Some of the obstacles that bar students from enrolling in dual credit courses and impede school districts from offering an array of dual credit courses to their students include:

- Students having to meet minimum requirements on a single point-in-time state standardized exam, TSIA or another college entrance exam

- Student achieves a minimum score on English II and/or Algebra I end-of-course exam

In response to testing limitations brought on by COVID-19 restrictions, the Coordinating Board approved measures to demonstrate college readiness for students entering post-secondary or wishing to enroll in dual credit courses who do not have access to Texas Success Initiative Assessment (TSIA) testing or meet the minimum requirements to enroll. In determining which option is best for individual students, institutions are expected to use additional factors, such as high school grade point average or high school course-taking patterns, approaches long used by other states. They must also be prepared to report to the Coordinating Board which factors were used in order to make placement decisions. E3 Alliance suggested that the state permanently adopt these multiple measures for high school students engaging in college credit bearing course work.

Alamo Colleges reported challenges in the delivery of standardized tests due to the pandemic, specifically the TSIA. As a result, and through flexibility provided by the Coordinating Board, the Colleges' Academic and Student Success teams were able to work through and create a 'Multiple Measures'[14] standard providing a way for students to access their dual credit and early college high school programs.

Alamo also reported that, "incoming High School freshmen registering for the Fall 2020 will undergo an individual review by the High School Program (HSP) liaison and director."[15]

Courses requiring TSIA but not including a college readiness standard will also be subject to individual review. This new process will allow for increased access for students and provide a more accurate placement of the student based on academic needs.

Alamo Colleges also reported the use of alternate forms of testing for accepting students. This process allows more students to test remotely and alleviate an additional burden on schools. To address class rank, some school districts changed the way they are doing their calculation, so that students are not negatively impacted by the inability to complete hands-on courses.

Several institutions and associations suggested statewide solutions to alleviate problem areas in dual credit. These include common course numbering or establishing guaranteed transfer pathways for lower-level courses to address unnecessary barriers to credit transfer for students around the state.

The University of North Texas System (UNT System) recommended the state provide counselors and advisors a central data repository that searches all public four-year institution catalogues and automates the delivery of degree requirement information to identify areas of opportunity for dual credit. Texas 2036 suggested reviewing the Tennessee Transfer Pathways model, an agreement between public and private community colleges to ensure that all credits earned from specific associate degrees transfer to partner four-year institutions. If that is impractical, regional partnerships with clearly defined pathways should be mandated so students can have advance notice of where their credits will and will not be accepted.

With regard to the rigor of dual credit courses, institutions advised that greater consistency in courses and better student preparation for subsequent college level courses was necessary. If there is increased emphasis on course design and delivery that is outcome-focused then it could help ensure that rigor is maintained, outside work is accomplished, and group skills and tasks are enhanced.

For better alignment in dual credit, TSTC recommended that the Legislature better align Texas Essential Knowledge and Skills (TEKS) and college Workforce Education Course Manual (WECM) course outcomes in TEA Programs of Study. Without this alignment, colleges and ISDs must manually manipulate this process to ensure appropriate course alignment for both the institutions of higher education and the ISDs. A statewide Dual Credit Task Force released a report in August of 2018, *Dual Credit: Where College Meets High School*, which describes additional solutions in further detail.[16]

It was also reported that recent TEA changes rewarding ISDs for College, Career and Military Readiness (CCMR) readiness have resulted in an increase in the number of dual credit courses requested by partner ISDs. Institutions suggested that such incentive-producing regulations should be modified to continue to reward high schools for achieving student college readiness while limiting enrollment in superfluous dual credit courses.

## Senate Bill 18
Senate Author: Senator Joan Huffman
House Sponsors: Representatives Charlie Geren, Briscoe Cain,

Craig Goldman, Tom Oliverson, Dade Phelan

SB 18, which relates to the protection of expressive activities at public institutions of higher education. Monitor the process by which institutions of higher education implement policies to protect the expressive rights of persons guaranteed by the constitutions of the United States and of this state.

### *Background*

SB 18[17] requires universities to allow any person to engage in free speech activities on campus, creates disciplinary sanctions for students who interfere with the free speech activities of others and establishes a process for addressing complaints of potential free speech violations. It allows universities to put restrictions on the time, place and manner of free speech activities. The restrictions must meet the following requirements:

- be narrowly tailored to serve a significant institutional interest;

- employ clear, published, content-neutral, and viewpoint-neutral criteria;

- provide for ample alternative means of expression; and

- allow members of the university community to assemble or distribute written material without a permit or other permission from the institution.

### *Question from the Committee*

**What have institutions done to protect the expressive rights of persons while also maintaining an orderly and safe learning environment?**

### *RFI Responses*

Institutions reported that they have strived to be fully compliant with the requirements of the statute, including, but not limited to, changing all campus grounds from limited to traditional public forums subject only to reasonable time, place, and manner restrictions. Institutions reported that they have also adopted policies to ensure that all such time, place and manner restrictions are reasonable, viewpoint-neutral and nondiscriminatory. As a whole, they reported that a review of their policies is continuous and on-going, and additional modifications may be made as necessary to safeguard the important principles of free speech and assure the right to engage in expressive activities on campuses in Texas.

Due to the pandemic, some trainings were provided to students via email.

### Senate Bill 25
Senate Author: Senator Royce West
House Sponsor: Representative Chris Turner

SB 25, authored by Senator Royce West, and the companion bill to HB 4018 by Representative Chris Turner, authorized multiple measures to improve the transfer of course credits between Texas public institutions of higher education in Texas. The current system of transferring credits from one public university or college to another can often result in students accumulating more credit hours than needed or earned credit hours not counting toward the completion of a degree. According to the bill author, credits not transferring toward a degree cost students and parents in Texas about $45 million annually, and cost the state an estimated $15 million annually.[18]

Texas has 148 public and private higher education institutions, including 50 community college districts and 75 universities.[19] All of the higher education institutions in Texas are required to follow the core curriculum, which outlines the first 42 semester credit hours that all undergraduate students have to take.[20] SB 25 intends to better organize prerequisites, core and lower-level courses, making it easier for students to identify which courses will transfer and how they can rely on fields of study in order to graduate in a timely manner without losing credits.

### *RFI Responses*

### Implementation Updates: Texas Higher Education Coordinating Board

*The following provides a summary of implementation for actions required by the Coordinating Board.[21]*

### Report on Nontransferable Credit Implementation Update

University report: Through a collaborative process with a group of university representatives with expertise in several related areas, the Coordinating Board established a structure to implement the reporting requirement on courses that do not transfer or apply to a degree. The first submission will include the cohort of students transferring for the first time from a community or state college and enrolling in a university in Fall 2020. Institutions should submit this report to the agency by November 1, 2020, and a full report to the Legislature is due March 1, 2021.

Community college report: The Coordinating Board already collects the data required to produce the community college report. The first report will be provided to the Legislature by March 1, 2021.

### Common Admission Application Implementation Update

The state's common application, ApplyTexas, now includes consent language to allow institutions to share student applications.[22]

### Filing of Degree Plan

The Coordinating Board is required to engage in negotiated rulemaking with institutions

of higher education for the administration of this section. Changes related to the degree plan apply beginning with the 2019-2020 academic year.

## Implementation Update

The Coordinating Board convened a negotiated rulemaking committee of representatives from institutions of higher education (public universities, community and state colleges) to develop rules relating to filing of a degree plan as required by SB 25. The rules were posted for public comment and were approved by the Coordinating Board in a special called meeting on December 11, 2019.[23]

## Recommended Course Sequences

The Coordinating Board is required to engage in negotiated rulemaking for rules relating to course sequences. Course sequence requirements start with the 2021-2022 academic year.

## Implementation Update

Course sequencing requirements start with the 2021-2022 academic year and the Coordinating Board was set to seek nominations for the negotiated rulemaking committee but was delayed due to the difficulties the COVID-19 pandemic presented in convening a committee in person and the impracticality of virtually convening such a committee.


## Study and Report on Core Curriculum Implementation Update

Coordinating Board staff are currently engaging community college and university leaders in discussions on transfer policy with an informal transfer workgroup co-chaired by Jacob Fraire, President and Chief Executive Officer of the Texas Association of Community Colleges (TACC), and Dr. James Hallmark, Vice Chancellor of Academic Affairs, Texas A&M University System.

In addition to the efforts of the informal workgroup, Coordinating Board staff is engaging with the Advisory Committee members and are in the process of gathering data on current efforts related to transfer. The data collected is intended to provide insight into institutions' processes for developing the Texas Core Curriculum and to share potential benefits and challenges of developing state meta majors as part of the Texas Core Curriculum.

### *Questions from Committee Members*

Higher education institutions and interested associations gave robust answers and recommendations to the questions posed by committee members. The full answers may be accessed on the Committee website and a summary of answers for each question is as follows.[24]

1. **In what ways can data collection and sharing between THECB and TEA improve and assist institutions with college credit transferability?**

Texas A&M University System indicated that the reporting required by SB 25 could be very helpful in identifying patterns where course applicability is not occurring -- within degree programs, institutions, component area options, etc. Current data, they explained, does not provide that level of information, so they were optimistic that future data made possible by SB 25 would be helpful for advisors in guiding students toward the appropriate courses and away from courses less likely to be applicable to a degree.

Institutions widely expressed support for Coordinating Board's examination of its data structures and processes and supported the agency transforming its data systems in a way that would allow it to be a resource to guide student success. The state's current data collection system, which includes both K-12 and postsecondary data, is stored at the Texas Education Research Centers. Access to the data is limited, restricted, and costly, institutions explained. These barriers were preventing the data from reaching its full potential to be able to highlight the issues surrounding credit transfer. The UT System recommended that rather than depending on students to self-report which courses they have taken at a two-year institution, it would be beneficial to gain access to students' academic records (e.g. course credit) via a secure data portal. The portal would provide admissions officers and academic advisors real-time information to assist students who matriculate to four-year institutions.

2. **What role can school counselors and advisors play in the success of transferable credits? Are there ways in which the state can utilize their expertise and student relationships more effectively?**

Proper, up-to-date training for school counselors and advisors was recommended, in addition to more funding to increase the number of school counselors and advisors. Texas State University System (TSUS) suggested creating a program to train recent college graduates to provide support to students in need of guidance students regarding college admissions and courses.

The UT System reported that Chancellor Milliken had directed the UT System Office of Institutional Research and Analysis to conduct a study of transfer student success within the UT System. The UT System Transfer Advisory Group[25] convened in August 2019 to guide implementation of SB 25, including the development of course sequences; ensure continuity of transfer student matriculation, progress, performance, completion and post-graduate success; identify and direct effective and targeted resources and support to transfer students, including a focus on advising and collaboration with two-year feeder colleges.

The Texas Transfer Alliance[26] is a collaboration of Texas universities and community colleges focused on improving transfer student outcomes. The Alliance aims to foster the conditions for scaled and measurable improvements in attainment rates for baccalaureate-seeking community college students, especially the large number of low-income students and students of color who begin education in the two-year sector. Among its activities, the project pairs two- and four-year transfer partners to advance shared transfer goals. Four University of Texas System institutions—UT Arlington, UT Dallas, UTEP and UT San Antonio—are part of this transfer

partnership strategy.

TACC reported its participation, in conjunction with Texas A&M System, on the Texas Transfer Workgroup, an initiative launched at the invitation of Coordinating Board Commissioner Harrison Keller. The Texas Transfer Workgroup includes four representatives for each of the public community college and university sectors.

TACC continued its RFI response with the following recommendations:

- School counselors and advisors can provide critical information to students, but they need to receive the information in a timely manner and communicate with each student. In many institutions, advising is not mandatory. Even where advising is required, caseloads for school counselors and college advisors are too high to effectively address each student's unique circumstances. The state could provide additional funding for student services to hire more advisors and then engage them in professional development. The state could also provide technical assistance to institutions to help them determine ways such as group advising to make advising more efficient yet still meet each student's unique needs.

- A statewide database of degree requirements at institutions of higher education (IHE) and course equivalencies from one institution to the next will help high school guidance counselors, college advisors, and students understand what courses they need to complete throughout their postsecondary pathway. For example, if students plan to take college courses through dual credit while in high school, then enroll in a community college, and later transfer to a university, understanding the courses in the students' program pathway will improve advising every step of the way. If a university uses course equivalencies rather than the common course numbers as written, students need to look at the course equivalencies (https://www.tccns.org/) and translate those courses into requirements for degree pathway. If all IHEs used the same numbering conventions, the equivalency database would be unnecessary, and students could more readily identify courses they need to take to complete a credential. Understanding how credits currently transfer may lead to discussions to improve transfer partnerships and can help hold IHEs accountable for abiding by extant articulation agreements and fields of study.

**Educate Texas**
Educate Texas leads the Texas Student Success Council, which created a work group focused on transfer policy. The work group is co-chaired by one representative from each community college and university. Educate Texas reported the following recommendations to further strengthen policies that ensure student transfer, improve credit portability, and ultimately contribute to the completion of postsecondary credentials:

- For the top 25 programs into which students are transferring, require universities to identify lower-division transfer courses that apply to that program, the courses that also count for core requirements, and any additional lower-division requirements from that program. This policy has the potential to empower students and high school counselors with the information they need to more efficiently choose and transfer coursework. There

is also a need to examine the programs that do not have established pathways and provide guidance so that these programs can improve transferability for students.

- Improve data sharing between TEA and the Coordinating Board to support efficient transfer of credits for students. Provide institutions of higher education with disaggregated transfer data (including student outcomes) to map pathways and help students understand their opportunities and choices for degrees and credentials.

    o Using data on credit transfer and course sequences supplied by IHEs in compliance with SB 25 to build new (or improve existing) tools and resources to identify course-taking patterns and map more efficient transfer pathways.

    o Conducting a study examining alignment between incentives for transfer in K-12 and higher education to understand their impact on credit transfer, including:

        o College, Career, and Military Readiness (CCMR) bonuses in K-12 established by HB 3 and how they support alignment with the 60x30TX postsecondary goals.

        o Fields of study and meta-majors as they support credit transfer between two- and four-year institutions of higher education.

        o The guided pathways efforts developed by community college systems designed to help more students earn meaningful credentials and transfer to universities with no loss of credit.

    o Make student data actionable for the approximately 80% of students who do not matriculate to four-year institutions by proactively communicating transfer options to students. THECB should develop and support a communications campaign that outlines transfer options for dual credit and two-year students. Using state-level data about four year institutions, students would receive a letter listing institutions that are likely to accept them based on their GPAs, degree pathways, certifications, etc.

- Establish an environment in Texas that is favorable to competency-based education (CBE) and credit for prior learning (CPL). This includes:

    o Supporting institutions offering competency-based education by exempting accredited CBE programs from formula funding penalties developed for seat-based programs. These include the three-repeat rule, the six-drop rule, and excess credit penalties.

    o As appropriate and feasible, the Coordinating Board should develop new rules specific to competency-based education programs. Additionally, the agency should provide tools and resources to support CBE programs implementing the new rules.

- Authorize an interim study exploring the impact of credit for prior learning on student outcomes. Include guidance on best practices for assessing, incorporating, and reporting credit for prior learning counted toward a degree plan. Supporting high-quality competency-based education and ensuring credit for prior learning allows students to progress toward degrees and credentials online and at the pace that works best for them. The formula funding rules and penalties were designed to decrease time to degree for seat-based programs, but they have had the unintended consequence of forcing CBE programs into a semester-based, seat-time structure. To support the scale of innovative options for students, we recommend refining these policies.

In support of these policy recommendations, Philanthropy Advocates, a collaboration with Educate Texas, is working with TACC to conduct research to clarify current transfer policies and positions among practitioners and associations. Additionally, Philanthropy Advocates is supporting TACC in conducting a survey of current students to understand how student behavior towards credit transfer has been impacted due to the COVID-19 pandemic. This research project is aimed at facilitating a better understanding of community college students experience with transferring to a four-year college in order to translate the findings into a state and local policy context and to share this knowledge broadly with the intention of influencing the improvement of transfer-related policy and practice.

## Senate Bill 16
Author: Senator Kelly Hancock
House Sponsor: Representative Lynn Stucky

### *Background*

SB 16[27] creates a student loan repayment assistance program for peace officers who were appointed as a full-time peace officer on or after September 1, 2019, who have earned at least 60 credit hours or the equivalent at an eligible institution of higher education in Texas prior to their initial appointment as a peace officer and who are currently employed and have completed at least one year of employment as a full time peace officer in Texas. The number of peace officers in Texas has been declining, and supporters believe that a loan repayment assistance program would encourage recruitment and retention of qualified officers.

### *Committee Action*

The Committee heard testimony on February 11, 2020 from Charles Contero-Puls, Deputy Assistant Commissioner, Texas Higher Education Coordinating Board; Frederick Frazier, Dallas Police Association (DPA) and Fraternal Order of Police (FOP); Chris Jones, Combined Law Enforcement Association of Texas (CLEAT); and Dallas Reed, Texas Municipal Police Association (TMPA).

Chris Jones with CLEAT explained the importance of a four-year degree for law enforcement officers and that hiring and retaining qualified, education candidates had become a critical and

challenging process. He expressed concerns raised by CLEAT members regarding implementation of the program, including that it was difficult to find the information on the Coordinating Board website. CLEAT suggested that officers be allowed to submit an application immediately instead of waiting until September 2020 so that officers who were hired after September of 2020 were able to immediately apply for these loan reimbursements. He also shared that many who were or would be peace officers prior to September 2020, were upset that they would not be eligible. Dallas Reed with TMPA spoke next and stated that the program was an excellent recruitment tool for police associations.

Frederick Frazer with DPA and FOP stated that law enforcement recruitment was very low. He explained that the bill's objective was to recruit new people and to make the bill retroactive would deplete funds needed to do this.

Charles Contero-Puls with the Coordinating Board provided updates on implementation. In January of 2020, the agency launched the official webpage for the program on their website to provide information to potential applicants. To further disseminate the information, the Texas Commission on Law Enforcement (TCOLE) helped identify peace officer associations to assist the Coordinating Board. The agency is also reaching out to higher education institutions to spread the word to students considering careers in law enforcement.

Mr. Contero-Puls further explained that to fund the program, the Legislature provided $4 million in FY 20-21. With over 12,000 peace officer licenses issued each year, it was likely that demand would exceed available funding and applicants would be received on a first-come, first-served basis. One nuance he pointed out regarding the funding was that because awards were only funded for the second year in the current biennium and double the funding in the next biennium would be needed in order to make maximum awards for the second and third year for the initial cohort of recipients. In order to bring new participants into the program at the maximum award level, the funding level would need to be even greater.

The Coordinating Board estimated that over 1000 applicants that could be funded the first year would be applying for the program and that the program that would require $20 million dollars in funding per year to fund 1,000 individuals at the maximum level.

## Recommendation

With respect to HB 449, HB 1735, SB 212, SB 18, and SB 16: The Legislature should continue monitoring implementation of these measures and evaluate whether additional changes need to be made.

With respect to HB 1638 (dual credit programs) and SB 25 (transferability), the Legislature should build upon the progress made in these areas by embracing additional recommendations, including some provided by stakeholders and detailed in this report. The forthcoming Higher Education Coordinating Board reports mandated by SB 25 should be evaluated to inform legislative action.

# Interim Charge Two

Evaluate current and future capital infrastructure needs at Texas public universities, health-related institutions, and Texas State Technical Colleges in preparation for potential legislation to be considered by the 87th Legislature. Identify and evaluate alternatives to tuition revenue bonds for the State's funding of higher education capital infrastructure needs, including options for addressing deferred maintenance needs at aging campuses.

## *Questions from Committee Members*

1. As a result of the pandemic, have institutions' infrastructure needs changed?
2. How have institutions' needs changed since the 86th Legislature? Are there projects that were included in HB 2000 that are no longer needed; i.e., were funded through other means? Are there projects that were not included in HB 2000 that now are a need? If so, why?
3. If the pandemic has changed institutional needs, are there federal funds that could qualify to help offset COVID-related changes?
4. Has the economic recession impacted borrowing costs for a potential Tuition Revenue Bond? Are there any anticipated changes to the costs of borrowing in the future, should conditions remain as they are?
5. Are there financial or other benefits to paying for TRBs with cash rather than borrowing money?
6. What kinds of longer-term impacts will we see to institutions if TRBs continue to be pushed off?

## *Background*

### *Tuition Revenue Bonds: Definitions and Exclusions*
Source: Legislative Budget Board[28]

Tuition revenue bonds (TRBs) are defined in Chapter 55 of Education Code, which authorizes the following:

- A governing board of a university system may establish a system-wide revenue financing program to provide funds to acquire, purchase, construct, improve, renovate, enlarge, or equip property, buildings, structures, facilities, roads, or related infrastructure at an institution, branch, or entity of the system.

- The board may issue bonds or notes and pledge to the payment of the bonds all or any part of the revenue funds of an institution, branch, or entity of the system, including collected tuition.

- Public junior colleges are excluded from tuition revenue bond authorizations.

### *Role of the Legislature*

- The Legislature authorizes issuance of the bonds in legislation that specifies the projects to be financed at institutions of higher education. Typically, there is not an expiration date on the authorization.

- Historically, the Legislature has appropriated General Revenue for the purpose of paying the debt service on TRBs that are issued for institutions of higher education.

- The General Appropriations Act limits the use of this General Revenue appropriation for only this debt service. Any unused portion of the appropriation must be returned to the Treasury. The General Appropriations Act also prohibits the expenditure of educational and general funds for auxiliary purposes (ex. dormitories, athletics facilities, etc.).

### *Issuance of TRBs*

- The Texas Public Finance Authority issues bonds for Midwestern State University and Texas Southern University.

- Other institutions, including Stephen F Austin and the Texas State Technical Colleges, have the option of using the Texas Public Finance Authority as an issuer.

- All other institutions or University systems issue their own bonds.

- Tuition revenue bonds are not included in the calculation of the constitutional debt limit.

## *Responses to RFIs*

### 1. As a result of the pandemic, have institutions' infrastructure needs changed?

Responses were mixed in regard to whether institutions' needs had increased, decreased, or remained the same due to the changing nature of instruction during the pandemic.

The University of North Texas Health Science Center (UNTHSC) reported that they would not seek the same TRB request from 2019 because they deemed it more prudent to repurpose existing facilities and new bonds would be instrumental in campus optimization and space realignment.

Respondents from Stephen F. Austin State University expressed the need to modify and upgrade classroom technology to accommodate an appropriate online delivery modality because previously deployed technology was geared towards face-to-face delivery of instruction. This was a common theme among institutions as they transitioned from full classrooms and auditoriums to online learning to keep students and faculty safe. Auditoriums that previously held hundreds of students need to be modified as students return to campus in order to maintain proper social distancing. Institutions reported that this will require an investment in infrastructure. The steps needed to make this happen, including erecting plexiglass barriers at

service points and in some labs and classrooms, comes at a significant cost to institutions.

Although the transition to online courses may be a solution to protecting the health and safety of students and faculty, students being present and in-person allows them to be fully immersed in student life and to receive all of the benefits and supports an institution has to offer. Institutions serving high-need student populations, such as University of North Texas at Dallas (UNT Dallas), report that, "students benefit from face-to-face instruction, and that infrastructure expansion would be crucial to continuing to serve the campus's growing population."[29]

The physical classroom spaces require attention to issues such as upgrades to HVAC and IT systems, as well as increased custodial and auxiliary services. Classrooms in institutions are now being cleaned at a much greater frequency than prior to the pandemic. Additional IT personnel support is also required, as more students and faculty are online and are learning to navigate these courses.

As a result of the pandemic, Health Related Institutions (HRIs) require more capacity in order to maintain patient isolation requirements due to COVID-19. These institutions also require high levels of staff and faculty support to ensure that necessary clinical skills are acquired. Texas Tech University Health Science Center at El Paso (TTUHSC-El Paso) expressed that the need for health care professional educational opportunities and graduates has increased dramatically.

Texas State Technical College (TSTC), whose programs often require some level of hands-on delivery, was forced to schedule multiple labs where a single group would normally have fit into one time slot. In order to successfully prepare skilled workers, while following safety protocols, this accommodation required more faculty time and more equipment, which increased infrastructure needs.

2. **How have institutions' needs changed since the 86th Legislature? Are there projects that were included in HB 2000 that are no longer needed; i.e. were funded through other means? Are there projects that were not included in HB 2000 that now are a need? If so, why?**

During the 86th Legislative Session, HB 2000[30] passed the House, but was not considered in the Senate. The bill would have authorized TRBs for capital projects totaling $3.8 billion. After HB 2000 failed to become law, the Permanent University Fund partially funded projects for UT Arlington (Social Work & College of Nursing Academic Building), a joint UT Dallas/UT Southwestern project (UTD-UTSW Translational Biomedical Engineering and Science Building), and UT Tyler (College of Nursing and Health Sciences Building). The University of Houston System received General Revenue funds for the Hobby School and for the Law Center.

Texas is growing in population. With this growth comes a need to accommodate the increase in students seeking to enter the higher education realm. Institutions reported that although they had successfully navigated the transition to online courses during the pandemic, students need face-to-face interaction and instruction. In order to accommodate in person instruction, institutions need updates to their infrastructure. For example, the University of Texas Permian Basin would like to update outdated classrooms, which currently utilize chalk boards. Also, the institution

would like to upgrade technology to give faculty the ability to provide instruction to both online and face-to-face students, as well as virtualize classrooms to give students access to software previously only available on campus. Both would require additional capital.

TSTC expressed that the economy has increased the need for heavily equipped and expensive lab space, stating that, "[t]he demand for workforce training is expected to increase post-recession, and TSTC's ability to meet the demand (in TSTC's hands-on environment) is constrained with the additional social distancing protocols and limited options for online delivery of career and technical instruction."

According to Sam Houston State University, an additional building:

> [Would] facilitate active learning and support student success through engaged, innovative teaching and learning environments, multi-modal research spaces for rapidly expanding programs and remodeled space for success-oriented services such as advising and mentoring programs, career services, enrollment management and other highly effective initiatives.[31]

An issue that has been magnified as a result of the pandemic, is the shortage of healthcare professionals, including available nurses. According to Texas Woman's University (TWU), "The COVID-19 pandemic has put a glaring spotlight on Texas' healthcare workforce shortages."[32] To address this need, institutions such as Sul Ross State University are seeking more building capacity to train nurses and other health care providers.

In addition to the need for new infrastructure, deferred maintenance has become a major and costly issue at many institutions. The University of Texas Health Science Center at San Antonio highlighted several items in need of repair for many years, including, "life safety elements such as fire sprinklers and egress systems are deficient or non-existent in some of the older buildings, and the roofs need to be replaced to prevent further leaks and water damage where current renovations to research and classroom space are underway."[33] The institution has invested over $20 million to address these needs over the past five years but much more is needed.

According to the University of Texas at San Antonio, deferred maintenance should include major renovation of existing buildings making them more viable for decades to come and "an added benefit would be a reduction of the cost of space formula[34] for which the State of Texas pays." Texas Tech University System expressed that the pandemic has further delayed needed repairs as there have been reductions in available labor as well limitations of construction materials needed for projects.

3. **If the pandemic has changed institutional needs, are there federal funds that could qualify to help offset COVID-related changes?**

Federal funding has been used to assist institutions in retrofitting classrooms to upgrade technology needs so they are able to continue educating students at a high level on a virtual platform. Many institutions reported that federal funds awarded had been allocated to offset the direct impact to students and that CARES Act funds could not be used for capital projects, unless

the project was related to the pandemic and did not need long-term financial support mechanisms. For example, federal CARES Act funds were used at the University of Texas Health Science Center at Tyler (UTHSCT) to renovate in order to prepare the facility for COVID-19 patients.

4. **Has the economic recession impacted borrowing costs for a potential Tuition Revenue Bond? Are there any anticipated changes to the costs of borrowing in the future, should conditions remain as they are?**

Over the course of 2020, interest rates on long-term debt have dropped significantly and are at near-record lows.

According to the Texas State University System, the Bond Buyer Index for revenue bonds was at 2.57% on August 20, 2020 (down from 3.20% on January 2 of the same year). As a result, on a $100 million project, the annual debt service would decrease by approximately $400,000 per year over the 20-year amortization.

The University of North Texas System echoed the impact of the current low cost of debt:

> In response to the economic recession, the Federal Reserve lowered the Federal Funds Target Rate to 0.0-0.25%. This in turn drove borrowing costs for our long-term debt to all-time historic lows. If TRBs were authorized and financed in the near-term, we could see a lower cost to finance TRBs than ever before. If the economic recession persists and deteriorates the State of Texas' credit profile, our cost of borrowing would likely be increased. If the economy continues to rebound, we anticipate seeing increases to our long-term borrowing costs.

5. **Are there financial or other benefits to paying for capital projects with cash rather than borrowing money?**

Paying for capital projects with cash from General Revenue (GR) was suggested by the University of Houston System and Texas State University System. However, institutions did recognize the constitutional limits on the use of GR for construction projects.

The UT System noted:

> Should the cash approach be taken, the Legislature could consider accessing the Economic Stabilization Fund for one-time capital funding of projects. While a direct appropriation from general revenue rather than the ESF would provide the debt capacity benefit, institutions are currently facing difficult times and need appropriations for operations to maintain services and preserve jobs.[35]

The UT System explained that making a direct cash appropriation would preserve debt capacity and also help to preserve their bond rating.

Institutions reported significant negative financial impacts during the pandemic – as many

institutions refunded students for unused housing, parking, dining and other services, while incurring new costs for protective and temperature screening equipment. These negative financial impacts, they explained, impacted their bond rating, making a direct appropriation a preferred avenue over TRBs.

6. **What kinds of longer-term impacts will we see to institutions if TRBs continue to be pushed off?**

According to Midwestern State University (MSU), delaying a TRB authorization would have dire consequences for institutions that would be forced to delay construction projects to a future date. These delays would impair institutions' ability to meet the needs of their growing enrollments and continued investment in excellence. The inability to keep up with growing deferred maintenance will result in exponential repair and replacement costs.

Many older buildings also experience health and safety issues, such as a lack of hot water for hand washing. The University of North Texas reported that many of their older buildings had outdated plumbing which was prone to metallic leaching. When a chemical substance leaches or is leached from a material, especially soil, it is removed by the action of water passing through the material.[36]

According to the Environmental Protection Agency (EPA), lead can enter drinking water through corrosion of plumbing materials, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures.[37] Many older buildings still use lead pipes for water systems, and the EPA has promulgated rules for lead.[38] Lead pipes themselves can be quite safe, however leaching can occur from failed joints or pipe corrosion. Because of their high degree of toxicity, arsenic, cadmium, chromium, lead, and mercury rank among the priority metals that are of public health significance.[39]

These metallic elements are considered systemic toxicants that are known to induce multiple organ damage, even at lower levels of exposure.[40] They are also classified as human carcinogens (known or probable) according to the U.S. Environmental Protection Agency, and the International Agency for Research on Cancer.[41]

According to the Center for Disease Control, low water use during the pandemic can increase contact time between pipes and water providing greater opportunity for contamination from these metals or from rust and debris settling. Flushing lines during the pandemic is the currently recommended solution for maintaining water quality. While effective in the short term on metals and for chlorine residual, it does not alleviate the underlying source of metal contamination in older pipe systems. Deferred maintenance funding for piping upgrades as a part of a holistic mechanical and plumbing upgrade project is the preferred solution for older buildings envisioned for continued lifespans.[42]

The primary reason for continued capital construction funding is population and enrollment growth. UTHSCT explained that, "absent tuition revenue bond support, growth in critical programs such as graduate medical education and a future medical school could be slowed. To meet infrastructure needs, UTHSCT would rely more heavily on philanthropic sources, which

are insufficient to cover the entirety of capital needs."[43] This sentiment was echoed by several institutions.

Texas Tech University System noted that:

> Cutting edge research relies on modern, well-equipped laboratory space that only TRBs can provide. Modern well-equipped facilities attract the best and brightest researchers that address the important challenges of the citizens of Texas as well as promoting growth in the regional workforce. Furthermore, the longer the delays in addressing the infrastructure needs the greater the costs for the repairs, renovation and construction will be.[44]

For technical schools such as TSTC, long-term growth plans are linked to increasing the capacity of training facilities on campuses in the regions and labor market areas with the highest growth potential. Postponing TRBs would limit their ability to train and place Texans in fast-growth markets, limiting the economic development opportunities for the state, reported TSTC.

## Recommendation

Long-term interest rates are at near-historic lows, making immediate investment in Tuition Revenue Bonds (TRBs) a prudent decision to expand capacity for a growing population, as well as replace or renovate aging infrastructure on campuses across the state.

It has now been nearly six years since the most recent TRB legislation passed. With some exceptions, the Legislature has generally declined to fund capital construction through the General Appropriations Act and there is no reason to think that will change.

Accordingly, the 87th Legislature should pass a robust TRB measure to fund needed construction and maintenance projects at Texas colleges, universities and health related institutions, taking advantage of exceptionally low interest rates.

# Interim Charge Three

Interim Charge 3: Review progress toward the goals of the 60x30TX plan, including institutional strategies for responding to diverse and rapidly changing workforce needs and demands, including workforce education, industry certification, and degree programs to address healthcare shortages.

Specifically review community colleges' capacity to meet the goals of 60x30TX, including a review of taxing districts and service areas versus geographic areas of need.

Review the Tri-Agency Workforce Initiative's work-based learning, industry-aligned internships, and industry credential initiatives. Consider whether legislative action may be needed to expand work-based learning and recruitment efforts for adults who have previously completed some college level coursework.

*Texas Higher Education Coordinating Board*

The Texas Higher Education Coordinating Board provided the following response to Charge 3: [45]

> In 2015, the Texas Higher Education Coordinating Board adopted the state's current long-range strategic plan for higher education. The 60x30TX plan comprises four broad goals, with the central goal being that by 2030, 60 percent of our younger working population, aged 25-34, should have a certificate or degree. We have made modest progress or held steady on most of the plan's goals. However, it has now been five years since the 60x30TX plan was adopted, and in the coming months our agency will undertake a strategic review of each of these goals to determine whether updates or refinements would be advantageous to the state and its needs and priorities. Specifically, the agency plans to examine ways the 60x30TX plan can emphasize the following key factors:
>
> Student attainment of high-value credentials other than Level I and II certificates or degrees, such as industry certificates, apprenticeships or certain short-term credentials, that will benefit students, families, and the state's economic recovery; adult learners outside the 18-34 population who return to higher education to reskill and upskill; and the essential role institutions of higher education play in research and development.
>
> Prioritizing higher education and student achievement is particularly important today. The COVID-19 crisis has caused tremendous hardships for Texas students, colleges and universities, and our state's economy. Although the uncertainty of COVID-19 remains, higher education offers a unique path to recovery and to a stronger, more durable workforce once this crisis recedes. We know that jobs follow skills. During the Great Recession, the United States lost more than 7 million jobs, including 5.6 million that required only a high school diploma. By 2016, the U.S. economy had added more than 11.4 million net new jobs, but only about 80,000 jobs requiring just a high school diploma had come back – meaning workers with only a high school education experienced almost no recovery at all.

Texas now faces perhaps an even greater challenge. Since mid-March, more than 3.2 million Texans have filed for unemployment relief, with unemployment rates reaching a high of 13.5 percent. Texans without certificates and degrees are in an especially vulnerable position. The unemployment rate for American workers who do not have postsecondary credentials is more than twice the rate for workers with bachelor's degrees. We know Texas will recover, but those who participate in the recovery will need new skills and high-value credentials to fill the jobs of tomorrow's emerging economy.

Even before the COVID-19 pandemic, the Coordinating Board was focused on the importance of reskilling and upskilling Texans with some college, but no credential to help them achieve a better return on their higher education investment and play a critical role in the state's workforce.

Earlier this year, we began a GradTX pilot project focused in the Houston region to re-engage the "some college, no credential" population. This comprehensive regional strategy brings together institutions, business representatives, and community organizations under the leadership of the Greater Houston Partnership. There are an estimated 1 million Texans in the Houston region with some college, but no credential who can benefit from the opportunity to reskill and upskill and help drive recovery.

Additionally, Governor Abbott and the Legislature recently awarded $46.5 million in federal Governor's Emergency Education Relief (GEER) funding to the Coordinating Board to support displaced workers who need to reskill or upskill to get back into the workforce.

We believe the GradTX pilot project, coupled with the federal GEER re-enrollment support, will allow the Coordinating Board and institutions of higher education to develop capacity and expertise in effectively reengaging the "some college, no credential" population. Statewide, there are nearly 4 million Texans who, at some point, stopped out or left college. Many of these students are within striking distance of finishing and providing opportunities/incentives to re-enroll at a Texas institution of higher education will allow them to reskill or upskill, get onto a new career path, and contribute to the state's recovery.

1. **How can the state meet the goals of the 60x30TX plan?**

Institutions explained that their focus was on preparing students for careers in Texas, based on workforce demands. Institutions provided suggestions for state agencies to assist meeting the plan's goals, including:

- Revising the definition of what counts as a certificate to align with the specific training needs of employers to allow institutions to properly prepare individuals for tasks and jobs.

- Continuing financial support of institutions to allow them to continue to have the capacity

to prepare students to meet regional workforce needs was also emphasized. The Texas Engineering Extension Service (TEEX) suggested that funding TEEX, which they reported has a proven track record of training individuals to enter the workforce, would be a valuable investment.

Young Invincibles (YI) suggested that Texas increase state investment in higher education, including investment in state financial aid, open educational resources (OER), and policies for direct student support. The organization specifically encouraged stronger support systems for student parents, students of color, first generation college students, and students who are returning to complete a degree.

For career and technical education, Texas State Technical College said institutions must evaluate job demand in each region and then design program offerings to match those available jobs.

The Greater Houston Partnership discussed the GradTX Pilot Program, the collaboration between the Partnership and the Coordinating Board. which it hopes the Legislature will continue to support, as well as other valuable programs that could help achieve the 60x30TX goals.

Partnerships between institutions were highlighted for their focus on reaching 60x30TX goals. Blinn College reported that through its partnerships with Sam Houston State University and the Texas A&M University System, the institution was able to assist students in reducing time to graduate as well as reducing student tuition costs in some instances. Midwestern State University explained that allowing reverse transfer agreements to complete associate degrees was also a crucial component of these partnerships as a method to help achieve 60x30TX goals.

Western Governors University-Texas (WGU) suggested Texas offer state aid and/or benefits to students attending WGU, as these forms are often available only to students at specific institutions, or of certain ages.  The institution argued that all students of need or other specified qualifications deserve state support that allows them to pursue education at the school that best meets their needs – including flexibility in schedules and shorter timeframe for degree completion -- and prepares them for the workforce.

WGU went on to explain that their online, flat-tuition format allowed students to graduate with less student debt in a shorter time frame than traditional institutions.

2. **How has the pandemic impacted our state's workforce needs?**

The Commit Partnership/Dallas Promise provided the following response:

> The COVID-19 pandemic has left an unprecedented impact on Texas, and particularly on our workforce. Between March and mid-August, a total of 3.5 million workers -- accounting for 24% of the total civilian workforce -- applied for unemployment insurance, a nearly ten-fold increase over 2019. The COVID-19 pandemic and its related job losses have disproportionately impacted low-wage workers and women. Nationally, workers of color are 1.5-4.5 percent more likely to lose their jobs, and workers without a

high school degree were 10 percentage points more likely to have stopped working than otherwise similar employees with college degrees.[46]

Texas State Technical College (TSTC) explained the need for reskilling and upskilling as a result of the pandemic:

> COVID-19 brought massive layoffs in the hospitality, tourism, and retail sectors. These layoffs, coupled with those in the petrochemical arena, have produced the highest unemployment rate since the Great Depression…Recovery likely will involve two phases of workforce training. The first phase should address the immediate retraining needs of displaced workers, as well as the workforce needs within those industries that are still operating and that faced a shortage of skilled workers before the pandemic. The second phase of workforce training should address needs resulting from the likely return and on shoring of many sectors that had moved off-shore. This will happen largely for national security reasons. Additionally, the state should continue to benefit from the relocation of various business and industrial sectors attracted to the stability of Texas' economy. As these things happen, higher education must anticipate where the growth will happen and adjust accordingly. TSTC has the analytics and industry partnerships in place to identify and respond appropriately to these training needs. The College's Rapid Industry Skills & Employability (RI$E) Program is but one example.[47]

Some businesses may not recover, leaving Texans in need of training, re-training, or additional higher education. Many may return to school for advanced degrees or certifications to be less affected by future economic downturns.

### 3. Is there legislative action that could help expand work-based learning?

Alamo Colleges suggested that tax incentives for businesses that provide opportunities for internships, at the high school and collegiate level, could help expand work-based learning. Building on those proposals with the addition of apprenticeships, on the job training, and other work-based learning opportunities could assist to expand the availability of these important experiential learning opportunities for students.

According to Midwestern State University, longer range and broader degree programs with alignment to community college offerings would provide a flexible, well-educated citizen across a career. If funding to explore and develop such programs were made available, that may accelerate the process of developing such programs, such as the state's investment in and support of competency-based degree programs.

WGU explained that its more than 60 bachelor's and master's competency-based programs, "better serves adult learners who enroll with specific skill sets, allowing them to graduate faster and at their own pace. From day one, students are assigned a program mentor who works with the student from enrollment through graduation, providing regular guidance and instruction regarding their programs."

Texas Public Policy Foundation remarked that work-based learning opportunities were a major

factor in determining the quality of a career or technical education program. They recommended the Legislature pass legislation allowing secondary CTE allocations to be used by school districts to outsource to the community paid internships and apprenticeships that serve as practica within a program of study.

Texas A&M Engineering Extension Service (TEEX) responded by saying the state can further support apprenticeship programs and require specific training and certification standards for industries wanting to do business with Texas (for example, cybersecurity). Texas A&M Engineering Experiment Station (TEES) suggested providing financial incentives to companies who invest in certain types of training that fulfills acute workforce needs. This type of approach would benefit the individual worker since their skills would be in demand.

Young Invincibles (YI) provided two suggestions regarding work-based learning. The first was the creation of an Apprenticeship Navigator program with navigators serving as regional points of contact for apprenticeship programs to identify apprenticeship sponsors, create outreach for apprenticeships, and strengthen partnerships. The second was to include the voices of young adults, to whom these work-based programs are aimed to support, in leadership-level conversations in order to help make communication and outreach efforts successful.

4. **Do current community college district boundaries align with the needs of the communities they serve? If not, how should they be altered and why will those changes improve educational opportunities for Texans?**

Lee College provided the following response:

> The history of how community colleges were created in Texas is important in order to understand why service areas and taxing boundaries may not be meeting the needs of the Texans. Most of the community colleges created throughout the state were originally formed based on an unmet regional need and were commonly formed by local independent school districts. After WWII, communities themselves started to form junior colleges in order to serve soldiers coming home from the war.[48]

TACC provided the following background information regarding community college service areas.[49]

> Texas community college service areas were established in 1995 by the 74th Texas Legislature through the enactment of SB 397 authored by Sen. Bill Ratliff and sponsored by Rep. Tom Craddick. Per its bill analysis, the creation of delineated community college service areas was sought to avoid duplication of services. Since the creation of service areas in 1995, subsequent legislatures have amended service area boundaries multiple times through statutory changes; however, there has been no statewide revision to the map.
>
> Short of requiring all of Texas to be in a college taxing district, designating service areas provided a plan giving Texans across the state access to the services of a community college, regardless of whether or not they resided in the taxing district of a college. A

benefit realized from the creation of service areas was the clarification of roles for community colleges in respect to where and how they allocated their resources, providing for greater efficiency in the use of scarce resources. The creation of service areas also eliminated many of the disputes among colleges regarding boundaries and encroachment.

Community college service areas include most of the state, and colleges have a physical presence in at least 106 counties. Physical locations track population centers: the median population of counties with a physical location is 48,981, or 0.17% of the state's population. The median population of counties without a physical location is 8,430, or 0.03% of the state's population. Today, factors impacting the efficacy of service areas include:

- Growth of dual credit and variability in dual credit tuition
- Variability in net asset values (NAV) among the 50 community college districts
- Legislative changes in service areas in some regions of the state
- Online education environment that encourages "shopping" for dual credit

Texas has experienced substantial growth since the implementation of current service areas; however, growth has largely centered in urban counties, especially along the Interstate 35 corridor and greater Houston region. Many rural counties have experienced population decreases even as the state grows.

Service areas could benefit from a continual review process, much like legislative redistricting or agency sunset review and stated that such a process would be complicated but important and the coming 2020 Census presents an opportunity for up to date data on population growth. Potential revisions to community college service areas would need to reflect the changing state demographics and regional variances across the state. Additionally, community colleges rely on a mix of revenue sources including tuition, local property taxes, and state appropriations. The level of reliance on each source varies widely across institutions; therefore, service area changes can have different fiscal implications depending on an institution's profile. Colleges with lower property tax revenue could be more significantly impacted by changes to service areas and subsequent enrollment patterns.

Factors to be considered before any changes to existing boundaries should include:

- Regional targets on participation by higher education regions as established by the Coordinating Board.
- Current levels of service and investment in each service area/county
- Texas population growth patterns
- Dual credit participation rates by school district
- Matriculation patterns of high school graduates to postsecondary education.
- Distance to a campus for a population
- Ideal population targets for campuses
- Education desert spots
- Meeting the goals of 60x30TX

Houston Community College (HCC) echoed much of what TACC reported and added that an interim study that identifies the pertinent issues and other relevant factors that operate to serve the best interest of the state, possibly in cooperation with RAND, may be a good option to explore.

**5. What is the current capability to handle an influx of Texans seeking re-training or upskilling opportunities through state programs?**

Institutions reported having the ability to increase scale to improve capacity for many of their professional programs, but would be limited by the availability of clinical, internship, or field-based experience opportunities. This limitation could be partially addressed through simulation if allowed, where technology and facilities are available, or alternatively, skills training centers would be an ideal way to provide short term and long-term training programs at four-year institutions.

*Texas Association of Community Colleges*

*Responses provided in full.[50]*

> The pandemic has caused a fundamental change, and we are adapting and evolving to increase our bandwidth to help our communities.
>
> Texas community colleges have a history of being bold – through ideas and action. During the great recession we did less with more and were tenacious in our efforts to upskill and re-train the workforce. With fifty community colleges covering 249 counties community colleges will have partnerships and training opportunities to serve the needs of Texans.
>
> Community colleges are ready to collaborate from Texarkana to El Paso and from Dallas to South Texas. One bold idea is the statewide Texas Talent Pathways (formerly referred to as 300X300). With the help of the Legislature, the community college-led Texas Talent Pathways initiative will seek to deploy workforce education in high-demand fields to 300,000 Texans within 300 days. Significant shifts in the market have resulted in the elimination of many existing jobs, and the creation of over 500,000 new ones. But first we must realize the mismatch between workforce needs and unemployed and underemployed workers' skills. Texas Talent Pathways identifies high demand skills and offers related certifications.
>
> Community colleges offer hundreds of certificate options putting students back in the workforce quicker and more efficiently to earn more money for their families. Through regional pipelines we can restart the economy statewide by partnering with our policy makers. Community colleges have the infrastructure to meet the demands, can meet the needs of workers where they live, and provide re-training or upskilling online or in-person.

*Texas A&M Engineering Extension Service (TEEX)*

Through community colleges, technical colleges and TEEX, the state has sufficient training providers to meet the increased numbers of individuals seeking training, re-training and upskilling. However, additional funding to these providers is needed in order to reduce the overall cost to the students to make this training more affordable and accessible to more individuals.

*Texas A&M Engineering Experiment Station (TEES)*

The (workforce) needs assessment requires more effort and detail in order to assess specific needs and not perceived needs. For example, when there were discussions related to new liquid natural gas facilitates building plants in the Port of Brownsville, educational units were ready to train up welders for the construction phase (this would have meant thousands of jobs). Company representatives indicated that they would not hire newly trained welders for the construction jobs since it was a specialized welding process. The concern was that they would be bringing in contractors for the construction phase who need transportation, shelter, etc. So, welders were a perceived need not a real one. If, as a state, we could assess specific needs instead of relying on the grand numbers that often come out of the demographic reports, then we could make specific plans and impacts. This would benefit the companies, educational institutions and individual workers.

6. **What is needed in order to identify and address gaps in existing data collection methods?**

Institutions largely responded that a comprehensive review of data collection methods was needed and that publicly available data should be aligned and integrated across systems. To inform policy decisions, institutions and associations suggested that the data be outcomes-oriented, timely, and actionable.

Texas 2036 suggested that regional workforce data should include skills-based workforce needs and nuanced, research-based workforce projections; where possible, state agencies should utilize proprietary workforce data sets to better identify and plan for workforce demands.

7. **What improvements could be made to alleviate 'summer melt' and to facilitate streamlined student advising?**

*Texas Association of Community Colleges*

Regional collaborations can support high school to college transitions and alleviate "summer melt." In 2020, even as higher education institutions and school districts were managing the weekly challenges of the COVID19 pandemic, Texas witnessed a rise in partnerships aimed at increasing postsecondary education enrollment among graduating high school students.

Two such collaborations:

- **Houston Endowment supports Houston-area students:** Supported by the Houston Endowment, Houston ISD and ten higher education institutions in the region are collaborating to assess the primary challenges students are facing and identify solutions that can be implemented in the short and long term. The project hopes to build upon those short-term steps to develop longer-term cross-system practices and policies that make the college transition more seamless for students. Three program goals guide this partnership:

  - Assess the challenges college-bound students from the Houston region are facing as a result of COVID-19 that stem from current K-12 and higher education processes.
  - Identify "low-lift" opportunities for K-12 and higher education institutions to collaborate in the short-term to address such COVID-19-related challenges.
  -
  - Identify other areas not specific to COVID-19 that could be examined and acted upon in the longer term through ongoing partnership between K-12 and higher education institutions to support postsecondary enrollment and success.

- **Summer Bridge Program:** Supported by TEA and led by the Commit Partnership, the Summer Bridge Program was launched in a partnership between Dallas ISD and area colleges and universities.

  The program provides recent high school graduates opportunities to complete an online course, which provides academic enrichment and pre-college preparation skills aimed at lowering rates of so-called "summer melt". As a part of the Summer Bridge program, the participating college or university would agree to use the successful completion of the online course as a proxy for determining college readiness. In other words, students who complete the online course would be deemed college ready for purposes of Fall 2020 enrollment.

According to McGraw-Hill, colleges and universities have found intervention or bridge programs to be widely successful for entering freshmen to improve college readiness. These support programs have been especially impactful for low-income and minority students who may be exposed to post-secondary education for the first time. Especially in the area of mathematics, where research has shown that the average student will have lost 2 ½ months of math knowledge during the summer break, providing students the opportunity to engage with adaptive or personalized technology to fill in knowledge gaps has helped level equity gaps across the entire study body. In these scenarios, advisors could then better provide direction to ensure a successful freshman year.

8. **What changes, if any, are needed to align data collection between the Coordinating Board, TWC and TEA in order to collect consistent metrics?**

The majority of non-agency responses indicated that the different agencies (Coordinating Board, TWC, and TEA) should coordinate their data definitions and collections. The current data required by each agency are varied, so anything to make it more uniform and decrease the reporting requirements would be an improvement.

Texas 2036 explained that Texas collects immensely valuable, student-level data through the University of Texas's Education Research Center (ERC), but stated that this data was not widely accessible to responsible researchers seeking to help policymakers identify success stories and areas for potential improvement. In secure, responsible ways that protect student privacy, data access to valuable ERC data should be improved for stakeholders.

TEA suggested the following:

- Extend use and assignment of Texas Student Data System (TSDS) Unique ID to facilitate matching across agency administrative data in areas of Tri-Agency interest

- Continued protection of student and educator level data among all users, agencies, administrators, and support staff

- Improve data standards and extensibility of systems (e.g., transcript information) intended to share data across LEAs, including across sectors

- Reduce use of self-reported indicators by sharing of source information, where applicable, timely, and allowed (e.g., use of SAT/ACT scores to determine satisfaction of TSI, dual credit hours earned, etc.)
- Develop consolidated Tri-Agency, stakeholder-facing tools and reports that address (1) common questions and (2) provides relevant context for broader range of stakeholders, such as agency-defined regions or other geographical boundaries of interest

TWC reported the following:[51]

    The Tri-Agency Task Force's Texas Data Workgroup is discussing the following possibilities to enhance matching and sharing data between the agencies and sharing de identified data with stakeholders and the public:

- Extend use of the PEIMS student identifier to facilitate data matching beyond the childcare program, such as for WIOA Youth served by TWC, and enhance monitoring of dropout recovery efforts by identifying when a high school dropout is pursuing their High School Equivalency through TWC's AEL program

- Expand the allowable uses of data between the agencies

- Develop consolidated Tri-Agency, stakeholder/public-facing data tools that answer common questions about Texas education and workforce development including the ability for users to filter the data on a combination of demographic and geographic characteristics as well as time periods

In November of 2020, the Tri-Agency Task Force submitted its report to the Governor's Office.[52]

9. **Does the overall financial status of small and rural community colleges affect their capacity to meet the goals of the 60x30TX Plan?**

*Texas Association of Community Colleges*

Small and rural colleges are not immune to the issues facing small school districts or rural communities in general. Limited local resources, modest property values, and, in some cases, declining population all put stress on these institutions.

Less-resourced institutions often cannot offer some of the tuition waivers and other supports as their larger, urban counterparts. While state funding on average represents roughly 25% of available funds for community colleges, this percentage is significantly higher for small and rural colleges.  As a result of higher dependency on tuition and the state funding formula, volatility in enrollment has a more pronounced effect on small and rural colleges.

10. **How has the overall financial status of small and rural community colleges been affected since COVID-19? How does that affect their ability to carry out normal operations?**

*Texas Association of Community Colleges*

TACC collected responses to the most recent iteration of the LBB survey from 37 of 50 community college districts. Based on the data received and estimates of the statewide figures assuming that non-reporting colleges would roughly mirror the averages of their size-based peer group, colleges across the state have experienced significant financial harm as a result of the pandemic.

TACC analysis of the reported data estimates that the community college sector as a whole will experience a financial loss of $72.2 million in FY 20 as a result of the pandemic, notwithstanding an estimated $123 million in projected reimbursements statewide. As colleges begin the fall semester, new or increased costs related to safe campus re-opening and online education are already being borne. These costs are more pronounced at small and rural colleges that are often less resourced than their large and urban counterparts. Early indications of enrollment declines and the related declines in tuition revenue could increase unreimbursed losses heading into the Fall 2020 semester.

# Recommendation

While Texas has made progress toward the goals laid out in the 60X30TX plan, the state is not on track to meet the goal of 60% of Texans age 25-34 having a post-secondary degree or certification by the year 2030.  Additionally, there is a growing consensus that the goals of 60x30TX may not be ambitious enough.  For example, why focus exclusively on younger Texans, when it is well-known that many Texans older than 34 will need additional education to successfully continue or alter their career paths?

Accordingly, the Legislature should support the Higher Education Coordinating Board in its

stated goal to evaluate and refine the goals of 60X30TX. Specifically, more attention must be given to adult learners and "identifying and prioritizing" high-value credentials.

Cost of college continues to be a barrier for too many Texans. Financial aid should be expanded to allow more Texans to obtain a post-secondary degree or credential.

The Legislature should consider additional investments in the AdviseTX program to allow the Coordinating Board to take a more scalable and strategic approach to advising high school students who attend schools with "historically low college-going rates."

The Legislature should evaluate the use of Open Educational Resources (OER) and consult with relevant state agencies on ways to improve the use of OER among students and faculty. The Legislature should examine additional ways to use OER grants to facilitate the creation of core materials that can be used by students and faculty at all institutions across the state in an easily accessible manner through the statewide repository.

The Legislature should support the ongoing work of the Tri-Agency Workforce Initiative to share data across agencies as the agencies develop strategies to create more pathways to earning credentials that lead to good jobs. If necessary, the Legislature should address barriers to data-sharing identified by the Initiative.

The Legislature should focus intently on items identified by the Initiative necessary to support student success including, but not limited to broadband access, counseling and advising, early child care, financial aid and internship/work study opportunities.

The Legislature should consider action to increase work-based learning opportunities, particularly for Texans who have completed some college but have not earned a degree.

The Legislature should consider the creation of a Sunset-style commission to conduct a comprehensive examination of community college districts' taxing jurisdiction, service areas and enrollment base to determine if any realignments are needed. This commission should conduct its work in 2021-2022 and present recommendations to the 88th Legislature.

# Interim Charge Four

Interim Charge 4: Study the prevalence of online courses and degrees in higher education. Examine how institutions providing online courses and programs are accredited, particularly courses and programs originating from states other than Texas. Evaluate how students whose courses and degrees are primarily online perform in terms of persistence and degree completion versus students who take courses in traditional classroom settings. Study labor market outcomes for students with primarily online courses and degrees versus more traditional programs.

1. **What are the existing barriers to online learning for students and faculty? What have institutions done to alleviate and eliminate these barriers?**

Many institutions reported access to adequate broadband internet service as a major barrier for students and faculty. Lack of availability, financial barriers, and knowledge or skill gaps where major factors. Outages by internet service providers also occurred, which hindered the educational process.

The Federal Communications Commission has a Household Broadband Guide to help illustrate the minimum download speed (Mbps) needed for light, moderate and high household use with one, two, three or four devices at a time (such as a laptop, tablet or game console). This guide defines the needs of medium service as 12 to 25 Mbps and advanced service as more than 25 Mbps. The current definition, 25 Mbps download speed/3 Mbps upload speed, was set by the Federal Communications Commission in 2015.[53]

In 2019, consumer advocacy groups urged the Federal Communications Commission to define broadband as web speeds of at least 100 Mbps, but the FCC kept the 2015 definition.

| | Light Use (Basic functions: email, browsing, basic video, VoIP, Internet radio) | Moderate Use (Basic functions plus *one* high-demand application: streaming HD video, multiparty video conferencing, online gaming, telecommuting) | High Use (Basic functions plus *more than one* high-demand application running at the same time) |
|---|---|---|---|
| 1 user on 1 device | Basic | Basic | Medium |
| 2 users or devices at a time | Basic | Medium | Medium/Advanced |
| 3 users or devices at a time | Medium | Medium | Advanced |
| 4 users or devices at a time | Medium | Advanced | Advanced |

Basic Service = 3 to 8 Mbps*

Medium Service = 12 to 25 Mbps

Advanced Service = More than 25 Mbps

*Mbps (Megabits per second) is the standard measure of broadband speed. It refers to the speed with which information packets are downloaded from, or uploaded to, the internet.

To help alleviate and solve issues with broadband, institutions demonstrated resourcefulness and expanded Wi-Fi networks to parking lots and parking garages so students could access their course materials in a safe environment. Other expansions involved parking school buses with hot

spots in areas where students could access the Wi-Fi. Many institutions also provided students with mobile hot spots and Wi-Fi packs. Although the institutions were able to do so efficiently and quickly, due to the incredible need and volume, it was a difficult process.

These short-term solutions worked to address temporary needs; however, better long-term solutions are needed if there is a continued reliance on Internet service for online courses.

Another barrier for students was not having access to necessary hardware and software. Many institutions provided to students who demonstrated a need for laptops, iPads, webcams, and other necessary hardware and software. However, compatibility with the variety of devices students use also proved a challenge, as did computer and technology literacy. Institutions set up tutorials, webinars and 'Boot Camps' to assist both students and faculty to be able to learn the systems and be productive.

Texas State Technical College (TSTC) reported creating an online orientation for students to help them become more aware of expectations and the online learning environment and to introduce them to the support that was available. While some colleges and universities have obtained CARES Act funding to increase the availability of devices, including laptops and hotspots. This funding addressed immediate needs but is not a continued source of funding or a long-term solution.

For faculty who had previously taught all or mostly face-to-face classes, the fast transition required institutions to work on implementation of a support system and tutorials, in order to keep the educational process smooth and as stress-free as possible. Faculty teaching labs and career and technical education (CTE) courses faced challenges developing activities to address courses' hands-on components. Faculty adapted, and many have found creative solutions to meet student learning needs. For courses with components for which remote learning was not possible, institutions developed procedures for health screenings and distancing to allow some students to come back to campus.

Alvee Hossain, a student who responded to the RFI, mentioned the lack of an established etiquette for online learning as problematic, explaining that "in a classroom, the established method is sitting at your desk, listening to your professor, and taking notes – no talking or getting up unless necessary. In a call, there's no basic expected etiquette regarding keeping cameras or microphones on or off. The inconsistency can cause students to get distracted from an already difficult way of learning."

According to the University of Texas at Dallas (UTD):

> Bureaucracy itself can be a barrier. Internal policies, accreditation guidelines, state law, and federal regulations all needed adjustments, and while most of those came when needed since the onset of COVID-19 in the U.S., not all of the requests for state statute exceptions have been answered. In addition, the lingering federal rules regarding online courses for international students remains an issue in a global pandemic. International students also still face barriers with visa issues and with time zone differences from the institutions in which they are enrolled. UTD is among institutions that implemented an

asynchronous option for each course offered to assist with time zone, technology access, and/or student work schedule challenges.

Texas State Technical College (TSTC) reported assisting faculty with course guidelines and training opportunities for online course development, best practices, and quality assurance. They stressed that learning the new guidelines and participating in the additional training while developing and delivering online courses had been an extra burden on faculty and, in some cases, had led to faculty overload and burn-out.

The Texas Association of Community Colleges (TACC) provided valuable information regarding the Digital Higher Education Consortium of Texas (DigiTex):[54]

> DigiTex assists Texas community colleges in providing learners an education without barriers through high quality digital educational opportunities, resources, and services that help students succeed, ensuring equity through collaboration. DigiTex operates under the auspices of the Texas Association of Community Colleges and serves all 50 public community college districts in Texas. DigiTex is based at Austin Community College, which acts as its fiscal agent.
>
> For institutions facing challenges with access, inter-institutional course sharing, facilitated by DigiTex, can alleviate and even eliminate these barriers. Through this process, a student enrolls in the local community college (Home Institution) to take a course that is taught by an instructor located at another college, the Teaching Institution. Benefits to students include access to distance learning courses statewide; support with high-quality, locally-delivered -- by their home institution -- services; and credits earned at their local college rather than having to enroll in multiple colleges throughout Texas and transfer the credits to their local institutions. Courses are transcripted as courses from their home Institution.
>
> For Teaching Institutions, course sharing can be used to fill empty seats in courses, offer unique courses and programs across the state and beyond, and generate revenue. Home Institutions can fill in gaps in guided pathways and other curricula, bring back "stop outs," and increase retention and completion, leading to economies of scale that allow the colleges to redirect often limited resources. Since March, enrollments through DigiTex's course sharing consortium have increased nearly 150 percent.

Some issues could not be addressed by institutions, including faculty and students reporting difficulty finding a quiet space to teach or to study due to roommates or other family members in the home. A lack of childcare was reported as an issue for faculty and students with school age children at home due to K-12 schools transitioning to online formats.

2. **What information and data is available regarding long-term student success for those taking courses primarily online -- both in general and specific to Texas institutions?**

Institutions reported that graduates of online programs had a commensurate level of success with

their in-person counterparts.

In September of 2020, the Texas Higher Education Coordinating Board (Coordinating Board) retained Student Tracker Premium data services from the National Student Clearinghouse (NSC) for Summer 2020 through Summer 2022.[55] This tool will enable Texas institutions and agencies to better analyze and understand the student educational pipeline from K-12 schools into and through postsecondary education. Some of the benefits include:

- Providing access to custom reports and visualizations of data as well as timely updates to enrollment and completion data
- Providing additional de-identified data to the state's three Education Research Centers
- Assisting the Texas Education Agency in analyzing data for high school graduates who leave the state to pursue higher education

Teachers play a major role in online learners' success. Institutions reported that investment in a specialized support structure for online teachers and learners to include Master's-trained instructional designers was crucial. Also, supporting both teachers and learners through technical and IT support dedicated to online learning was reported as a necessary component of ensuring this success.

*The University of Texas at Arlington (UTA)*

*Full response is as follows.*

> Academic and on-campus debates from the 1990s and early 2000s quickly gave way to research and practice that clearly demonstrated that teaching modality itself did not define quality—well-designed teaching and learning could take place both on-campus and online. More than 400 academic studies and meta-analyses were collected at www.nosignificantdifference.org, later overseen by the Western Interstate Commission on Higher Education (WICHE), a leading national body for online learning. Since that time, hundreds of additional studies have confirmed these findings. Research on critical topics related to online and distance learning appear regularly in research journals and research grants.
>
> National enrollment and thought trends in online learning are available through WICHE/WCET (https://wcet.wiche.edu/), which has for years focused on student success, diversity and inclusion, and more recently on institutional resilience via online learning during times of transformation. National trend data is summarized annually by the Babson Research Group and the Online Learning Commission (OLC) in a national report that is widely respected (https://onlinelearningconsortium.org/read/grade-increasetracking-distance-education-united-states/ ).
>
> The online and distance learning communities played a central role in driving what is today known as "Learning Analytics," a movement of academics and practitioners who research and manage the troves of "big data" that result from online learning. Extensive datasets are generated daily as learners work online in the learning management system,

and these data are utilized by faculty and advisors on campus to model student success, so as to better teach and guide learners for high-engagement academic results. Research in the area of Learning Analytics is also providing insights into successful teaching and learning online through organizations such as the Society of Learning Analytics Research (SoLAR)[56], of which UTA was an early institutional member, and through its international meetings and academic journal. [57]

Houston Community College (HCC) stated that even before COVID-19, distance education enrollments at Texas public college and universities have been trending upward, increasing nearly two percent from Fall 2018 to Fall 2019.

According to data from the Coordinating Board, in Fall 2019, Texas community and technical colleges, statewide distance education enrollments totaled 800,223 (42% of total semester credit hours (SCH)), compared to 531,617 (22% of total SCH) at universities. This data illustrates the important role online education plays at community colleges.

3. **With institutions having shifted instruction to online-only in Spring 2020 because of the pandemic, what lessons have been learned?**

Institutions reported that it was more challenging for students to participate in real-time synchronous lectures and classes as they juggle work and the demands of family at home. To alleviate this issue, asynchronous leaning through recorded class materials, including lectures, should be encouraged to allow students to determine the most appropriate time to engage with the course material.

Institutions and university systems also reported that it would be beneficial to conduct mandatory online instruction trainings and provide support for all faculty, regardless of teaching preference, whether they taught online or only in-person. They also reported learning that a more rapid progression to tools such as Zoom and TEAMS, prior to FY 2020, and their use to improve faculty, staff and student communication would have allowed for a smoother transition to all online classes in Spring 2020. In addition, student-focused functions such as orientation, advising, and financial aid relied heavily on face-to-face interaction prior to Spring 2020. In hindsight, every university office would have benefited from training using online communication tools prior to the pandemic.

From surveys, institutions learned how to better address the needs of students. For example, the University of North Texas (UNT) reported requests from students included making sure assignment due dates and notifications from course instructors were readily available and easily accessible.

In general, the rapid transition from in-person to online formats brought an array of lessons from which institutions were able to learn, including the need for improvements in information delivery, pedagogy, and tech support.

4. **What are the challenges related to technology, quality, accessibility or other considerations? The Committee is seeking the perspectives of college/university**

**administration, faculty and students.**

Gwendolyn Vastine, an associate professor of mathematics at Lone Star College, reported that proctored testing is a concern for math testing, but that ALEKS[58] (Assessment and Learning in Knowledge Spaces), a web-based, artificially intelligent assessment and learning system, has Respondus Lockdown Monitor, which is used in conjunction with a webcam and allows students to test in a way that discourages cheating.

She also reported that her students did extremely well after Spring Break and were able to switch over to the online environment easily, with very few students dropping courses. The success rates for her classes remained high, and she went on to report that many students said they actually preferred the online lectures where they could pause, rewind, and make her repeat herself again and again, unlike the face-to-face classroom.

Unfortunately, Vastine's experience with retention was not universally shared. A common response was that the lack of a set daily schedule and accountability caused students to feel less motivated to stay current with coursework. Many students experienced significant disruption due to the loss of jobs and income, the need to seek alternate employment, or a need to work longer and more unpredictable hours, often with insufficient access to childcare.

Access to technology often impacted student performance, including the need to share technology with other household members and not having enough time to complete assignments as a result. While many programs have been put into place to help mitigate some of the shortcomings related to technology, many students are still struggling. Some issues are more difficult for institutions to address, including students having a quiet space to attend a virtual class or do homework, finding motivation to be attentive in classes, or struggling because they are in a different time zone. With many going through difficult financial times as a result of the pandemic, students may have to choose between taking classes or working to earn money needed to put a roof over their heads. This can lead to students deciding to not enroll, take a reduced load, or just be generally less satisfied with the quality of education being offered.

Institutions also reported significant costs associated with making content accessible to all learners, specifically in adherence to ADA requirements. This includes making videos with closed captioning, providing documents and content compatible with screen readers, alt-tagging images, and providing alternative formats of instructional materials.[59] These additional resources resulted in unanticipated costs to institutions.

Rural East Texas institutions such as Stephen F. Austin State University reported the lack of broadband infrastructure in the region as a major obstacle, explaining that, "the last mile build out of broadband infrastructure is the most challenging. Even when the broadband infrastructure exists, it does not provide the needed bandwidth to support the reliable delivery of information services."

5. **Post-pandemic, will the recent shift to online courses lead to expanded online demand and capacity?**

Institutions reported that the recent shift to virtual learning would lead to expanded demand for online courses and those with a hybrid format where a student could elect to take a class online or in-person. Some students reported that they enjoyed the flexibility of being home and not spending time commuting or searching for parking on campus.

However, not all students agreed. Many reported missing the on-campus, in-person experience and would desire a return to in-person instruction once safe to do so.

If there is an increased number online courses, institutions will need to make adjustments, including the hiring of more tech support staff for students and faculty. Also, additional counselors, advisors, and faculty may be needed to support more of an online format for students.

**6. How can the Legislature address gaps in equity in accessing reliable, affordable Internet access?**

Access to additional funding was reported as critical to ensure that students had access to adequate hardware, software, and high-speed broadband. Allowing the use of financial aid to help pay for these was also suggested, as was the creation of a budget item to help fund technology access and/or upgrades. The development of a state broadband plan was also suggested, or incentivizing internet service providers to extend their commitment to the "Keep Americans Connected Pledge"[60] through the duration of the pandemic.

Postsecondary Advocates Coalition recommended the following:

- Direct additional $10 million from the GEERS fund (via the CARES Act) specifically for postsecondary institutions' instructional materials, including internet infrastructure and device procurement for enrolled students

- Utilize state influence to advocate for more federal stimulus funds directed toward educational purposes, including technological uses

- Avoid education cuts to postsecondary institutions in order to stay on track toward state goals

**7. What sort of differences in quality are we seeing for online nursing programs without a clinical component versus those that do have one or are done in-person?**

*Background*

*The Texas Board of Nursing provided the following background. [61]*

Following Governor Greg Abbott's state disaster declaration on March 13, 2020, the Texas Board of Nursing, with direction and assistance from the Governor's Office, implemented procedures to waive certain requirements to help the state's licensed vocational nurses, registered nurses and advanced practice registered nurses respond to

COVID-19. These requests for waivers are based upon the assertion that strict compliance with these laws could prevent, hinder, or delay the deliverance of nursing care in relation to efforts to cope with the declared disaster.

On March 21, 2020, in accordance with section 418.016 of the Texas Government Code, the Office of the Governor granted the Board of Nursing's request to suspend 22 Tex. Admin Code 217.3(a)(2) and (4). This rule relates to temporary authorization to practice/temporary permits for graduate nurses and graduate vocational nurses. Prior to this waiver, the rule limited the length of a graduate nurse (GN) or graduate vocational nurse (GVN) permit to 75 days. The granted waiver now allows the Board to extend GN and GVN permits up to 6 months.

This extension will allow nurse graduates to continue to practice until they can take the licensing exam. These individuals must still be supervised by a licensed nurse in their GN/ GVN roles. Employers will be able to employ these graduates and meet health care demands during the declared emergency. Further, the public will have greater access to care when health care demands are stretched if these individuals can practice during this time.[62]

Additionally, 22 Tex. Admin. Code 214.10(e)(3), 22 Tex. Admin. Code 217.9(f), and 22 Tex. Admin. Code 217.9(g) were suspended, resulting in the following:

- The suspension of 214.10(e)(3), allows students in their final year of a nursing education program to meet clinical learning objectives by exceeding the 50% limit on simulated clinical learning experiences. Prior to this waiver, these rules limited clinical learning experiences for vocational nursing and professional/registered nursing students to 50% simulation activities in each clinical course.

- This temporary waiver may help senior nursing students enrolled in a program that has ceased direct care clinical learning experiences to graduate as planned and become a part of the nursing workforce during this unprecedented disaster when employers need "all hands on deck".

- The suspension of Rule 217.9(f) eliminates licensure reactivation fees and continuing education requirements for a nurse who has not practiced in Texas and whose license has been in inactive state for less than 4 years. This will help expedite reactivation of licenses during this time of great need to increase the nursing workforce.

- The suspension of Section 217.9 (g) eliminates licensure reactivation fees, continuing education requirements, refresher course requirements, and the jurisprudence exam requirement. Employers who seek to employ nurses who have been out of practice for a significant period of time are encouraged to assess each nurse's competency and offer orientation necessary to assure the nurse is competent to practice safely.

The rule suspensions are in effect until terminated by the Office of the Governor or until the March 13, 2020 disaster declaration is lifted or expires.

It is important to note that if a license was suspended, revoked, surrendered, otherwise placed inactive based on the terms of any prior disciplinary order, or currently under disciplinary monitoring or investigation, it is excluded from being eligible for these waivers.

A preliminary look at 2020 results of the National Council Licensure Examination (NCLEX) for registered nurses and licensed vocational nurses shows no appreciable differences in the pass rates compared to 2019. However, this is preliminary, and results will need to be trended for at least the next year to identify differences. [63]

No nursing program should function without adequate direct patient care clinical experiences because it is not safe. A study of clinical time and availability may determine how to provide higher quality experiences in patient care and identify other learning experiences in various health care settings. Some programs are front-loading didactic content with intense clinical experiences later in the program. High fidelity simulation helps prepare nursing students to provide a higher level of care with actual patients. However, current national research does not support replacing more than 50% of hands-on patient care clinical learning experiences with simulated experiences. Pre-licensure RN students from diploma, associate degree and baccalaureate degree nursing programs and VN students from a nursing program could augment and support nursing services in health care facilities. The Board of Nursing has encouraged programs and practice settings to consider establishing innovative partnerships to assist the nursing workforce needs of the pandemic as well as the need for continuing nursing education.[64]

*University of Houston System*

The University of Houston System reported that while on-line learning is extremely important for pedagogy and clinical teaching, it is an adjunct to such learning for the nursing profession. They explained that most nursing programs have on-line components in their curriculum and therefore the definitions of "online" must also be quantified in numbers of semester credit hours and actual clock hours. A standard definition of "online" was needed, UH explained, stating that, "there are different definitions according to the Coordinating Board, Homeland Security with SEVIS, Texas Board of Nursing and even the University of Houston."[65]

UH further reported that specific issues related to an online-only nursing program without a clinical component include accreditation, ability to gain employment, and a lack of clinical learning.

*University of Texas System Regarding the University of Texas at Arlington*

*Full response is as follows.*[66]

At UT Arlington, our institution with the most robust nursing program, there is no difference in quality between online and on-campus nursing programs. Consistently, on campus and accelerated online programs are offered for RN-BSN, BSN, and MSN programs. All of these programs include a clinical component. The syllabus objectives,

course content, assignments and evaluation metrics are the same for the didactic and clinical components in each course. Only the mode of delivery of the didactic material differs. Where an on-campus class may include instructor lectures, group work, class discussions etc., the corresponding online class would likely include video clips of lecture material, a discussion board, group work. The clinical education component is identical for on-campus and online classes. The COVID-19 pandemic has equally challenged on campus and online clinical courses with similar losses of available clinical sites for face-to-face clinical instruction and a corresponding need to quickly develop increased use of simulation and virtual simulation clinical experiences using our SMART Hospital (simulation facility). UT Arlington faculty and staff members' extensive experience in online learning, role as pioneers in use of simulation for clinical education, creativity, passion for student success and dedication, and seasoned experience as nursing educators, has allowed quality to remain high through constant challenges presented during COVID.

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### *Midwestern State University*

Midwestern State University responded that with the advances in high-fidelity mannequins and simulation, many skills may be practiced and perfected in that environment. These advances also present an opportunity to revisit the allowable percentage of competencies that may be simulated. However, they added that the absence of a significant clinical component would result in an unacceptable decline in quality, as patients are not "standardized." Even with the advances previously described there is a limit to the ability to program variation into a simulation environment. Further, quality nursing and healthcare rely heavily on communication skills, cultural sensitivity, and general care delivery skills that may only be developed with direct patient contact.

8. **What sort of privacy exists for students utilizing some of the more popular online curriculum packages?**

### *Responses*

Institutions largely responded that they either conducted regular in-house training or outsourced the protection of data and privacy. *Full responses are as follows.*[67]

### *Lone Star College*

Lone Star College considers student privacy when purchasing online curriculum packages. Our vendors are required to provide verification that student information is secure prior to the purchase.

*Midwestern State University*

We cannot speak to the exact nature of these as we do not use proprietary online curriculum packages. That said, we deliver our online curricula through our learning management system, Desire 2 Learn (D2L), which provides the privacy and security of student information we require.

*Stephen F. Austin State University*

We leverage the Department of Information Services (DIR) contract requirements for protecting data and privacy. As more online tools are created and utilized, ensuring privacy will become more challenging as integration among the services and tools will be increasingly important to maximize the technology investment and provide better services to students.

*Texas A&M University System*

Our Learning Management Systems are password protected and we use DUO for security purposes.

*Texas State University System*

Institutions utilize annual training in data and information security and ongoing training in cybersecurity to support student privacy concerns and to educate students on security/privacy issues involved in online learning. All higher education institutions utilize multi-layered security and authentication protocols that could include the following: special login credentials, two-step verification, requirement of "strong" passwords, facial recognition, and other forms of biometric authentications (e.g., fingerprints, thumbprints, retina scans, etc.). The right to prevent unwanted disclosure of personal information to others has been, and will continue to be, an important security and privacy concern for higher education institutions. On a regular basis, institutions and the system review contract and vendors to make sure personal student data is not used in any prohibited ways and is compliant with various FERPA guidelines.

*Texas Tech University System*

All systems used by the Texas Tech University System (TTU System) schools are behind firewalls and multiple levels of authentication and encryption. The vetting process for new technologies includes that they comply with FERPA, HIPPA, and institutional security and privacy standards.  All TTU system schools comply with SACSCOC standards that require institutions to be sure that the student who registers in a distance or correspondence education course or program is the same student who participates in and completes the course or program and receives the credit.

*University of Houston System*

Students are guaranteed a reasonable amount of privacy at UH, as the platforms we adopt undergo thorough UIT security screening to guarantee FERPA compliance. As an example, the

screening process for consideration of building blocks for our Blackboard Learn LMS can be viewed at https://uh.edu/blackboard/faculty/building-blocks/ . UH's commitment to student privacy is also demonstrated through its required FERPA training and testing for all faculty and staff each year.

*University of North Texas System*

UNT works closely with our Office of General Counsel and IT security office to ensure technology utilized by our programs include all appropriate privacy measures such as HIPAA and FERPA.

*University of Texas System*

While all technologies that UT institutions acquire and implement comply with FERPA and privacy laws, as required, a UT System task force on Affordable Learning has identified concerns with data collection and privacy for a number of commercial publishing curriculum packages, concerns shared by others across Texas and the U.S. These concerns center on protecting student privacy through clear data-sharing agreements, including transparency around data collection used in advertising and marketing.

9. **Has recently adopted legislation on Open Educational Resources been able to make an impact on the quality of online education?**

*Texas Higher Education Coordinating Board*

*Full response is as follows.[68]*

> HB 3652 (86R)[69] required the Coordinating Board to contract with a high-quality open educational resource (OER) repository to develop and maintain a web portal customized to meet the needs of individual institutions of higher education, students, and others who may benefit from access to open educational resources.
>
> In response, the Coordinating Board partnered with the Institute for the Study of Knowledge Management in Education (ISKME), creators of OER Commons, to create an OER repository for Texas – OERTX. OERTX is designed to facilitate the curation of OER e-textbooks and other OER materials used frequently by Texas institutions of higher education and to support the creation and customization of resources to meet the needs of Texas students and faculty.
>
> All OERTX resources will be shareable, customizable, and scalable digital resources free and available to any user. The Coordinating Board is partnering with Texas institutions of higher education to include faculty-created, proven instructional resources that align with Texas Core Curriculum courses, co-requisite courses, and career and technical programs. The web portal will also offer online teaching support and training for faculty.
>
> Materials developed by Coordinating Board faculty grantees from the 2018 and 2020

OER Grant Program, authorized by the 85th Texas Legislature, will be available in OERTX.

In response to the OER repository created by HB 3652, the Texas Library Association (TLA) provided the following:

Librarians and instructional designers have the experience and expertise needed to curate and create OER materials, train and assist faculty in OER development and use, and promote usage across campuses. These professionals are essential to any OER project, from development to ongoing management, promotion, and training. The Texas Digital Library and other initiatives are providing resources for those interested in expanding OER. [70]

TLA also reported that the University of Texas at San Antonio (UTSA) Libraries was at the forefront of the OER movement on campus. The Adopt-a-Free-Textbook grant program, which began in 2016 and was spearheaded by the library, awards money to faculty who agree to use OER texts in a course for at least four semesters (most continue to use them after the grant period is over).[71]

UTSA Libraries partnered with OpenStax, a nonprofit educational initiative based at Rice University which publishes high-quality, openly licensed college textbooks that are free online and low-cost to print. UTSA Libraries works with faculty to utilize OER from both OpenStax and other free and low-cost online textbook repositories. UTSA reported $8 million in savings from textbooks costs for classes taught by professors who have received grants over the last four years. For example, the UTSA Math Matters team benefited by combining resources from OpenStax and WeBWork to create free online textbooks for College Algebra and Math for Business students, saving them $500,000 per semester, collectively.

TLA recommended state-funded grants (which are offered to support faculty development of OER) need to be extended to librarians and instructional designers. Grants should be available to state and private institutions, they suggested, if they are creating core materials that will be used by students and faculty at all types of institutions across the state, and all OER courses and course materials supported with state funds should be easily discoverable and accessible through the state-wide repository. Lastly, they recommended that funds for keeping created materials up-to-date should be included as part of a grant program.

*Texas Association of Community Colleges*

*Full response is as follows.*[72]

DigiTex recently conducted the first statewide survey on OER programs, policies, and practices at two- and four-year public and private, non-profit institutions in Texas. Conducted in partnership with the national Institute for the Study of Knowledge Management in Education and the Coordinating Board, the survey painted a picture of a growing commitment to OER.

The responses, from 100 institutions, revealed insights into specific priorities, practices, and perceptions surrounding OER across the Texas higher education landscape. The responses included that:

- Affordability and access are key drivers of OER, though teaching and learning benefits also play a role

- The development of faculty OER training and incentive programs are key priorities for institutions

- OER-based courses are prevalent across Texas and likely to scale, and the development of full, OER-based programs are also underway, primarily at the state's two-year institutions

- OER discourse is limited and non-standardized within and across institutions, and the majority of institutions do not have a written definition of OER

- Data collection on the pedagogical and financial impacts of OER is nascent, yet promising

- Institutions view lack of faculty awareness and conflicts with existing priorities as principal barriers to OER adoption

The report concluded that those leading the way in OER across the state are collecting data on the extent and impact of its use. Enabling further expansion of these efforts necessitates institution, system, and state level support as colleges and universities work to more effectively utilize their resources to increase instructor and student use. DigiTex plans to use this data as a baseline for future, biannual statewide OER surveys, to eventually include data on impact and outcomes."[73]

*Synopsis of Responses from Other Institutions*

Largely, institutions reported that OER usage had a positive impact in terms of reducing costs for students or the potential future reduction of costs. In general, institutions agreed that OER was an intelligent, logical move during the COVID-19 pandemic and would likely be utilized more in the future given the partnership with Coordinating Board and the Institute for the Study of Knowledge Management in Education (ISKME).

Conversely, some institutions reported that due to the newness of OER, the impact was either difficult to measure or was modest at this early stage. Institutions reported that they were working to improve the quality of the online educational experience including but not limited to the quality of available materials. Difficulty in identifying materials and in the availability of materials was cited as a reason for the slow process in OER progress.

The UT System reported that their Affordable Learning Accelerator Task Force, with a primary focus on OER, would soon submit its report and recommendations to Chancellor Milliken. Many

of the recommendations speak to assessing impact of OER along multiple measures, including ROI to students and institutions, as well as impact to student learning and success outcomes.[74]

Houston Community College (HCC) shared that the Boston Consulting Report's Case Study, funded by the Bill and Melinda Gates Foundation, included an extensive review of HCC's online program. The report that OER makes a positive impact. The report, entitled, "Digital Learning: Impact on Outcomes, Access, and Economics," confirms that OER at HCC lowers student cost while improving educational quality with indications of academic students returning to the Institution.[75]

Alamo Colleges reported that one area that could benefit from further legislation was the domain of dual credit agreements. House Bill 3650 (86th Legislature) added the requirement that dual credit course agreements between Independent School Districts (ISDs) and Institutions of Higher Education (IHEs) should consider using open education resources in each course offered. The use of the word "consider," was very subjective and not impactful. Alamo reported that challenges exist with current purchasing practices of ISDs while also educating ISDs on OER, the usage of OER, and other cost saving strategies in the classroom.

The Texas State University System explained that they were in the process of developing a systemwide repository of OER resources at the institution, state, and national level, to help promote and encourage the use across their system. Texas State University reported the recent formation of a Managing Textbook Costs committee which was incorporating OER and affordable learning materials in their discussions, inclusion of OER in strategic planning efforts, as well as better communication by the Registrar related to courses that utilize low- or no-cost learning materials. They reported that, "at institutions like Sam Houston State University and Lamar State College Orange, libraries are helping coordinate and take control of campus OER efforts and are helping to promote usage by faculty and track cost savings for students."[76]

The University of Houston System reported that their faculty engage in a wide array of OER projects, including adoption, adaptation, and creation. Of the known OER projects awarded through their Alternative Textbook Incentive Program[77] (ATIP), 27 involve the adoption of OER and/or library materials, nine involve authoring or creating new OER, and 22 involve a combination of adopting, adapting, and/or creating open resources. They reported significant savings to students, explaining, "in the first two years of ATIP, 39 courses replaced commercial textbooks with freely-available resources, affecting approximately 6,383 UH students and resulting in an estimated $863,902 in student savings from textbook costs. For the upcoming 2020-21 academic year, an additional 19 courses will impact approximately 3,352 more students, resulting in a projected $426,556 in additional cost savings."[78]

It's important to mention that the Legislature has provided resources for the creation of materials. SB 810 from the 85th Regular Session provided funding to the Coordinating Board for grant projects awarded to faculty to create and adapt OER.[79] The first round of grant-funded projects will not be completed until August 2021, and the second round of grants has yet to be awarded. In the first round, 15 grants were made to faculty at two- and four-year public institutions across Texas.

10. **Do small and rural community colleges have the financial capability to switch to online, as well as in-person, classes, degrees, etc.?**

11. **How does the impact of COVID-19 affect the small and rural community college's ability to offer online classes and make other changes to adapt to the pandemic?**

*Question 10 was answered in conjunction with question 11 by Texas Association of Community Colleges.*

*Texas Association of Community Colleges*

*Full response is as follows.* [80]

> DigiTex leverages its funding to help ensure that small and rural community colleges have the financial capability to capitalize on online learning as needed and appropriate through interinstitutional course sharing. In fact, a large focus of course sharing has been on supporting participation by the smaller, rural colleges, making it a priority to subsidize the cost of participation for these colleges.
>
> As mentioned above, enrollments through DigiTex's course sharing consortium have increased nearly 150 percent since March, with four rural colleges -- Frank Phillips College, Howard College, Angelina College, and Ranger College -- among the top five in enrollments. Lee College is the fifth. Additionally, Western Texas College is one of our top Teaching Institutions (TI), offering seats in 51 course sections for the consortium for Fall 2020; they also have engaged in 20 course sharing arrangements outside our consortium, enabling them to offer courses to their own students that otherwise might not fill, and to generate revenue as well.
>
> Ranger and Howard Colleges participate as TIs as well, with Howard College/the SouthWest College for the Deaf offering unique courses in American Sign Language. Ranger College depends on course sharing to deliver pathways programs that enhance transferability and employment; otherwise, students might not have access to needed courses. Frank Phillips College provides robust offerings at branch campuses and in remote areas through the DigiTex/Acadeum partnership.
>
> The advantages of participation in course sharing to the rural colleges include capitalizing on courses across the state previously unavailable to their students, helping the students localize the courses to their rural community context as well as complete credentials sooner than what otherwise may have been possible. With a total of 16 colleges currently participating in course sharing, DigiTex projects an increase of at least nine additional participating colleges by Spring 2021, many of them rural.

*Texas State University System provided the following response:[81]*

> TSUS has four smaller enrollment institutions in its system (Sul Ross State University

with campuses in Alpine, Del Rio, Eagle Pass and Uvalde), Lamar Institute of Technology in Beaumont, Lamar State College Orange, and Lamar State College Port Arthur), several in rural parts of the state (SRSU and LSCO), and there is no question that these types of institutions traditionally have less financial capacity to switch to online learning. However, due to their rural nature, Sul Ross State University and its campuses in Alpine, Eagle Pass, Del Rio, and Uvalde, as well as Lamar State College Orange, have increased their online capabilities over the past 10 years to better serve the students and families in West Texas and Southeast Texas.

An enormous benefit of being in a university system, for both public four-year and two-year institutions is the ability to share services, particularly as it relates to technology and online education. Over the past 5 years, TSUS's Chief Online Education, Dr. Bill Angrove, who also is Vice President for Online Education at Sam Houston State University, has aggressively worked with smaller enrollment institutions in our system (which could easily be expanded to other small, rural community colleges) to share services with SHSU in the following areas: learning management system, instructional designers, video capture software, ADA compliance software, 24/7 technology hotline services, among others.

## Recommendation

The Legislature should consider measures to ensure that students have access to adequate hardware, software, and high-speed broadband.

The Legislature should consider creating a standardized vetting process for institutions of higher education with respect to technology systems to ensure they comply with FERPA, HIPPA, and institutional security and privacy standards.

The Legislature should work with stakeholders to ensure that expanded use of online courses does not create new opportunities for cheating.  Institutions of higher education must have strong controls in place to ensure academic integrity.

# Interim Charge Five

Interim Charge 5: Monitor the State Auditor's review of agencies and programs under the Committee's jurisdiction. The Chair shall seek input and periodic briefings on completed audits for the 2019 and 2020 fiscal years and bring forth pertinent issues for full committee consideration.

*The full State Auditor's response and responses from institutions or agencies can be found on the House Committee website.[82]

The State Auditor's Office (SAO) submitted their response to the RFI for the Speaker of the House of Representatives' interim charge regarding monitoring the State Auditor's review of agencies and programs. The reports included were released during fiscal years 2019 and 2020 and include audit recommendations. These reports may relate to the agencies under the Committee's jurisdiction and/or other interim charges issued to the Committee. The State Auditor reported that their office would continue to keep the Committee informed of any additional reports released that may be of interest.

## Recommendation

The Legislature should continue to monitor the actions taken by institutions in their Corrective Action Plans and consider requesting an update from each institution that has not fully implemented its action plan.

Since a Committee on Higher Education oversight hearing on audits conducted by the State Auditor's Office was not possible this interim, the Committee should hold such a hearing during the 87th Legislative Session.

# COVID-19
COVID-19 and Higher Education in Texas

Due to the pandemic and its impact on institutions of higher education, the Committee added a request for information regarding institutions' response to COVID-19. The Committee requested written submissions from public university systems; public colleges, universities and health-related institutions; public community, technical and state colleges; and relevant associations, such as those representing independent and private institutions, faculty associations and student groups. To follow are summarized responses received through September 1, 2020. For the complete responses, visit the Committee's website: https://house.texas.gov/committees/.[83]

## TEXAS HIGHER EDUCATION COORDINATING BOARD'S ROLE

*Full response is as follows.*[84]

> In response to the pandemic and its impact on state institutions, the Texas Higher Education Coordinating Board (Coordinating Board) played a facilitatory role "to collect information and address challenges institutions face in response to the disruption caused by COVID-19." Additionally, the agency focused on working with the Governor, legislative leadership, and other agencies to ensure maximum flexibility of rules and regulations to help institutions adapt to the current public health emergency and continue to serve students, and to collaborate with public and private institutions of higher education across the state to adapt to the changes that may be needed to ensure continuity of operation and instruction for students.[85]

> The Coordinating Board also established a "Coronavirus Resources" webpage to serve as a central hub for information regarding issues arising at campuses as a result of the pandemic, and to provide relevant resources to address questions, other institutions' plans regarding reopening, and notifications of important actions taken by state and federal policymakers. [86]

> In July, the agency posted guidance regarding the reopening of campus operations for the Fall 2020 semester. The guidance included a checklist of recommended health protocols for safely resuming in-person instruction at public and private postsecondary institutions across Texas.

## FEDERAL FUNDS FOR INSTITUTIONS OF HIGHER EDUCATION

### *COVID-19 Impact on Enrollment*

The impact of the coronavirus pandemic on enrollment at institutions of higher education is difficult to predict and may be subject to different and countervailing pressures. Historically, institutions of higher education have seen increases in enrollment during economic downturns. This pattern is particularly pronounced at community and technical colleges. But it is still uncertain how the ongoing pandemic will impact enrollment during

the Fall 2020 semester and beyond. The Coordinating Board undertook a survey of Summer 2020 preliminary headcount enrollments at Texas public universities, technical, state, and community colleges and health-related institutions (final certified data will be available in the fall). This preliminary data showed that summer enrollments statewide increased 11 percent over a year earlier. However, there was considerable variation in summer enrollment patterns across institutions. While 32 of 38 universities showed increases from 2019 to 2020, some smaller regional universities had significant decreases. Approximately two-thirds of community colleges showed increased enrollments compared to Summer 2019, but the range in the percent of increase or decrease varied from -87% to +107% for Summer I enrollments. Enrollments at Texas State Technical Colleges (TSTC) are down, and enrollment in career and technical education (CTE) programs is down at other two-year institutions. Preliminary enrollment data for the Fall 2020 semester will be available in October.

### *Responses from Institutions*

1. **Are institutions of higher education ensuring the health and safety of students, faculty and staff during the 2020 Fall Semester? When applicable, please speak directly to classroom and lab settings, dormitories and dining halls.**

Institutions reported preparing safety protocols to ensure the health and safety of students, faculty, and staff. Frequent meetings were held with leadership to develop a unique plan for each institution to ensure a safe return to campuses. All plans incorporate social distancing protocols; use of face coverings; building cleaning and sanitization protocols; and self-assessment, testing and monitoring. Many reported a hybrid of online and in-person classes for the Fall 2020 semester with the exception of some private institutions. Some schools reported a plan to implement randomized testing upon the start of the fall semester in order to earlier be able to detect a possible outbreak or surge. Baylor University, for example, reported testing 5% of its population on a weekly basis and also reported testing the sewage of residence halls in order to identify "hot spots" for targeted testing.

Classroom capacity was reduced in many instances, including larger classrooms and conference rooms or ballrooms. Cleaning of public spaces was increased in frequency as well, and designated entrances and exits were clearly marked.

Reduced capacity was implemented in classrooms to provide social distancing, as was assigned seating, recording of all attendees and mandating the use of masks by all occupants. Labs at institutions were individually reviewed for necessary and appropriate protocols based on the work performed in the lab, and where necessary, additional precautions for personal protective equipment (PPE) for research teams, including face shields in addition to masks, were required. Texas Tech University reported the development of an app to assist students with self-assessment before attending class.

Many, if not all, residence halls were converted to single occupancy. At some institutions, where the majority of rooms would have multiple occupants, there was increased cleaning and sanitation in common areas; safety and hygiene protocols communicated to all students and

parents; signage across the residence halls to promote social distancing, hygiene and how to report concerns; and enhanced digital communications strategies.

Many institutions implemented a prohibition on guests or visitors in the residence halls during a certain period of time, with a plan to re-evaluate this protocol over the course of the pandemic. Others instituted a limit on the number of guests who could be in one room at a time. Isolation and quarantine spaces were provided as needed for residents and institutions reported that hotel space for students would be provided in there was a need to quarantine. Meals would be delivered to those who are isolating.

To continue serving students who utilize dining halls, in some instances, institutions converted these spaces to takeout-only and began instituting safety protocols which mirrored restaurant precautions, such as having the diner wear their mask at all times except when seated and consuming food or drink. One-way traffic patterns were also put into place. To reduce the chances of guests coming into contact with one another, dine-in service was transitioned to full-service, with servers coming directly to tables.

Most institutions reported that dining rooms would be sanitized daily, and staff were instructed to follow enhanced front-of-house cleaning and sanitizing protocols, including cleaning tables, chairs and front-of-house touchpoints. For the safety of both staff and students, Plexiglas barriers were installed in many dining halls.

2. **What plans are in place for on-campus COVID-19 testing? Do institutions have the capacity to provide testing on campus, both in terms of available supplies and labs to process tests?**

*Due to the specificity of responses, each response is included in full below.[87]*

*Texas Association of Community Colleges*

Based on Legislative Budget Board (LBB) survey results, almost all colleges plan to or are already implementing rigorous screening processes but no testing, often citing the cost. Common screening processes generally consist of:

- Online training for students and employees prior to arrival on campus

- Minimizing campus entrance points and requiring visual screening, temperature check, and verbal confirmation of lack of symptoms or contact with infected/ suspected persons

- Periodic (mostly weekly) online self-certification

- Compliance monitoring, especially in large public spaces

- Agreements to cooperate with local and state health officials for any necessary contact tracing

The few colleges that will have testing on campus are generally hosting community clinics that conduct testing, though some also have their own partnerships with local healthcare providers. Some are also creating more rigorous screening and considering testing for more vulnerable individuals, including those working in labs, healthcare sites, and other close contact environments; athletes; resident students; and those who have recently traveled to known COVID-19 hotspots.

## Midwestern State University

MSU's approach began with questionnaire screening of resident students upon arrival with quarantine and testing of those indicating symptoms of COVID-19. MSU will test symptomatic and potentially exposed individuals throughout the academic year as part of our spread mitigation plan and contact tracing efforts. The samples will be collected in our student health center, with processing by outside laboratories. We currently project adequate supplies and lab capacity to conduct all needed testing. As part of our surveillance activities, we plan to test a random sample of 50 residential students weekly.

## Stephen F. Austin State University

Our students and employees have access to testing via multiple channels. Our student health clinic can order tests for both students and employees. This testing is being conducted in collaboration with the hospitals in the city. To date the processing of these tests have not been hindered by supplies or access to labs. As of today, our response time is averaging 36-48 hours. More information can be found online: http://sfasu.edu/fall2020.

Both students and employees are required to report via an on-line portal when they have had a test. This reporting even prior to a result allows our contact tracing to begin more quickly.

## Texas A&M University System

Texas A&M Health is leading a system-wide COVID-19 testing initiative via an agreement entered into between the Texas A&M University System and Curative, Inc. to provide access to oral testing across all System universities and agencies. The free testing program for all students, staff, and faculty began in July of this year.

The System has committed to supplying up to 20,000 tests per month, and as part of the agreement with Curative, Inc., testing results are provided from their lab within 30 hours. This increased accessibility and availability of COVID-19 testing continues to help Texas A&M mitigate the spread by taking preventative and proactive measures to ensure the safety of students, faculty, staff and communities across the state of Texas. Positive tests across the System will be handled by local health departments and the Texas A&M COVID Investigation Operations Center to assess the COVID-19 situation as it evolves.

The Texas State University Student Health Center (SHC) currently provides evaluation and PCR testing for COVID-19 to students, faculty and staff.  With five testing machines, SHC's maximum total testing output per day is 150 tests.  These are rapid tests, producing results in 15 minutes. Texas State's comprehensive testing plan is to have multiple molecular testing capabilities to mitigate potential supply issues during a COVID surge. The SHC will use the rapid PCR tests for symptomatic persons, and if capacity remains, the SHC will test close contacts.  The SHC will use its reference lab, CPL, for PCR testing that exceeds in-house testing capacity. By using a reference lab to support SHC testing, testing capacity can be increased up to 500 tests per day if necessary. As new testing options become available, they will be assessed for use at Texas State.  We are also entering into a partnership with the county to do a statistically appropriate surveillance testing program of students weekly.

Sam Houston State University (SHSU) is working with its reference lab CPL to provide testing support and has ordered equipment to support rapid testing. Testing capacity may be affected by availability of test kits as regional/national demand continues to exceed supplies available. The SHC has been receiving test kits over the summer and accumulating a stockpile for the Fall.

Sul Ross State University (SRSU) will refer testing as needed to local providers at PCHC (Preventative Care Health Clinic) and Big Bend Regional Medical Center.

Lamar University (LU) is directing faculty and staff to their local healthcare provider or other resources as the Health Center only sees LU and LIT students. LU has provided a list of healthcare entities and testing resources in the community who are providing such services and we have not heard of faculty and staff who are in need of a test not being able to locate an opportunity to test. Regarding students, like SHSU has been receiving testing kits over the summer and have accumulated a small stockpile. Many students also are local residents and seek out testing options available through their healthcare provider. LU has also contracted with a local healthcare provider to complete required NCAA/Athletic testing and they are also available should we have need for more testing availability on campus.

Lamar State College-Orange (LSCO) will refer testing as needed to local providers at PCHC.

Lamar State College-Port Arthur (LSCPA) provided on campus testing for three days in August. Testing was provided by a third party through Port Arthur Emergency Management. Testing was open to faculty and staff the first day and the general public the other two days. LSCPA will refer testing as needed to local providers at PCHC.

Lamar Institute of Technology (LIT) will refer testing to local providers at PCHC, and is working to have testing on campus for a limited time.

*Texas Tech University System*

Texas Tech hosted a drive-thru testing site, organized by the Texas Department of Emergency Management (TDEM), for our university community from August 3rd to August 24th. The drive-thru testing was provided at no charge for students, faculty, and staff, and was voluntary. Testing will now be available at Student Health Services. We are recommending that students, faculty and staff who have not been practicing the safety guidelines recommended by the governor have a COVID-19 PCR viral test prior to returning to campus for any scheduled activities, meetings, or classes.

*Texas Woman's University*

TWU will have the ability to test symptomatic and potentially exposed students though student health services, as well as all testing required by NCAA for student-athletes. PCR testing capacity will be through an outside lab, while antibody testing will be conducted via in-house equipment.

*University of Houston System*

Each UHS institution will have a plan to identify, mitigate and isolate anyone testing positive with COVID-19 virus. For students who live in campus dorms, quarantine spaces have already been identified and set aside if a student tests positive for the virus. Testing will be made available either directly on campus or at a designated site for quick results.

The University of Houston has contracted with UT Health to conduct up to 100 tests per day for students, faculty and staff that are showing symptoms of the virus, with priority for those who have been on campus recently. Additionally, in an effort to mitigate the anticipated spread of the virus resulting from holiday travel, we are transitioning all academic activities online after Thanksgiving, when we will have just a single week remaining on the academic calendar followed by finals. Significant precautions, with guidance from the medical community, will be enforced to create a campus environment that greatly reduces the risk of spreading COVID-19.

At the University of Houston, an occupational nurse has been recruited and will be solely devoted to addressing COVID-19 workplace concerns. Testing for benefits eligible faculty and staff at all UHS institutions is also available through primary care physicians and covered 100% by the state health insurance plan.

On the advice of medical experts, UHS will regularly update positive cases of COVID-19 among members of their institution's communities. Since March 2020 through August 17, 2020, the University of Houston has documented 173 such cases; however, most of them have not been on campus. UH contact tracers, trained through a program developed by the UH College of Medicine, have and will continue to promptly notify anyone in our campus community identified, per CDC guidelines, as being a close contact to any individual on our campus known to have tested positive. All UHS institutions will begin posting the number of positive cases on their COVID-19 websites this Fall.

*University of North Texas System*

Each of the UNT World locations are in different geographic regions and have different testing needs due to the quantity and makeup of the occupants.

UNT Dallas and the system offices located in Dallas County will utilize the testing provided by the county on an as needed basis. At UNTHSC, any required testing is being provided within their on-campus clinic or at county testing sites.

At UNT Denton where there are over 38,000 students, the following testing program has been instituted:

- The Student Health and Wellness Center (SHWC) has the ability to test symptomatic students with rapid antigen tests where results are known within 5-15 minutes. SHWC will make notifications as necessary, including to the Contact Tracing team for decisions that directly impact the campus community, such as the need for isolations/quarantines.

- Random sampling will be conducted with a capacity of 120 tests per day. Random sampling was conducted at Move-In and will be continued thereafter utilizing a random sampling to test by building. UNT will utilize data to make decisions to better isolate the virus across campus.

- UNT currently has 15-18 contact tracers with another 40+ who are trained who will be added to the active team as needed. Any campus community member who is identified as a close contact in the contract tracing process will have the ability to be tested at the SHWC at no cost.

*University of Texas System*

*UT Arlington*

UTA is providing on-campus COVID-19 testing at no charge to students via Student Health Services. In addition, UT Arlington has repurposed the North Texas Genome Center (NTGC) to process test results rapidly. We currently have had capacity to keep up with testing needs for our student community. The NTGC is ramping up to test 750 students per week and eventually have capacity to test 1,500 per week in October.

UTA is conducting surveillance testing for high-risk groups, including intercollegiate athletes, marching band, spirit groups, adapted sports (wheelchair) athletes and residence hall assistants.
An internal contact-tracing team has been established to assist with campus tracing of the virus. This is a critical element in our plan to keep our community healthy. Contact tracing training was conducted in partnership with the Tarrant County Health Department. Our team is responsible for timely notification of close contact individuals, Facilities

Management and University Communications to ensure we are transparent and Clery-compliant.

## *UT Austin*

UT Austin has implemented an extensive testing system on campus in anticipation of the fall semester. The university has the capacity to test hundreds of symptomatic students each day using our in-house lab, with results turned around within 24 hours. We have also acquired three rapid testing machines that will allow for 100 tests/day with a 15-minute turnaround time for results.

Symptomatic faculty and staff may utilize their own healthcare provider or get COVID-19 testing at UT Health Austin, the clinical arm of Dell Medical School. All symptomatic testing will be billed to an individual's insurance, and for uninsured students the university will subsidize the cost of the test so there is no out-of-pocket expense. UT Austin will also conduct free proactive community testing for members of the UT community who are asymptomatic in an attempt to help monitor the spread of the infection. The goal is to test approximately 5,000 members of the UT community each week, as well as all students living in campus residence halls within the first couple of weeks of moving in.

Importantly, testing (especially for those who are asymptomatic) is voluntary and is being offered at little-to-no cost to those being tested. Primarily, UT Austin is using in-house labs to perform symptomatic COVID-19 testing for students, as well as asymptomatic proactive community testing for students, faculty, and staff. Individuals who get tested at UT Health Austin will have their tests processed by a lab external to the university. By conducting the vast majority of our testing in-house, UT Austin has tried to shield itself from potential fluctuations in supply and demand that can impact commercial and other third  party labs. However, to supplement these in-house capabilities, UT Austin is contracting with outside laboratories in case additional or back-up resources become necessary.

## *UT Dallas*

COVID-19 testing for symptomatic students will be offered by appointment through the Student Health Center (SHC). SHC staff will take samples from the students and will then send the samples to UT Southwestern for processing in their diagnostic laboratories. UT Dallas does not have any capacity to perform tests independently on campus. Both the supplies and test processing are being provided by UT Southwestern. UT Dallas employees who have been on campus within the past seven days and are exhibiting COVID-19 symptoms will be offered testing through UT Southwestern's drive-up testing facility or asked to test with their healthcare provider.

## *UT Health Houston*

UTHealth has created a drive through and stood up on-site testing and a molecular

laboratory that offers inhouse testing with a same- or next-day turnaround time for staff and students. Testing is currently recommended for any symptomatic staff and students and for asymptomatic staff and students after an exposure. We can currently administer up to 500 tests/day and plan to escalate to 1000, pending a stable supply pipeline. Although we did not perform "pre-entry testing" and are not planning for now to do random rapid antigen testing, we are offering antibody testing as part of a point prevalence and longitudinal study.

*UT Health San Antonio*

The Department of Pathology made and manufactured testing kits when there were none available nationally. The research community scaled-down research activities in order to strategize the use of PPE to reduce demand and in response to social distancing. Where excess inventory was available, PPE was diverted to clinics. While the supply chain is loosening for basic PPE items, KN-95s, swabs and reagents continue to be challenging to acquire and any continued shortages will make it difficult to provide testing across our community for the COVID19 virus.

UTHSA employees are collecting COVID-19 tests at our Wellness 360 Employee and Student Clinic and our other primary care clinics. The UTHSA Department of Pathology Lab is processing these community COVID-19 tests, in collaboration with University Hospital, our primary teaching hospital.

Efforts are expanding to accommodate the testing of students, athletes, faculty, staff at our sister institution, UTSA, and some San Antonio-area independent school districts, as well as to other surrounding healthcare facilities with overflow needs. We anticipate these testing efforts to continue until an effective vaccination is discovered and widely introduced into the population.

*UT MD Anderson Cancer Center*

Laboratory medicine faculty and staff enabled MD Anderson to establish broad based testing for patients and employees. This includes testing for symptoms; asymptomatic testing of patients after high-risk exposures and prior to key patient care milestones (new patient visit, hospital admission, surgery or other high-risk procedure); and asymptomatic employee testing after high risk exposure and for routine surveillance. Our laboratory also provides testing capacity to Harris Health system patients and employees, allowing as many tests to be processed as Harris Health requests each day.

The institution has seven testing sites for outpatients and employees throughout the Houston metro area, a Swab Team that provides bedside testing to patients in the urgent care and inpatient areas as well as ample supplies and lab capacity for both routine and symptomatic testing of patients and employees (including trainees). We have collaborated with many stakeholders and developed a process to direct students and trainees to specific testing centers per an algorithm approved by institutional leadership. MD Anderson also supplies appropriate PPE for students and trainees.

*UTMB Galveston*

UTMB's labs (clinical and Galveston National Lab) have the capacity to process 4,000 COVID-19 tests per day for patients, staff, students, and our community. Student Health has been performing COVID-19 PCR free tests for symptomatic and asymptomatic exposure based on CDC Guidelines. At present, we do not anticipate any issues with supplies or testing capacity.

*UT San Antonio*

UTSA will offer COVID-19 testing as follows:

| Site/Laboratory | Capacity | Turnaround | Population |
|---|---|---|---|
| On Campus Test Site (Livingston Med Lab) | 200 tests per day | Within 24 hours | Students, faculty and staff |
| UTSA Athletic Facility (UT Health) | 125 tests per day | Within 24 hours | Athletes and Athletics Staff |
| On Campus Test Site (UT Health) | 40 tests per day | Within 24 hours | Symptomatic students, faculty and staff |
| Student Health Services Clinic (Quest Diagnostics) | 20 tests per day | Typically, within 3 days | Symptomatic students |

In addition, free COVID-19 testing is available through San Antonio Metro Health.

*UT Southwestern*

UTSW is a testing site and has capacity to test members of our community on an as-needed basis.

*Texas College*

Texas College has the capacity to offer COVID-19 testing; however, the availability of tests and getting supply chains to provide tests and PPEs are of concern, as they are slow in responding. The administration views the matter of testing as very significant to maintaining a safe environment. It should be noted however that the availability of tests is limited and are not being offered as options for many higher education institutions. And it should be noted that testing beyond temperature checks are of interest as a result of some individuals being asymptomatic and temperature checks do not reveal such.

*Independent Colleges and Universities of Texas* (ICUT)

ICUT compiled the full response of their institutions which can be found on the House Committee website. Many institutions who had 100% of their courses online did not provide on campus testing, but those who did have on campus courses and were able to provide PCR, antigen, or a combination of the two types of testing to students, faculty and staff. Some institutions reported that due to their proximity to a large metro area, they encouraged those seeking a test to utilize free testing being offered within their community.

3. **If applicable, what are plans for collegiate athletics this Fall? How will student athletes be kept safe? If fans will be permitted to attend events, how will fans be kept safe?**

To keep student athletes and staff safe, institutions reported a number of measures being taken, including daily temperature and symptom checks. Many instituted strict hygiene protocols and three-times-a-week COVID-19 testing for student-athletes. UT Austin reported that with the potential COVID-19-associated concerns relating to myocarditis, rigorous heart screening procedures — including an EKG, echocardiogram, and cardiac MRI — are in place for all student-athletes that test positive. These students must be cleared before returning to activity.

Stadium capacity for home football games was to be restricted to 25%, and institutions canceled tailgating and only opened the parking lot within a shorter time prior to and following the end of a football game. Texas A&M University reported that any staff personnel with access to the team bench are required to follow the same protocols required of student athletes. Texas State University System reported that while the Sunbelt Conference still planned to host sports, other conferences involving schools within their system had been postponed indefinitely or moved to the spring semester.

The mental health of student athletes was also an aspect of safety institutions considered, with some providing counseling and sport psychology services.

An additional measure by some institutions included limiting staff who have contact with athletes to only those considered essential, and a full cleaning of all athlete spaces such as locker rooms before any game. Schools reported that after the cleaning was done, the athletic spaces were locked down until game time and then only accessible by student-athletes and coaches. This protocol prevents members of press and others from entering these facilities. In many instances, staff at the stadium for concessions, cleaning, and other needs were required to have health screenings before reporting for work and some institutions reported use of contact tracers with respect to the athletic event as needed.

Those not considered student-athletes or athletic staff were also considered in the safety protocols implemented by institutions. For example, marching bands and half-time performances were eliminated by some institutions to further limit the number of contacts among persons on the field. Schools also limited the capacity in the press box.

Institutional plans for keeping fans safe included more cashless and touchless options for concessions, merchandise, and ticketing. Fans are also required to use the entrance gate specified

on tickets to avoid overcrowding, to comply with six-foot distance markers, and wear face coverings.

**4. What do projected enrollment figures and formula funding look like to institutions for this school year?**

Many institutions reported flat or decreased enrollments among first-time in college students (FTIC). Some institutions reported graduate enrollments could be higher, but that the decrease among FTIC students would offset any graduate enrollment increase. Institutions continued to focus on increasing enrollment and remove barriers to students but acknowledged that in a COVID-19 environment, the best-case scenario would be flat enrollments. TSUS reported a projected increase only in their Lamar University institution.

The Texas A&M University System reported that formula funding supports the core instructional, operational, and infrastructure costs at public institutions and the System's highest priority was maintaining general revenue support to these formulas. University of North Texas System echoed this sentiment, stating that, "now more than ever, stability in state funding for our institutions is critical to ensure we continue to educate the next generation of Texas leaders and accelerate the recovery of our state from the impacts of the pandemic…Especially as we continue to educate more students, we ask that the Legislature at least maintain formula funding General Revenue at the current funding levels. In these uncertain economic times, stable and predictable formula funding is critical for each of our institutions – providing the foundation for each to implement programs and initiatives critical to the success of our students."

The University of Houston System reported that additional emergency financial aid could help to encourage students to stay enrolled, but no additional federal monies had been appropriated for that purpose since March. UT Dallas reported that, "because of the nature of the enrollment decline in incoming freshmen and new master's students, weighted formula hours will decline in some areas."

UT Arlington relayed that their graduate and non-resident students would likely decrease which would cause a corresponding decrease in tuition revenues. UT El Paso, UT Tyler and UT San Antonio were some of the few institutions reporting that their summer enrollments had increased, and they expected fall to be up as well.

Institutions explained that enrollment this school year would play a factor in formula funding for the 2022-2023 biennium when the Legislature convenes.

Texas State Technical College's state funding is based on Returned-Value Funding Formula derived from the wage performance of students for five years after their time at TSTC. Because of this, the impact of COVID-19 would affect funding formula outcomes for several biennia in the future but would not likely impact formula funding determinations for the 2022-2023 biennium.

Texas Association of Community Colleges (TACC) anticipated continuing to shoulder the lion's share of the enrollments in Texas postsecondary education. Dual-credit and continuing education

were some areas where institutions expected a drop in enrollments, partially due to lack of access to technology and to state and local mandated school closures at the onset of the pandemic.

5. **Has there been a noticeable impact on staff or faculty retention with regard to concerns about the pandemic?**

Most institutions reported that there has not been a significant impact on overall retention due to concerns about the pandemic. This is a result of reductions in income, direct and indirect increases in COVID-19-related expenses and adjustments necessary to accommodate revised teaching delivery methods. Institutions did report impacts to staff or faculty who needed to balance the lack of childcare with work and noted that there was a limited ability to accommodate staff or faculty who identified as high risk and requested to work from home.

The federal Coronavirus Aid, Relief, and Economic Security (CARES) Act included $14 billion for higher education, with Texas institutions of higher education receiving approximately $1 billion. The funding was allocated based on several factors, including the number of Pell Grant recipients at an institution and designation as a minority-serving institution (MSIs) or Historically Black College and University (HBCUs).

In addition to direct federal funding to institutions, in July, Governor Abbott and legislative leadership announced $175 million in CARES Act funding through the Governor's Emergency Education Relief (GEER) Fund for Texas higher education.[88] With the focus of the funding on helping students continue or restart progress toward earning a postsecondary credential or degree. This funding was divided as follows:

- **$57 million** to help preserve FY20-21 funding for the TEXAS Grant, Texas Educational Opportunity Grant (TEOG), and Tuition Equalization Grant (TEG) programs,

- **$46.5 million** in emergency educational aid so students who have been financially impacted by COVID-19,

- **$46.5 million** in targeted financial aid for upskilling and reskilling displaced workers with high value credentials,

- **$15 million** for strategic education and workforce data infrastructure to provide timely, actionable intelligence to students, institutions, employers, and policymakers; scale and expand existing technologies and tools that support college and career advising; and help students stay on track to earn high-value credentials, and

- **$10 million** to improve the quality of online learning by strengthening distance education course offerings and bolstering institutions' capabilities to use data to support student success. This includes funds to develop Open Educational Resource (OER) course materials that can reduce costs to students.

*Texas Emergency Aid Grant Program*

One of the items that was quickly identified as a priority was providing increased aid to students who suddenly found themselves subject to unexpected needs, including covering the cost of healthcare, childcare, and housing. Additional expenses also included support for services such as food pantries and clothes closets; and technology supports such as laptops and hotspots.

In order to build institutional capacity to support emergency aid programs, the Texas Higher Education Foundation, in partnership with Greater Texas Foundation and Trellis Foundation, launched the collaborative Texas Emergency Aid Grant Program to support students across Texas public and private higher education institutions. This initiative allows institutions to apply for grants from the Foundation to support their emergency aid programs and provide direct or indirect assistance to students impacted by the pandemic.

With initial anchor funding of $711,000 from partners and individual contributions, the Foundation was able to award grants to 57 of the 121 institutions that applied for funding. Grants varied from $10,000 to $20,000 and were prioritized based on the student body's financial need, with different weights for community colleges and universities. The Foundation continues to raise funds for this effort and will make additional awards to institutions.

6. **Health Related Institutions (HRIs) were exempt from the 5% budget cuts earlier this year, due to their important role in resolving the public health crisis. What are some of the programs, research, and responses to the pandemic that our Health Related Institutions have contributed?**

On May 20, 2020, Governor Abbott, Lieutenant Governor Dan Patrick and House Speaker Dennis Bonnen sent a letter to state agencies and public institutions of higher education requesting each submit a plan identifying savings that would reduce their general revenue related spending by 5% for the 2020-2021 biennium.[89] HRIs and community colleges were both exempt from the 5% reduction. These plans were to be submitted to the Legislative Budget Board (LBB) and the Office of the Governor by June 15, 2020.

Institutions responded to the pandemic in a multitude of ways, utilizing students, faculty, and staff to mobilize and implement programs. They conducted studies on how the virus spread and best ways to lessen the risk of spread. They implemented contact tracing training and deployed teams to do the work, and also assisted in helping their local communities obtain testing in a variety of ways. They conducted research on the development of a vaccine as well as research on effective treatment regimens.

*Full responses are as follows.*[90]

*Texas A&M University System*

Texas A&M Health has been a leader in the response to COVID-19, utilizing the expertise and commitment to service of its students, faculty, and staff to lead testing and contact tracing efforts; direct research projects; and provide services in innovative ways

during the pandemic.

Texas A&M Health assisted with the early design of a contact tracing program for the Department of State Health Services (DSHS), through which Texas A&M Health strategized to mobilize Texas A&M University System existing resources for the statewide contact tracing initiative workforce. Texas A&M was the first academic institution in Texas to contract with DSHS, immediately deploying personnel from Texas A&M University and other Texas A&M System partners, including Healthy South Texas and Texas A&M AgriLife Extension, Texas A&M Forest Service, and the Colonias Program at Texas A&M University, to provide epidemiologists, contact investigators, and contact tracers as part of the state's Texas Health Trace system. On a local level, Texas A&M Health formalized an interagency agreement with the Brazos County Health District to form the Texas A&M COVID Investigation Operations Center. Through this agreement, Texas A&M Health is selecting, training, and managing up to 60 employees, including contact tracers, case investigators and epidemiologists, to provide contact tracing services to the Brazos County region. In addition, Texas A&M Health is providing similar contact tracing services for every campus location throughout the state, and for employees of all Texas A&M System agencies, wherever they are located throughout Texas.

In addition to testing and contact tracing efforts, Texas A&M School of Public Health (SPH) is leading a COVID-19 response and modeling initiative. Faculty and students within the School of Public Health have been actively involved in developing actions and lessons-learned reports using their experiences working within Texas and throughout the world, and in conjunction with the Texas Department of Emergency Management (TDEM, a Texas A&M System agency) and the Office of the Governor. In addition, SPH faculty have been documenting and modeling the spread of COVID-19 and the related health care system impacts. Since April, utilizing real-time data from the state and collaborating partners, the SPH has led a University-wide group to provide weekly updates on the current status and future predictions of the spread of COVID-19 statewide, as well as locally. These updates are shared with DSHS, the Texas Emergency Management Advisory Group, University leadership, and local decision makers.

From a research perspective, Texas A&M Health is involved in or leading numerous efforts in vaccine development and treatment responses. The Texas A&M University System and Texas A&M Health Center for Innovation in Advanced Development and Manufacturing (CIADM) received a federal task order as part of the Operation Warp Speed initiative, which reserved production capacity at CIADM to mass manufacture the COVID-19 vaccine candidate Novavax, Inc., NVX-CoV2373, and to potentially manufacture other leading candidates for COVID-19 vaccines. CIADM is currently working with its partner Fuji North America to build out facilities and processes to manufacture as many as 500 million vaccines. The CIADM was one of three centers developed in the U.S. in response to the H1N1 influenza pandemic by the Biomedical Advanced Research and Development Agency, or BARDA, part of the Office of the Assistant Secretary for Preparedness and Response at the U.S. Department of Health and Human Services.

Texas A&M Health is leading a group of scientists and medical doctors with Harvard's School of Public Health, MD Anderson Cancer Center, Cedars Sinai Medical Center in Los Angeles, and the Baylor College of Medicine in Houston to repurpose the vaccine, BCG, a nearly 100- year-old tuberculosis vaccine still in use worldwide. Researchers hope to demonstrate that the BCG mitigates the effects of COVID-19 and/or improves the impact of a vaccine, allowing fewer people to be hospitalized or to die from the illness. Other research projects include a vaccine evaluation study; an investigation into fluorescent biosensors that can detect virus particles for flu, dengue, zika and now COVID-19; and the use of adult stem cell products to treat lung injuries caused by COVID-19. Texas A&M Health is also working in partnership with the biopharmaceutical company Pulmotect and MD Anderson Cancer Center on an inhaled therapeutic drug that could provide short-term immunity against COVID-19.

The Texas A&M Health Engineering Medicine (EnMed) program - a collaboration between Texas A&M Health and the Texas A&M College of Engineering - has responded to the COVID19 pandemic in a multitude of innovative ways and in support of Texas Medical Center organizations like MD Anderson, Baylor Scott & White, Memorial Hermann, and Houston Methodist by creating prototypes, testing, and fabrication in the following areas:

- COVID-19 testing booths
- 3D printed swabs for COVID-19 testing
- Electric beam decontamination of PPE N95 masks
- Inhaled buffer to enable multiple patient usage of inhalers
- Simpler alternatives to ventilators o DIY PPE masks
- Intubation chambers
- 3D printed spacers
- 3D printable autoclavable masks
- PPE gowns
- 3D printable PEEP valve for ventilators
- Sterilizing N95 masks
- Robotics for COVID-19
- Smartphone app to capture community spread patterns

In keeping with its mission to improve health outcomes in rural and underserved areas, Texas A&M's Healthy South Texas program is providing emergency diabetes management kits and medication assistance to low-income individuals, many of whom have lost their health insurance coverage along with their employment during the pandemic. Throughout the COVID-19 crisis, Texas A&M Health College of Dentistry has provided ongoing emergency dental services to patients in its North Texas clinics, the majority of whom are uninsured and have no other access to dental care.

In addition, Texas A&M Health deployed Texas' first telehealth station of its kind in Cameron, Texas to help address the growing crisis related to rural health care access that

has been exacerbated by COVID-19. Texas A&M Health has also worked to provide up-to-date and accurate information to students, faculty, staff, and the general public through more than 3,000 local, state, national, and international media appearances, numerous articles, and a free video series, COVID-19 Conversations.

*University of North Texas System*

The COVID-19 pandemic requires those invested in the community's well-being to react with leadership, teamwork and innovation. The University of North Texas Health Science Center (HSC) at Fort Worth is on the front lines of that response.

**Testing**

- UNTHSC faculty, staff and students volunteered 6,309 hours to test 3,247 people, including 973 first responders, at two public drive through test sites. One of the test sites was in underserved southeast Fort Worth.

- The UNT System College of Pharmacy manufactured 500 units of Viral Transport Media (VTM) for Tarrant County Public Health. The solution is an essential component for COVID-19 testing and shortages have been reported.

- UNTHSC opened a COVID test clinic on campus for students, staff and City of Fort Worth employees.

**Public Health**

- Students from the UNTHSC School of Public Health volunteered 2,897 hours to assist Tarrant County Public Health investigators with critical contact tracing through July 31.

- A UNTHSC data analytics team led by Dr. Rajesh Nandy analyzed publicly available data related to the pandemic and, through Aug. 7, has issued six reports on trends and projections.

- UNTHSC's startup laboratory became the new headquarters of an emerging biotech company developing a hand sanitizer to combat coronavirus.

- UNTHSC partnered with the City of Fort Worth to monitor COVID-19 and West Nile virus in the community and joined communication resources to educate the public.

- Student and employee volunteers helped the Tarrant County Public Health information hotline triple its capacity to handle calls and operate 24 hours a day, seven days a week.

- UNTHSC donated 5,000 surgical masks to Fort Worth Fire Department and

partnered with Tex-Air Filters to make masks to distribute 7,000 protective masks to vulnerable populations.

**Community support**

- UNTHSC has delivered 1,500 boxes of food containing fresh dairy and produce to families in need every week since July 10 and will continue through Sept. 4.

- A team of social workers in the UNTHSC Center for Geriatrics launched the Cheer over Fear campaign to support isolated older adults through handmade cards, letters and artwork.

- Texas College of Osteopathic Medicine students formed DFW COVIDsitters, a free childcare service for health professionals on the front line.

- To address concerns about child abuse, UNTHSC students and pediatricians began calling struggling families to offer support and connect them to resources.

- Launched the COVID Connection Calling Plan in which HSC leaders personally called all full- and part time faculty and staff members – 1,384 calls in two weeks – to check on their well-being and thank them for their work. The Alumni Relations team made more than 8,000 calls to check in with HSC alumni.

*Texas Tech University*

Although Texas Tech University (TTU) is not a health institution, TTU's Institute for Environmental and Human Health (TIEHH) is a BSL-3 CDC bioterrorism sentinel laboratory equipped to detect potential bioterrorism agents and other human health threats from zoonotic and infectious disease. TIEHH was the first member of Texas' CDC Laboratory Research Network to begin testing samples collected from suspected COVID-19 patients. To date, TIEHH has conducted over 12,000 COVID-19 tests for hospital, clinics, county health departments, nursing homes, and industrial facilities throughout a 67-county region of West Texas.

Viral transport medium (VTM) is required to stabilize samples collected from suspected COVID-19 patients, so the samples can be transported to a testing site. During long periods over the past 4-months, VTM has been in critically short supply, threatening the state's ability to continue testing. In coordination with Professors Harvinder Gil and Steve Presley, TTU has generated over 34,000 VTM sample-collection kits. These kits have been distributed to health authorities in 26 counties throughout the West Texas region, and helped supply State of Texas COVID-19 rapid response teams working out of Austin.

*Budget Cuts to Higher Education*

7. **How have state and federal COVID-related funds already impacted budgets?**

*Full responses are as follows.*[91]

### Midwestern State University

The university received $4.6M of CARES Act funds, of which $2.2M was disbursed in student emergency aid and assisted 3,370 (60.7%) students. The $2.4M for institutional support provided relief to our auxiliary housing and dining operations when the university suddenly transitioned to fully online learning in March 2020. These funds provided reimbursement of $1.7M in refunds made to students for unused housing and dining services. The remaining CARES Act funds were used for personal protective equipment, campus signage, and the expansion of campus IT capacity to enhance flexibility in teaching and learning to support a variety of teaching modalities.

### Stephen F. Austin State University

Federal funds were provided through the CARES Act of slightly over $10.5 million. Of this, $5.2 million was legislatively mandated to be awarded to students as emergency aid; the remaining $5.2 million is divided as follows: $2.6 million allocated to instructional classroom technology upgrades and $2.6 million allocated to fiscal year 2021 budget support. SFA received additional federal funding from the Strengthening Institutional Programs component of the CARES Act in the amount of $513, 425, which was allocated to fiscal year 2021 budget support. As SFA begins opening for the Fall 2020 semester, there is a recognition of the volatile economic environment. Families are experiencing unemployment, students have increased financial needs, and state revenues are lagging. Likewise, the university will experience additional costs associated with maintaining safety protocols. These include maintaining aggressive sanitization and hygiene protocols as recommended by authorities as well as increased custodial cleaning.

### Texas A&M University System

Across the Texas A&M System, the mandated 5% budget reductions for the 2020-21 biennium total $84.6 million. This reduction, coupled with $150.9 million in COVID-related losses and offset by federal CARES funding ($56.3 million in institutional support and $64.7 million in funds for our Minority Serving Institutions), resulted in a net loss of $149.3 million across the System. These reductions hurt. Our institutions had to cut into the teaching and services provided to our students that are and will continue to impact students' success and time to degree. Continuing these reductions into the 2022-23 biennium will further harm our students.

### Texas State University System

CARES Act allocations provided a critical source of funding for direct grants to students, rebates/refunds for Spring room and board, and mitigating costs associated with transitioning to remote learning. Ongoing costs associated with increased COVID protocols (enhanced cleaning, COVID testing, materials, Wi-Fi parking lots et.) are

creating additional stress on limited financial resources impacted by State appropriation reductions (implemented and anticipated). The need for additional funding is acute as the costs of preparing for and responding to COVID are significant at the same time our enrollment is down and state appropriations have been reduced.

The Federal CARES funds have been fully allocated and provided direct grants to students, rebates/refunds for spring room and board, provided direct support of the purchase of cleaning and other supplies related to COVID response, and mitigating costs associated with transitioning students to remote learning.

The recent announcement of additional Federal Funds from the Office of Governor on the allocation of Governor's Emergency Education Relief  (GEER) funds for targeted Financial Aid for upskilling and reskilling the workforce, emergency student support, restoration of financial aid, enhanced data infrastructure and strengthening online learning we anticipate will have meaningful impacts for our students and help address budgetary impacts.

*Texas Tech University System*

Texas Tech received the Higher Education Emergency Relief Fund – Student Portion in the amount of $12,757.626. We received 21,312 student applications and awarded 21,103, disbursing the full amount of funding received by the end of June 2020. Texas Tech received the Higher Education Emergency Relief Fund – Institutional Portion in the amount of $12,757.626. We utilized the funding for costs associated with significant changes to delivery of instruction, including refunds made to students for housing and dining, costs associated with online instruction and providing students hardware for laptops and internet connectivity, and costs to return students back to campus from study abroad courses.

Texas Tech also received Minority Serving Institution funding in the amount of $1,928,953. One-half of the amount is allocated to student emergency relief needs and the other half is allocated to institutional costs associated with changes to delivery of instruction, including changes to student fees.

*Texas Woman's University*

The federal aid provided by the CARES Act has been a lifeline over the past 6 months and has definitely helped TWU to continue serving our students and the State of Texas. The expenses associated with pivoting to on-line learning were substantial and without the CARES Act funding would have significantly affected operations. Expenses include but are not limited to:

- Providing technology to faculty, staff and students to facilitate online learning;
- Creating Wi-Fi access in parking garages and other common areas;
- Redesign of academic, housing, dining, and other facilities to accommodate social distancing; and

- Increased use of support services.

In addition to expenses there were substantial losses in revenue for things like dining and parking fees that were either not collected or refunded to students.

We continue to account for expenses and lost revenue related to COVID and appreciate the Governor and Legislature's efforts to collect this data through the LBB and other means.

We are also grateful for the recent injection of funds into the Texas Grants program. Those funds are extremely important to the student body we serve at TWU. Over half of our students are "Pell Eligible" and any support for financial aid at the State and Federal level will be critical in maintaining our progress towards 60x30.

*University of Houston System*

The Federal CARES Act was certainly valuable in helping to cover some of the costs related to covid-19, but given the magnitude of the costs, it did not cover nearly enough to avoid serious financial loss. The University of Houston, for example, experienced an estimated loss of $35.7 million in revenue in FY 2020 with only $18 million in CARES Act funds that can be used towards these revenue losses. To encourage enrollment during the summer semesters, each university within the system discounted some mandatory fees, at a considerable loss of revenue from these fees. We again anticipate significant reduction in revenues again during the Fall semester as students have opted for more online classes than in-person, putting financial stress on auxiliary services like dorms, food services and parking that are not supported by state funds. There continues to be a concern that students will struggle to afford the cost of tuition during the Fall semester without a significant influx of emergency financial aid in addition to what is already provided to a student population that relies heavily on entry level and service industry employment incomes to pay their tuition.

In trying to absorb these revenue losses and to comply with the biennial 5% reduction to 2020-21 general revenue-related state appropriations, each of our universities instituted a variety of strategies in order to reduce expenditures, including instituting a freeze on filing vacant positions, forgoing merit increases, restricting the letting of new non-essential contracts, elimination of unfilled staff positions, reduction in force and elimination of academic programs.

*University of North Texas System*

UNT System institutions were allocated $35.25 million in combined CARES Act funding. The student portion of these funds allowed our institutions to support students in crisis with direct grants approaching $12 million awarded in FY20 and expectations of additional awards of $4 million in FY21. By providing refunds to students for auxiliary services not utilized in Spring 2020 and waiving certain fees for Summer sessions, UNT System institutions were able to further alleviate the burden on students by an additional

$12 million - the institutional portion of CARES Act funds helped to offset these losses in income. UNT and UNT Dallas also are receiving MSI CARES Act funding and are serving students by utilizing those monies on recruitment and retention initiatives for minorities. Without CARES Act funding, much deeper cuts to FY 2020 budgets would have been required - severely limiting our ability to directly assist students impacted by the pandemic and reducing the level of services provided to all students.

While CARES Act funding has been critical in UNT System institutions support of its students and its missions, the System still expects a combined deficit of over $27 million in FY20 and additional losses in FY21. COVID-19 has created unprecedented financial challenges for UNT System institutions and institutions across the state. Now more than ever, continued, stable state funding is critical for our institutions to be able to continue to provide high-quality education and academic support services for students across UNT System institutions and enable our institutions to be effective partners in helping the state recover from the economic downturn.

8. **How has the pandemic affected the overall financial status of small and rural community colleges?**

*Texas Association of Community Colleges submitted the following response for questions 4, 5, 7 and 8.* [92]

Community colleges can draw from the experiences of past economic recessions to anticipate enrollment increases. The question is whether those increases will be realized in the Fall 2020, given the active health concerns over COVID-19, or come in the Fall 2021. Under either scenario, community colleges are well positioned to support Texans seeking to upskill or reskill as they restart the Texas economy. As of Fall 2019, Texas community colleges enrolled nearly 54% of all Texas undergraduates, 92% of all CTE enrollments, and 46% of all students in higher education. We anticipate continuing to shoulder the lion's share of the enrollments in Texas postsecondary education.

While the COVID-19 pandemic is seriously stress testing the operating budgets of Texas colleges and universities, developing reliable statewide estimates of the impact's severity is challenging at this stage. The Legislative Budget Board (LBB) has been collecting monthly financial impact information from all state agencies, including higher education institutions. Although this survey was not intended to enable aggregate analyses and the data are not being reported either universally or uniformly, it has produced the best available means for estimating how the pandemic has affected community college and university finances and will continue to affect them in the near future.

TACC collected responses to the most recent iteration of the LBB survey from 37 of 50 community college districts. Based on the data actually received and estimates of the statewide figures assuming that non- reporting colleges would roughly mirror the averages of their size-based peer group, colleges across the state have experienced significant financial harm as a result of the pandemic. TACC analysis of the reported data estimates that the community college sector will experience a financial loss of $72.2

million in FY 20 as a result of the pandemic, notwithstanding an estimated $123 million in projected reimbursements statewide. If these figures hold, community colleges will receive reimbursement for about 63 percent of losses experienced in FY 20.

As colleges begin the fall semester, new or increased costs related to safe campus re-opening and online education are already being borne. These costs are more pronounced at small and rural colleges that are often less resourced than their large and urban counterparts. Early indications of enrollment declines, and the related declines in tuition revenue, could increase unreimbursed losses heading into the Fall 2020 semester.

**9. Does your institution have a public, online dashboard for the reporting of positive COVID-19 cases, which is updated daily? If so, what is the link to the dashboard?**

Several systems and four-year universities reported online COVID-19 dashboards, including: Baylor University, University of North Texas System,  Texas Tech University System,  Texas A&M University, and Texas State University System. Additionally, TACC reported the following colleges with online dashboards:
Austin Community College, Odessa College, and Grayson College.

Other community colleges reported internal use dashboard or other public facing resource sites.[93]

# Statement from Representative Terry Wilson

Representative Chris Turner                                    December 28, 2020
Chairman, Higher Education Committee
Texas House of Representatives

Dear Chairman Turner:

Thank you for the work you and your staff have done with compiling the most recent recommendations on behalf of the Higher Education Committee. After reviewing the report, there are several recommendations I ask that you consider before I can provide my full support.

Given the current fiscal environment heading into the 87th Legislative Session, along with the paradigm shift from traditional learning to online learning, I am uncomfortable with the recommendations made in Interim Charge 2 and 3. Most likely, the State Legislature will have to institute reductions across various agencies and departments, and I have serious concerns about whether asking for increased spending in the form of expanding the 60x30TX plan, or increasing the cost of tuition through Tuition Revenue Bonds (TRB's), are the most financially prudent decision at this time.

Asking for and implementing TRB usage should be considered with great caution and used sparingly. I believe we should clarify this through a constitutional amendment, ensuring accountability and student protection. If we were to consider issuing TRB's for new construction, I would need additional guarantees that students are protected in this financial investment. I strongly believe universities should set a minimum student to square foot ratio requirement to ensure that new construction is needed and implement a tuition freeze so students across the state are protected.

Likewise, the choice to defer maintenance was made by university administrators who focused on other priorities. No matter how low the interest rate, issuing debt that will further increase the cost of tuition, rather than making tough decisions on priorities, at a time when student debt is already set to become a financial crisis, is fiscally irresponsible.

In addition, the recommendation mentioned there could be "exponential repair and replacement costs," yet failed to go into detail about what those current numbers are, what the financial forecast would be, along with how it varies from university to university. I found the data lacking to support the current justification of requesting and issuing these bonds.

For me to support the recommendation that TRBs be issued for deferred maintenance, the report should also recommend that universities requesting TRBs for deferred maintenance show which items they chose to prioritize over maintaining their facilities, and that the decision be based on if the legislature feels that funding those priorities would have justified issuing TRBs.

Furthermore, I have concerns with the recommendation made in Interim Charge 3 to expand the 60x30TX plan. The data provided was insufficient to support the efficacy of the program under the current metrics and the reasoning behind an expansion. If our higher education community is currently not on track to meet the current goal as is, why would we consider legislation expanding this mandate? More information is needed as to where we are specifically in terms of achieving this goal, the current metrics used to define that achievement, and what "support" for this goal entails, other than simply increasing budget appropriations.
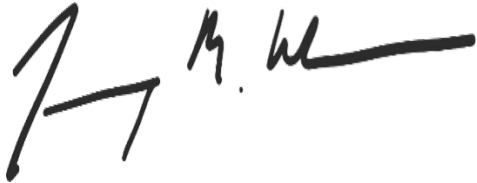
Overall, I have strong concerns with the report's continuous recommendation for funding when we know we are walking into a fiscal year where many departments and organizations will be asked to make reductions to their budget. Based on our current fiscal reality, the inclusion of a recommendation to identify cost saving measures and encourage budgetary prioritization based both growth and affordability, barring universities' abilities to provide emergency services that have come because of COVID-19, hurricanes, and other natural disasters, would have greatly increased my support for the report.

The time to focus on our priorities is now and, barring medical research, and the Texas Department of Emergency Management services that universities like Texas A&M are providing, I would have liked to have seen recommendations on ways our higher education system could be resourceful and cost efficient, to survive the reality of the fiscal year that is before us, as

many Texans have had to do this past year.

If these concerns were addressed in the report, I would be far more open to providing my support. I appreciate your understanding in this matter and look forward to your response.

Yours in service,

Terry M. Wilson, Representative
Texas House of Representatives, District 20
Colonel, USA, Retired
Terry.wilson@house.texas.gov

# ENDNOTES

[1] https://house.texas.gov/committees/committee/requests-for-information/?committeeCode=C290

[2] https://hro.house.texas.gov/pdf/ba86r/hb0449.pdf#navpanes=0

[3] http://board.thecb.state.tx.us/index.cfm?ObjectID=86335F40-D667-11E9-A9A00050560100A9

[4] https://hro.house.texas.gov/pdf/ba86r/hb1735.pdf#navpanes=0

[5] https://hro.house.texas.gov/pdf/ba86r/sb0212.pdf#navpanes=0

[6] https://reportcenter.highered.texas.gov/meeting/advisory-committee-supporting-documents/negotiated-rulemaking-committee-on-sexual-harassment-assault-committee-members/

[7] https://www.highered.texas.gov/apps/events/past-meetings/2019/

[8] https://reportcenter.highered.texas.gov/meeting/advisory-committee-supporting-documents/title-IX-training-advisory-committee-members/

[9] https://texashistory.unt.edu/ark:/67531/metapth1221927/

[10] https://texashistory.unt.edu/ark:/67531/metapth1221917/

[11] https://reportcenter.highered.texas.gov/agency-publication/miscellaneous/dual-credit/

[12] https://capitol.texas.gov/BillLookup/Text.aspx?LegSess=85R&Bill=HB1638

[13] https://www.schoology.com/blog/asynchronous-learning-definition-benefits-and-example-activities#:~:text=Asynchronous%20vs.,at%20scheduled%20meetings%20or%20lectures.&text=Live%20streamed%20lectures%20or%20demonstrations

[14] https://v3.boardbook.org/Public/PublicItemDownload.aspx?ik=46628082

[15] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300002/9834e713-9af8-49f2-86b2-67bc44c8e5f4.PDF

[16] https://www.utsystem.edu/sites/default/files/offices/academic-affairs/FINAL%20Dual%20Credit%20Task%20Force%20Report.22.2018.pdf

[17] https://hro.house.texas.gov/pdf/ba86r/sb0018.pdf#navpanes=0

[18] https://www.houstonchronicle.com/news/houston-texas/education/article/Texas-state-Senate-passes-college-transfer-bill-13793444.php

[19] http://www.txhighereddata.org/Interactive/Institutions.cfm

[20] Texas Education Code (TEC) Chapter 61, Subchapter S, Sections 61.821-61.832

[21] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300002/59d8ae57-6ba6-4364-915d-ab87026d3f54.PDF

[22] https://www.applytexas.org/

[23] https://www.highered.texas.gov/apps/events/board-meetings/special-called-board-meeting7/

[24] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300002/C2902020080300002.pdf

[25] https://www.utsystem.edu/offices/academic-affairs/student-success/our-undergraduate-student-success-work/transfer-ut-system#:~:text=The%20UT%20System%20Transfer%20Advisory%20Group&text=Interpret%2C%20disseminate%20and%20provide%20guidance,the%2086th%20Texas%20Legislature

[26] https://highered.aspeninstitute.org/wp-content/uploads/2020/05/Texas-Transfer-Alliance-2-Pager.pdf

[27] https://hro.house.texas.gov/pdf/ba86r/sb0016.pdf#navpanes=0

[28] Legislative Budget Board. *Texas Public Higher Education: Overview of Tuition Revenue Bonds*. 2019. https://www.lbb.state.tx.us/Documents/Publications/Presentation/5862_TRB.pdf.

[29] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/57e528ef-22b7-404f-8ed5-cd49e462d3bb.PDF

[30] https://capitol.texas.gov/BillLookup/History.aspx?LegSess=86R&Bill=HB2000

[31] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/0043b005-b9f6-45fd-9b9e-ef6aebd3356a.PDF

[32] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/5694f2c4-56e2-4f52-b247-33bdf9030e1f.PDF

[33] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/8eceeb9b-957c-441b-992e-8cd46c5af0f7.PDF

[34] http://www.thecb.state.tx.us/DocID/PDF/1215.PDF

[35] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/8eceeb9b-957c-441b-992e-8cd46c5af0f7.PDF

[36] https://dictionary.cambridge.org/us/dictionary/english/leaching

[37] https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#:~:text=Lead%20can%20enter%20drinking%20water,pipes%2C%20faucets%2C%20and%20fixtures.

[38] https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#regs

[39] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4144270/#:~:text=Because%20of%20their%20high%20degree,at%20lower%20levels%20of%20exposure.

[40] https://toxtutor.nlm.nih.gov/03-004.html

[41] https://www.epa.gov/sites/production/files/2013-09/documents/metals-risk-assessment-final.pdf

[42] https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html

[43] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/8eceeb9b-957c-441b-992e-8cd46c5af0f7.PDF

[44] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300003/1f6e701f-475c-4c26-9571-40d8e0b47bc7.PDF

[45] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300004/f4edda02-9e8e-4df1-8523-1118556a2353.PDF

[46] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300004/f745606a-7789-4ad9-842c-28a06518b3f7.PDF

[47] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300004/9552dcec-eee6-46f8-9c8f-e640dd7d49fc.PDF

[48] https://www.legis.state.tx.us/tlodocs/86R/handouts/C2902020080300004/b0826f03-017a-4221-9dfa-008349ed2acc.PDF

[49] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300004/102a90c0-71a1-447f-aef1-db73861711ef.PDF

[50] Ibid.

[51] https://www.legis.state.tx.us/tlodocs/86R/handouts/C2902020080300004/03a129f5-4aaf-47db-acca-b3133f16e654.PDF

[52] https://triagency.texas.gov/

[53] https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2015-broadband-progress-report

[54] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/515f5ffc-2386-4188-ad6f-fd0bef5c5496.PDF

[55] https://reportcenter.highered.texas.gov/correspondence/general-correspondence/national-student-clearinghouse/

[56] https://www.solaresearch.org/

[57] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/1d028a8b-ac22-411e-9234-e38330d4e7d6.PDF

[58] https://www.aleks.com/about_aleks

[59] https://www.insidehighered.com/digital-learning/views/2017/05/03/tips-designing-ada-compliant-online-courses

[60] https://www.fcc.gov/keep-americans-connected

[61] https://www.bon.texas.gov/waivedrules.asp ; accessed October 15, 2020

[62] https://www.bon.texas.gov/COVID-19Licensing.asp

[63] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/cb0469eb-de73-4c56-8675-bb13a5a3f097.PDF

[64] https://www.ncsbn.org/Policy_Brief_US_Nursing_Leadership_COVID19.pdf

[65] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/83e01f98-4c2c-4e98-a5df-c780440316b8.PDF

[66] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/7f35550c-5542-4874-8eee-9027e44a3161.PDF

[67] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300004/C2902020080300004.pdf

[68] https://www.legis.state.tx.us/tlodocs/86R/handouts/C2902020080300005/ee2d99fe-a562-49ca-ab73-8492807b41a2.PDF

[69] https://capitol.texas.gov/BillLookup/History.aspx?LegSess=86R&Bill=HB3652

[70] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/4c6594d2-c701-4fdc-89f8-6c7ed947411d.PDF

[71] https://lib.utsa.edu/services/faculty/oer/apply-for-a-faculty-grant

[72] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/515f5ffc-2386-4188-ad6f-fd0bef5c5496.PDF

[73] Ibid.

[74] https://www.utsystem.edu/offices/academic-affairs/student-success/our-undergraduate-student-success-work/university-of-texas-system-affordable-learning-accelerator-task-force/affordable-learning-accelerator-task-force-info-sessions-and-webinars

[75] https://www.bcg.com/en-us/industries/education/making-digital-learning-work

[76] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/bc0726ab-8a43-4964-b00d-28009f63318d.PDF

[77] https://libraries.uh.edu/oer/incentive/

[78] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/83e01f98-4c2c-4e98-a5df-c780440316b8.PDF

[79] https://capitol.texas.gov/BillLookup/History.aspx?LegSess=85R&Bill=SB810

[80] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/515f5ffc-2386-4188-ad6f-fd0bef5c5496.PDF

[81] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300005/bc0726ab-8a43-4964-b00d-28009f63318d.PDF

[82] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300006/C2902020080300006.pdf

[83] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300001/C2902020080300001.pdf

[84] https://www.legis.state.tx.us/tlodocs/86R/handouts/C2902020080300001/41285376-519f-46c1-b60a-b5bcca3fd73a.PDF

[85] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300001/41285376-519f-46c1-b60a-b5bcca3fd73a.PDF

[86] Ibid.

[87] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300001/C2902020080300001.pdf

[88] https://gov.texas.gov/news/post/governor-abbott-announces-additional-118-million-in-federal-funding-to-support-texas-higher-education

[89] https://static.texastribune.org/media/files/a34c76c1f470d023b34aaf85f17728d8/O-AgencyHeads202005200703.pdf?_ga=2.51022315.372772054.1601391083-564294894.1556720821

[90] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300001/C2902020080300001.pdf

[91] Ibid.

[92] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300001/a00b8f59-1868-4ac3-8f3c-76a590a1e96f.PDF

[93] https://capitol.texas.gov/tlodocs/86R/handouts/C2902020080300001/C2902020080300001.pdf