

Texas General Academic Institutions: Increasing Successful Community College Transfer

A Report to the Texas Legislature
Senate Bill 1, 85th Texas Legislature, Regular Session

Fall 2017

This page has been left blank intentionally.

Robert "Bobby" Jenkins Jr., CHAIR
Stuart W. Stedman, VICE CHAIR
John T. Steen Jr., SECRETARY TO THE BOARD
Arcilia C. Acosta
S. Javaid Anwar
Fred Farias, III, O.D.
Ricky A. Raven
Janelle Shepard
Andrias R. "Annie" Jones, STUDENT REPRESENTATIVE

Austin
Houston
San Antonio
Dallas
Midland
McAllen
Sugarland
Weatherford
Houston

Raymund A. Paredes, COMMISSIONER OF HIGHER EDUCATION

Agency Mission

The mission of the Texas Higher Education Coordinating Board (THECB) is to provide leadership and coordination for the Texas higher education system and to promote access, affordability, quality, success, and cost efficiency through *60x30TX*, resulting in a globally competitive workforce that positions Texas as an international leader.

Agency Vision

The THECB will be recognized as an international leader in developing and implementing innovative higher education policy to accomplish our mission.

Agency Philosophy

The THECB will promote access to and success in quality higher education across the state with the conviction that access and success without quality is mediocrity and that quality without access and success is unacceptable.

The Coordinating Board's core values are:

Accountability: We hold ourselves responsible for our actions and welcome every opportunity to educate stakeholders about our policies, decisions, and aspirations.

Efficiency: We accomplish our work using resources in the most effective manner.

Collaboration: We develop partnerships that result in student success and a highly qualified, globally competent workforce.

Excellence: We strive for excellence in all our endeavors.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age or disability in employment or the provision of services.

This page has been left blank intentionally.

Table of Contents

Executive Summary	i
Legislative Directive.....	i
Methodology.....	i
Findings.....	i
Conclusions.....	iii
Recommendations.....	iii
Introduction	1
Analysis and Observations – Survey Responses	3
Institutional Goals for Community College Transfer Students’ Success.....	3
Outreach Services for Transfer Students.....	4
Transfer Orientation.....	4
Advising Transfer Students.....	5
Transfer Student Success Programs.....	6
Websites.....	6
Financial Aid.....	7
Articulation Agreements.....	7
Dual Admissions.....	9
Statewide Initiatives.....	9
Barriers to Transfer.....	10
Emerging Issues.....	12
Analysis and Observations – Performance Data	12
Applications, Acceptances, and Enrollments.....	12
Completion Rates.....	16
Completion Rates and Financial Aid.....	18
Time to Degree.....	21
Conclusions	28
Recommendations	31

Tables

Table 1. GAIs Orientation Activities offered for Transfer Students	5
Table 2. Ranked Barriers to Transfer.....	11
Table 3. Peer Group Comparison of Fall 2016 to Fall 2015 Texas FTUG and Community College Transfer Applicants, Acceptances, and Enrollments	13
Table 4. Fall 2016 Texas FTUG and Community College Transfer Applicants, Acceptances, and Enrollments	15
Table 5. Difference in Completion Rates for Junior Cohorts 2005-2012	16
Table 6. Completion Rates Junior Fall 2012 Cohort.....	17
Table 7. Peer Group Completion Rates Junior Fall 2012 Cohort, With and Without Pell Grants	18
Table 8. Five Cohort Years of Native and Transfer Juniors Completion Rates, With and Without Pell	19
Table 9. Completion Rates by Institution Fall 2012 Junior Cohort, With and Without Pell Grants	20
Table 10. Statewide Summary Time to Degree, Fall 2005-2012 Cohorts.....	22
Table 11. Average Time to Degree - Years, SCH Attempted, & Semesters for Fall 2012 Junior Cohort.....	23
Table 12. Average Time to Acquire Junior Status	25
Table 13. Average Time to Degree after Acquiring Junior Status	26

Charts

Chart 1. Comparison of FTUG and Community Colleges Transfer Students for Fall 2016 Enrollment by Peer Group	14
Chart 2. Comparison of Time to Degree Calculation with 20-Year and 10-Year Time Periods	21
Chart 3. Years to Junior Status and Years to Graduation from Junior Status	27

Appendices (Available at: <http://www.theccb.state.tx.us/appendices>)

Appendix A: Institutional Profiles	32 - 69
Appendix B: The General Appropriations Act, House Bill (SB) 1, Article III-269, Section 49, 85th Texas Legislature Regular Session	70
Appendix C: Transfer Survey Instrument 2017.....	71
Appendix D: Institutional Survey Responses	80 - 270

Executive Summary

Legislative Directive

The General Appropriations Act, Senate Bill (SB) 1, Article III-269, Section 49, 85th Texas Legislature, Regular Session, for the 2018-19 biennium directs the Texas Higher Education Coordinating Board (Coordinating Board) to provide an analysis of transfer goals and practices based on reports from Texas public general academic institutions (GAIs). The rider requires the Coordinating Board to submit an annual report that describes institutions' efforts to increase the number, success, and persistence of community college transfer students. The report provides recommendations to improve student transfer. This is the eighth annual report.

As part of the report, the rider directs the Coordinating Board to provide GAI performance data for their community college transfer students and native students. For the Coordinating Board's analysis and report, Texas public GAIs responded to a survey about their goals and practices in serving community college transfer students. This report fulfills the directives from the Legislature, and Appendix B includes the text of Article III-269, Section 49.

Methodology

The 2017 report includes analysis of applications, acceptances, and student enrollments for fall 2016. This analysis compares first-time-in-college students (native) at Texas public universities and community college transfer students applying to, and enrolling in Texas public universities. Additionally, to compare the performance of students at public universities, continuing natives and new transfers who were classified as juniors in fall 2012 are tracked through spring 2016 – the most recent data available. Texas public universities are grouped according to their peer group in the Coordinating Board's accountability system to allow for more meaningful comparisons.

Appendix C contains a copy of the survey sent to all Texas public GAIs to solicit information about institutional programs and practices that encourage transfer success. The survey responses from individual institutions are provided in Appendix D, and response comparisons are included in the Analysis and Observations section of this report.

Findings

The report focuses on transfer students who have accumulated 60 or more semester credit hours. Using such a restricted range of transfer students yields a limited understanding of the overall transfer picture. While the survey responses and data show that Texas public GAIs are successfully recruiting students from community colleges, the completion rates and time to degree for community college for this particular subset of transfer students do not compare favorably to those of native students who were first-time-in-college students at universities. There are a number of reasons for this, including variable use of the Texas Common Course Numbering System (TCCNS) by GAIs, and limited sharing of information/understanding of the Texas Core Curriculum (TCC) and Field of Study Curricula (FOSC). Transfer students in this study took longer to achieve junior level status because they stopped out along the way, leading to a longer time to degree. Additional factors that influence time to degree include enrolling part time and taking developmental education courses. Being older, having family

obligations which require working, and lower socio-economic status – these characteristics of community college transfer students also contribute to slow time to degree.

GAI's continue to add to their repertoire of support programs for all students, and transfer students in particular. Recruitment on community college campuses, specialized orientation, and systematic and continuous advising are key to increase enrollment numbers of transfer students and improve persistence and graduation. Providing potential students with information about transfer as early as possible, for example when they apply to college, would lead to improved understanding and hopefully improve transfer

Texas public universities participate in the Texas Common Course Numbering System (TCCNS), but not as effectively as possible. GAI's differ in their publication and promotion of the system. There is a lack of standardization in where TCCNS equivalents are located in institutional catalogs and on their websites. Additionally, universities' development of institutional articulation agreements lacks standardization and consistency, as evidenced by survey responses. GAI's expressed different levels of enthusiasm for the process and usefulness of articulation agreements. A proliferation of articulation agreements does not clarify course transferability or provide clear pathways for transfer students. GAI's are often challenged when transcribing transfer students' courses which should apply to a degree, particularly when a course does not have an institutional equivalent.

Most GAI's reported continued concern about students transferring with excessive semester credit hours (SCH). With the financial support provided by the Texas Legislature in 2017, the Coordinating Board staff will convene an estimated 25 FOSC Advisory Committees in the next few years. The work of the FOSC Advisory Committees will continue to define clear curricular pathways and streamline transfer for students. Also, most universities identified inaccurate and/or inadequate advising at the community college as a major barrier to smooth transfer. The efforts of GAI's to be more present on community college campuses may mitigate these concerns. Data indicate that, in proportion to native students, community college transfer students rely more on financial aid. Lack of sufficient financial aid support for transfer students is a continued concern reported by GAI's.

The performance data included in this report – for the fall 2012 cohort of public university natives and transfer students classified as juniors – indicates that completion rates for community college transfer students and time to degree continue to lag behind that of native juniors. The 2017 report marks no change of note, up or down, in statewide and individual institutions' time to degree in years for the transfer students. Completion rates, time to degree, attempted SCH, and semesters enrolled remain close to those reported in previous years, with minimal change for the two groups within each cohort of natives and transfers during the eight-year period of reports. Completion rates for natives have ranged between 83 to 84 percent with an eight-year average of 84 percent. Completion rates for transfers have ranged between a low of 64 percent in this year's report to a high of 69 percent reported for the 2008 cohort (2013 report), with an eight-year average of 67 percent. Time to degree, in years, for native students has remained at 5.4 to 5.5 years, and for transfer students, time to degree clusters around 7.5 years for the eight years of reports.

The data for the 2017 report was further analyzed to explore the distribution of time between the period students spend achieving junior status and the period students spend from junior status to graduation. There were greater differences between natives and transfer in the time spent to achieve junior status with transfer students spending an additional two years more in this phase of their academic career. Statewide-level data shows natives take on

average 3.1 years to achieve junior status while it takes transfer students 5.1 years at the community college for the same achievement. Data for graduates who transferred from community colleges reveals they complete the last half of their degree program at a similar pace as native students, with natives in school 2.1 years and transfer students completing their degrees on average 2.5 years after transferring.

Conclusions

The enrollment and performance data and the institutional survey responses indicate that Texas public universities understand the importance of transfer students, and they are continuing efforts to recruit, retain, and graduate those students using a variety of strategies.

It is important for prospective community college transfer students to connect to a university as soon as they start at the community college. Recruitment combined with advising on community college campuses are strategies to encourage that connection. Even so, community college transfer students in the 2012 cohort of study spent longer achieving junior status and extended their time at the community college to an average of 5.1 years. Once at the university, community college transfer students who go on to graduate progress through the second half of the degree program at a similar pace as native students and graduate on average within six months of their native classmates.

Recommendations

To Increase the Number of Students Successfully Transferring:

- Community colleges should accelerate student progress to transfer by encouraging full-time enrollment when possible, including enrolling in summer school, enhancing advising aligned to the Texas Common Core (TCC) and Field of Study Curricula (FOSC), and filing a degree plan by the time a student completes 30 semester credit hours, as required by statute.
- Concurrently with the development of statewide curriculum alignment for degree programs, institutions must use these pathways (TCC and FOSC) and assess their degree programs to ensure they reflect the FOSC.
- As new FOSC are developed, the Coordinating Board will actively inform institutions of the new FOSC. Once institutions are informed, they must educate advisors to ensure that students are made aware of required courses.

To Improve Completion by Smoothing the Pathways Between Community Colleges and Universities:

- Texas public universities must be more diligent in aligning their courses with those in the *Lower-Division Academic Course Guide Manual* (ACGM) and in using the Texas Common Course Numbering System (TCCNS) because it provides the universal language to communicate lower-division program requirements and course information.
- GAI faculty and administrators should actively use the TCC, the ACGM Learning Outcomes Project, and FOSC to improve transfer and should not create multiple articulation agreements that compete or conflict with these statewide initiatives.
- GAI and community college administrators should provide faculty with joint professional development to increase their awareness of the significance of statewide initiatives to

align courses and curriculum such as the TCC, the ACGM Learning Outcomes Project, and FOSC.

To Reduce Time to Degree:

- Universities should collaborate with community colleges to tackle difficult transcripting and degree-auditing issues to ensure correct application of the TCC and FOSC courses toward degree requirements.
- Universities should include the required number of semester credit hours to be completed in residence and the required number of semester credit hours to be completed at the upper division on their webpages for transfer students and have their representatives going to the community colleges well versed in the importance of these accreditation standards.
- Many students in Texas transfer to a GAI prior to achieving junior status. To include these important populations, future studies of transfer should include other students who transfer at different points in their academic career.

Introduction

The General Appropriations Act, SB 1, Article III-269, Section 49, 85th Texas Legislature, Regular Session, for the 2018-19 biennium directs the Texas Higher Education Coordinating Board (Coordinating Board) to provide an analysis of transfer goals and practices based on reports from Texas public general academic institutions (GAIs). The rider requires the Coordinating Board to submit an annual report that describes the universities' efforts to increase the number, success, and persistence of Texas community college transfer students. The report also makes recommendations to improve student transfer.

As part of the report, the legislation directs the Coordinating Board to provide GAI performance data for community college transfer students and native students. For the Coordinating Board's analysis and report, GAIs responded to a survey about their goals and practices in serving community college transfer students. This report fulfills the requirements of Article III-269, Section 49, which is included as Appendix B.

The report focuses on transfer students who have accumulated 60 or more semester credit hours. Using such a restricted range of transfer students yields a limited understanding of the overall transfer picture. While the survey responses and data show that Texas public GAIs are successfully recruiting students from community colleges, the completion rates and time to degree for community college for this particular subset of transfer students do not compare favorably to those of native students who were first-time-in-college students at universities. There are a number of reasons for this, including variable use of the Texas Common Course Numbering System (TCCNS) by GAIs, and limited sharing of information/understanding of the Texas Core Curriculum (TCC) and Field of Study Curricula (FOSC). Transfer students in this study took longer to achieve junior level status because they stopped out along the way, leading to a longer time to degree. Additional factors that influence time to degree include enrolling part time and taking developmental education courses. Being older, having family obligations which require working, and lower socio-economic status – these characteristics of community college transfer students also contribute to slow time to degree.

The data analysis for this report, which looks at the transfer of Texas students from a public two-year college to a public university, is only a portion of the much broader spectrum of student mobility. While this report has a limited scope and the term "transfer" is defined narrowly, the institutional survey responses provide evidence of the complex challenges and the many variables that influence the movement and success of students. Concurrent with the recruitment, advising, and enrollment of Texas community college transfer students, Texas public universities must address the needs of students seeking to transfer from other public and private universities, both in and out of state; students from out-of-state two-year colleges; and students with international transcripts and global educational experiences. Many of those other students have attended multiple institutions before applying to the Texas public universities that may be their final destinations. Additionally, universities must advise their returning students, who may or may not return with transfer courses.

The performance data are drawn from the Coordinating Board's existing database of information reported annually by each Texas public, general academic, four-year institution.

The 2017 report includes analysis of applications, acceptances, and student enrollments for fall 2016. This analysis compares first-time-in-college undergraduate (FTUG) students at Texas public universities and community college transfer students applying to, and enrolling in

Texas public universities. Application and enrollment data shows the proportions of native to community college transfer students in an institutions' undergraduate population new to the institution. Some institutions are characterized as primarily attracting first-time-in-college students, and while not obvious from the data presented in the report because of narrow definition of transfer, others have evolved to be predominantly transfer institutions. The differences exist for many reasons, including the historical origins of the institutions, geographic locations, program capacities, admission criteria, academic focus, and reputations for serving transfer students.

The report follows a cohort of students at public universities, continuing natives, and new transfers who were classified as juniors in fall 2012 and tracks them through spring 2016 – the most recent data available. Texas public GAIs' data are displayed according to their peer group in the [Texas Higher Education Accountability System](#) to allow for similar size, mission, and academic offerings.

Institutional information about programs and practices that encourage transfer success are presented along with recommendations to encourage institutions to adopt successful strategies to improve community college student transfer. The report includes a summary of information from each institution, as directed by the rider.

Coordinating Board staff surveyed each Texas public university to understand institutional goals and document current practices serving community college transfer students, to identify barriers to student transfer, and to discern potential emerging issues. The survey responses from institutions are provided in Appendix D, and response comparisons are included in the Analysis and Observations section. Performance data by institution compares native and community college transfer students and is presented in the report's tables and in the Institutional Profiles section.

The juniors whose performance is analyzed are either "native" students or "transfer" students. "Native" juniors are those who initially enrolled at the university and achieved their designated class status the fall semester of the cohort year at that same university. "Transfer" juniors are those students who transferred for the first time from a community college into a university as juniors the fall semester of the cohort year. For the juniors in this report the cohort year is 2012. The term "time to degree" in this report refers to the time a student takes to complete a bachelor's degree and follows the student from first enrollment in higher education at a public institution, university or community college, to graduation with a bachelor's degree. Only graduates are included in the time-to-degree calculation. The completion rate refers to the rate at which the same cohort of students graduated with a bachelor's degree. For the purpose of this study, the completion rate was calculated at four years following the semester in which a native or transfer student achieved junior status.

In addition to enrollment and performance data, the second component of the report provides the results of a survey of Texas public universities conducted by Coordinating Board staff in June 2017. Texas public universities were asked about their outreach efforts and services for transfer students. The survey solicited information about articulation agreements, community college program enhancements, advising, website information, financial aid and scholarships, student success programs, degree program alignment, and participation and promotion of statewide initiatives aimed at smoothing and improving transfer for Texas students. The survey also requested that institutions rank common barriers to transfer.

Currently, seven Texas public GAIs have unique circumstances, which do not allow them to provide data regarding transfer students for the purposes of this report. Two Texas public

institutions are upper-division level only: Sul Ross University-Rio Grande College (Sul Ross-Rio Grande) and Texas A&M University-Central Texas (TAMU-Central Texas). These two institutions offer no point of comparison between their native and transfer students in the tables and analyses since all their students are transfer students.

Five Texas public institutions originally were founded as upper-division institutions but recently received authority to expand into the lower divisions. These institutions are as follows: Texas A&M University-San Antonio (TAMU-San Antonio), which admitted freshmen in 2016; University of Houston-Clear Lake (UH-Clear Lake), which admitted freshmen in 2014; University of Houston-Victoria (UH-Victoria), which admitted freshmen in 2010; Texas A&M University-Texarkana (TAMU-Texarkana), which admitted freshmen in 2010; and University of North Texas-Dallas (North Texas-Dallas), which admitted freshmen in 2009.

Data from TAMU-San Antonio and UH-Clear Lake do not allow for comparisons. The 2012 cohort of juniors' data for UH-Victoria, TAMU-Texarkana, and North Texas-Dallas provides limited comparison because the number of native students in the cohort is small. Also, in terms of historical tracking of the student cohorts used for comparison, the separate institutions of The University of Texas-Pan American (UT-Pan American) and The University of Texas at Brownsville (UT-Brownsville) are included. For fall 2016 admissions data and for the responses for the survey, the single institution of The University of Texas Rio Grande Valley (UTRGV) is included.

Analysis and Observations – Survey Responses

Institutional Goals for Community College Transfer Students' Success

GAIs are aware of the importance of community college transfer students to degree completion rates for the institution. Most Texas public universities (78%) have recruitment goals specific to community college students. However, fewer institutions (49%) have goals for retention from that first critical semester after transfer to the second semester of attendance. The average projected percentage of community college transfer students expected to graduate with a bachelor's degree during the 2016-17 academic year and reported in the survey was about 50 percent of all baccalaureate graduates.

One challenge in analyzing institutional goals and projections is that transfer students are not always tracked separately. Additionally, students coming from community colleges directly account for only a portion of all transfers. It is likely that many transfer students start at a university, then attend a community college, and then decide to attend another university to graduate. Labeling and tracking these "swirlers" as one kind of transfer student or another may be limited by the institutions' capacity to enter different identifiers into the student information systems, and then mine that data for analysis.

Outreach Services for Transfer Students

The most basic and common outreach to transfer students is recruitment. All Texas public universities recruit on the campuses of community colleges. Marketing, budget considerations, and competition (other universities, public and private) drive recruitment activities and their success. For some smaller, less urban universities, recruiting involves making community college students aware of the university. Recruiters also communicate information about facilities and campus resources, social life, extracurricular activities, and academic programs.

In addition to a regular recruitment schedule, institutions participate in transfer fairs and special events organized by a community college. Thirty-six of the 37 public universities send representatives to transfer fairs. During recruitment visits and at transfer fairs, universities provide information specific to a student's circumstances. Most universities (84%) provide academic advising and many (54%) also provide financial aid advising.

A growing trend is for universities to place permanent recruiters/advisors on key feeder community college campuses to increase an institution's visibility and accessibility to community college students. More than a third of public universities (38%) have a permanent transfer advisor on a community college campus. This strategy was used most often when the university has only one major feeder community college. When asked what was the single most effective program to improve community college transfer student enrollment, institutions mentioned, more often than any other effort, the ability to have a permanent or regular presence on community college campuses.

Transfer Orientation

Orientation is an essential and valuable service for transfer students. All but two institutions reported offering a transfer orientation. The two institutions not offering an orientation specific to transfer students do include transfer students in a general orientation for all new students. Of the institutions offering a transfer orientation, more are making attendance mandatory. This year, 22 of 35 institutions offering a transfer orientation required attendance from their new transfer students. All Emerging Research and Research Institutions offer and require transfer orientation. Among the other accountability system peer groups, orientation is mandatory at approximately half of the institutions in each group.

The list of activities in table 1 shows the services provided at transfer orientation, along with the number of Texas public universities that reported including the activities in their programs for last two years. Overall, universities are adding more activities to their orientation for transfer students. Activities listed in the table and shaded demonstrated growth of five or more institutions.

Table 1. GAIs Orientation Activities offered for Transfer Students

Orientation Activities	2015-2016	2016-2017
Financial aid advising	29	34
Campus safety/security information session	28	33
Advising with professional advisors	30	31
Meal	29	31
Student organizations' presentations	26	30
Registration	30	29
Mental Health/Counseling Services presentation	24	29
Meetings specific to academic program majors	31	28
Career Services presentation	21	28
Campus tour	28	27
Health Services information session	23	25
Housing information session	17	24
Parent/family participation and sessions	23	24
Advising with faculty advisors	23	20
Assignment of student mentors	6	12
Assignment of faculty/staff mentors	1	5

Advising Transfer Students

Texas public GAIs use multiple opportunities and means to advise transfer students. Initially they use outreach and recruitment efforts to provide academic advising on community college campuses before admissions. Advising students after admissions, but before they register for courses, is also a priority. Most (89%) require new transfer students to be advised. As indicated above, orientation programs often include meeting with an advisor. Of the 35 institutions with transfer orientations, 33 provide advising either with a professional advisor or a faculty advisor. Because of the complexity, uniqueness, and amount of information to consider when advising transfer students, most universities (86%) provide training to advisors specific to the issues relevant to transfer students.

Universities' emphasis on advising may arise from concerns that are perceived as barriers to smooth transfer. Thirty universities of the 37 (81%) surveyed identify students transferring with excessive hours as problematic. The second most frequently identified barrier was inadequate or inaccurate advising at the community college. Twenty-four GAIs (64%) place inadequate or inaccurate advising at the community college among their top five barriers. The top two barriers are closely related, occur in the students' educational careers prior to admission and attendance at the university, and complicate advising when students transfer. Excessive hours and courses not applicable to a degree plan present challenges when advising transfer students; universities try to mitigate the negative consequences of these barriers through community college outreach advising and specialized training for their own advisors. Mitigation is good, but preventative solutions such as clear statewide curriculum pathways are better and will involve more than just the GAIs.

Transfer Student Success Programs

Texas public universities offer many programs to enhance and support the success of all students. Transfer students benefit from the success programs or strategies used at most universities. The most common include providing a writing lab (100%), mathematics lab (86%), discipline specific tutorial services (84%), and academic early alerts for struggling students (86%). Less common are student or faculty mentors (59%), learning communities (43%), on campus childcare (43%), and transportation assistance (30%).

Texas GAIs added fewer new programs targeted toward transfer students than in 2016, with 17 universities (46%) reporting a new program, as compared to 27 universities (73%) last year. Most Institutions reported maintaining or expanding existing services, rather than implementing new services.

Of new programs, institutions reported initiating the following to serve transfer students and encourage success:

- Implementation of the Education Advisory Board, a research, technology, and consulting company – programs for enrollment management and student success (5)
- Designating or increasing staff or committees to focus on transfer student advising and success (4)
- Peer mentoring (2)
- Transitions advisors to guide students who change majors (1)
- Acquisition of designated space on community college campus for recruiting and advising students (1)
- First-Year-Experience with learning communities (1)
- Academic intervention video clips accessible and developed on an existing online course platform (1)
- Transfer Student Success Week to introduce students to campus resources (1)
- Participation on the college exploration website of Phi Theta Kappa, a community college honor society (1)

Websites

All Texas public universities have pages on their websites for information tailored to address the needs of transfer students. Typical information found on the transfer web pages is focused on transfer credit and course transferability, transfer grade point average (GPA), and financial aid/scholarship opportunities. Requirements for admissions vary by institution, and putting this information on the website is important to prospective students as they compare institutions.

All universities provide information about the required minimum number of semester credit hours (SCH) a student needs to be considered for transfer admissions. The average of institutions' reported required minimum is 20 SCH. All but The University of Texas at Austin (UT-Austin) include the required grade point average (GPA) for transfer admissions. About two-thirds of institutions (68%) report providing the number of in-residence SCH students are required to take to graduate with a bachelor's degree at their institution. Only nineteen institutions (51%) provide the limit on transferable hours accepted in transfer. Accreditation standards set the minimums for SCH taken in residence to ensure institutional effectiveness and educational quality of awarded degrees. Some transfer students may naively think that anything

taken at the community college or another institution should or will be applied to their degree at the transfer university where they ultimately plan to graduate. Students need to be made aware of the existence of limits on transferable hours.

Most institutions set their minimum GPA for transfer admissions at 2.0; however, seven institutions report a higher requirement. For example, Texas A&M University at Galveston (TAMU-Galveston) offers specialized maritime programs and graduates are awarded their degree through the research institution, Texas A&M University (TAMU), which requires a 2.5 GPA. The other institutions reporting requirements higher than a 2.0 GPA for admission are Emerging Research Institutions. Texas Tech University (Texas Tech) and The University of Texas at Dallas (UT-Dallas) require a 2.5; Texas State University (Texas State), The University of Texas at Arlington (UT-Arlington), and The University of Texas at San Antonio (UT-San Antonio) require 2.25.

Financial Aid

Another frequently appearing item of interest found on websites is financial aid and scholarship information specific to transfer students. Of the 37 universities surveyed, 31 have such information accessible from their website.

Texas public universities with a mix of native and transfer students reported that they awarded transfer students on average 34 percent of institutions' overall financial aid. This is an increase of nearly nine percentage points over 2016 survey responses. At the two Research Institutions, transfer students' awards averaged \$13,117 at TAMU and \$13,482 at UT-Austin. At Emerging Research Institutions, transfer students' financial aid awards averaged from a low at the University of Houston (UH) of \$3,666 to a high of \$12,235 at UT-Dallas. At Doctoral Institutions, the award averages clustered around \$10,400. At Comprehensive Institutions, the awards averaged between \$2,787 and \$10,965. Based on survey responses from Master's Institutions, the averages for financial aid awards to transfer students showed the widest range and fell between \$2,409 and \$19,465. Statewide, the average award to transfer students was \$9,390, which is an increase of \$500 over 2016.

Beyond the conventional financial aid packages available for students, some institutions offer institutional and departmental scholarships specifically designated for community college transfer students. Survey responses from 73 percent of public universities indicate these scholarships are offered. Eligibility for the institutional and departmental scholarships may be based on need, but merit or academic record are also considered. The scholarships are used to attract high-performing transfer students from community colleges. The percent of transfer students who receive institutional or departmental scholarships varies widely among universities, but the statewide average based on the survey is 12 percent.

Articulation Agreements

All public universities report having at least one articulation agreement. Survey responses indicate 1,441 articulation agreements currently in effect among universities and community colleges, with 138 new agreements initiated this year by 18 institutions. The number of articulation agreements in effect at each institution ranges from one to more than 200. While most of the agreements are for academic programs, almost 500 articulation agreements are intended to provide for the transfer and application of career and technical courses. The disparity among universities in the number and types of agreements reported,

indicates articulation agreements between Texas public universities and community colleges mean different things to different institutions and lack standardization.

To develop articulation agreements, institutions must engage in “vertical teaming.” Locally, most universities collaborate with community colleges in their region to align degree program curricula and courses. Vertical teaming is intended to help students avoid learning gaps and accumulating excessive hours and help students transfer from community colleges to universities with a level of preparation similar to that of native students. Thirty-two universities (86%) reported conducting vertical team meetings, which addressed the transfer curricular needs of approximately 228 degree programs.

If statewide initiatives such as the Texas Common Course Numbering System (TCCNS), Texas Core Curriculum, the *Lower-Division Academic Course Guide Manual* (AGCM) Learning Outcomes Project, and Field of Study Curricula (FOSC) are embraced and successful, there will be less need for local vertical teaming efforts. Considering the increased mobility of students, local customization of programs and courses may create unintended hindrances, which could be avoided by adjusting courses and curricula to be aligned with statewide initiatives.

Texas public universities were asked to identify barriers to articulation agreements. Ten of the 37 respondents from institutions provided no answer or indicated there were no barriers. The most frequently identified barrier was lack of time and/or personnel to invest in the development and maintenance of articulation agreements. The logistical challenges of identifying and coordinating the efforts of the appropriate stakeholders (faculty, enrollment management staff, administrators, advisors, etc.) at the university and with their counterparts at multiple community colleges were perceived as substantial barriers; and 15 of the 37 institutions’ answers conveyed this perception. Four institutions indicated that faculty participation and interest differed among degree programs and departments, and that some faculty had strong proprietary interest in particular courses. This may be a consequence of accreditation standards and the desire to have quality control over programs. Three institutions cited location as a barrier; two institutions were in less densely populated areas with few or no community colleges within easy driving distance. The third institution citing location indicated that its densely populated area, with many community colleges and universities in close proximity and with a large pool of “swirling” students, created challenges to effective agreements.

Other barriers cited were the specialized nature of the degree programs, the change from one-program articulation agreements to umbrella agreements, program capacity, and lack of responsiveness and promotion by community colleges. Two institutions cited the challenge of semester credit hours that cannot be easily applied to a degree program. Those SCH come from courses outside the core curriculum and are taken to complete an associate degree, or for dual credit, but are not needed for the bachelor’s degree. Two responders observed that “because so many degree and curriculum linkages are already in effect . . . developing specialized articulation agreements has a return on investment that is questionable” and that institutional “transfer planning guides are replacing MOUs [memoranda of understandings].”

Articulation agreements are considered a means to smooth transfer. However, this conventional approach without standardization to clarify student and course transfer may not adequately address the complexity and specialized nature of academic planning, continuously evolving disciplines of study, and the increased mobility of students. With the variety, challenges of creating, and the necessity of continual maintenance, assessing the collective success and value of articulation agreements is difficult, if not impossible.

Dual Admissions

Dual admission agreements are much less prevalent than articulation agreements and usually do not involve programmatic alignment. Twenty GAIs indicated that they have at least one dual admission agreement. Eight institutions have dual admission agreements which defer enrollment at the university. These types of dual admission agreements often are used as a marketing tool to establish a relationship with a prospective student. Only one institution tracked the students participating in a deferred enrollment agreement to actual enrollment at the university.

Nineteen institutions have dual admission agreements that provide for concurrent enrollment at the partner colleges. However, concurrent enrollment at two institutions of higher education is a common occurrence and strategy for transfer students, but it is not necessarily related to or controlled by dual admissions agreements. Of the 19 institutions with concurrent enrollment agreements, only four tracked students and reported the number of students participating in the formal agreements. In terms of admission requirements, all but two institutions apply the same admissions requirements to the dual admission students as regularly admitted students.

Statewide Initiatives

The use of a common course numbering system, the TCCNS, has been encouraged in Texas since the mid-1990s and mandated in state statute since 2003. Institutions are required to provide the TCCNS number adjacent to the institutional course prefix and number at the beginning of each course description, if the course has a common number equivalent. GAIs also must include in their electronic catalog a list of all common courses offered, along with an explanation of the common course numbering system and its significance.

Most institutions are compliant with Coordinating Board's rules in identifying common courses in their descriptions, but a comprehensive list is sometimes more difficult to locate. The deeper one delves into institutional websites, catalog, and departmental pages, the less frequently information about the TCCNS appears. Down from 83 percent in last year's survey, a total of twenty-four (65%) institutions report that they provide degree program guides that include TCCNS course numbers on their transfer student pages of the institutional websites. The specific reasons for the decline were not reported in the survey, but may be attributable, in part, to different responders for the survey, changes in programs, changes in location of the material, and adoption of the TCCNS as the institution's lower-division course numbering system. Only two institutions indicate that departmental webpages provide TCCNS equivalents. Less than half of surveyed institutions indicated that TCCNS numbers are included with degree requirements in catalogs.

Fifteen (43%) of the 35 GAIs offering lower-division courses indicate that they use the TCCNS as the institutional numbering system for lower-division courses that have TCCNS equivalents. The remaining GAIs use a crosswalk matrix to match their institutional course numbers with the TCCNS number. The proportion of each institution's lower-division inventory of courses that are part of the TCCNS either based on course number or crosswalk assignment varies greatly among institutions. Texas public universities were asked for their number of lower-division courses with a common number equivalent and their number of courses without a TCCNS equivalent. Two institutions do not offer lower-division courses: Texas A&M University-Central Texas (TAMU-Central Texas) and Sul Ross University Rio Grande College (Sul Ross-Rio

Grande). Additionally, five institutions did not provide complete information, so those institutions were not considered in analysis. Of the 37 institutions surveyed, the remaining 30 provided the numbers of lower-division courses with and without a TCCNS equivalent. The average percentage of lower-division courses with TCCNS equivalents for the 30 institutions was 40 percent, ranging from a high of 83 and 82 percent, respectively, at Texas A&M University-San Antonio (TAMU-San Antonio) and Angelo State University (Angelo), to a low of 7 percent at Sam Houston State University (Sam Houston).

Institutions were also asked about TCCNS equivalents included in core curriculum. The average percentage of lower-division courses with TCCNS equivalents in core curriculum at the 30 institutions was 72 percent. Individual institutional averages ranged from a high of 100 percent at five institutions to a low of 30 percent at the University of Houston (UH).

When the public universities were asked about the number of TCCNS course equivalents included in the major requirements for bachelor's degrees, responses with specific numbers were less frequent. Twenty institutions provided numbers, but others either provided no numbers or indicated the information was not available.

Active courses in the TCCNS that may be offered by community colleges must be included in the Coordinating Board's ACGM. The ACGM provides the course descriptions and the student learning outcomes for TCCNS courses. Faculty from both public universities and two-year colleges collaborate to develop the courses. These ACGM/TCCNS courses are the building blocks of several Coordinating Board initiatives intended to facilitate and improve transfer efficiency. Key among these are the Texas Core Curriculum; FOSC; Texas Tuning, with the accompanying statewide voluntary transfer compacts; and the ACGM Learning Outcomes Project. The success of the initiatives depends on how well they are embraced and promoted in Texas' individual institutions, both at universities and community colleges. Faculty and advisor involvement with, and awareness of, the initiatives is essential. The most prominent initiative is the core curriculum. Almost all (36 of the 37 institutions surveyed) GAIs report that their faculty are aware of the Texas Core Curriculum, and the same number report that it is useful to their institution. Faculty are considered less aware of the ACGM Learning Outcomes Project and FOSC, but these initiatives are considered of greater usefulness than the Texas Tuning Project and Voluntary Transfer Compacts. The work of Texas Tuning and the formulation of Voluntary Transfer Compacts was completed several years ago and may be viewed as superseded by the continuing work to develop FOSC and revise courses through the ACGM Learning Outcomes Project.

Barriers to Transfer

Numerous barriers to transfer exist and, for purposes of the report and survey, can be categorized as problems associated with advising; financial restraint on institutions for services and on students in paying for their education; and programmatic challenges, such as admissions, capacity, and course scheduling. There were no problems identified that were common to all institutions. The GAIs were asked to rank 12 barriers to transfer identified in previous survey years and to add any others not included in the list. As noted above under advising, "students transferring with excessive hours" was the barrier cited most frequently, followed by "inaccurate and/or inadequate advising at the community college," which ranked second in frequency. Lack of financial support for transfer students was ranked third. The item ranked the least frequently was "insufficient training for recruiters."

The “Ranked Barriers to Transfer” in table 2 provides the number of institutions that ranked an item as being a problem and also the number of institutions that ranked the item as their most problematic. Very few GAIs chose to rank all of the items. Barriers encountered by students that institutions perceived to be different from the survey’s list were as follows: the “push” for students to complete an associate degree, the necessity of increased staff and faculty involvement in recruitment and articulation agreement activities, students lacking guidance for course and major selection, the necessity of providing online students with tutoring and advising, staff time for evaluating of career and workforce education courses, lack of a degree audit system for all students, and the need for students to take courses in sequence for some degree programs.

When the rankings were compared to the rankings from last year, the item that demonstrated the greatest increase among institutions’ rankings (as problematic) was “Lack of course and program alignment with community colleges.” Last year, 14 institutions ranked this item. This year, 20 of the 37 public, four-year institutions ranked it.

Table 2. Ranked Barriers to Transfer

Barrier	Institutions ranked as problematic	Institutions ranked as number one problem
Students transferring with excessive hours	30	11
Inaccurate and/or inadequate advising at the community college	27	6
Lack of financial support for transfer students	25	4
Inadequate course scheduling and/or course rotations to meet the needs of new transfer students	22	1
Insufficient financial resources at your institution to facilitate transfer of students from community colleges	20	1
Insufficient staff at your institution to facilitate transfer of students from community colleges	20	5
Lack of course and program alignment with community colleges	20	2
Lack of timely and/or accurate transcript evaluation	16	3
Program admission requirements that are different from your institution’s admission requirements	15	1
Lack of available academic programs to meet transfer students’ needs	13	1
Programs at capacity at your institution	13	2
Insufficient training for your institution's recruiters	9	0

The survey asked institutions about changes they have made to overcome the transfer barriers experienced by students. Twenty-one universities indicated they had made significant changes to smooth transfer. Ten institutions indicated that they had reviewed and updated program and course alignments with community colleges, including the increased use of the TCCNS. Three institutions cited their participation in regional consortia as a means to overcome barriers. One broadened its recruitment focus to support international students transferring from community colleges. Data exchange with community colleges is used to allow two universities earlier contact with prospective students. Three universities made improvements to their channels and frequency of communication with prospective and newly admitted transfer students. Initiating an online orientation, offering lower-division courses, streamlining processes for course evaluation, and practicing greater flexibility in advising were also viewed as solutions to challenges to transfer.

Emerging Issues

The GAIs surveyed were asked to identify emerging issues at their institutions that are likely to cause barriers to transfer. Seventeen of the 37 public universities responded with specifics about their challenges. The barrier most frequently cited (seven institutions) was the lack of necessary funding for staff and resources to facilitate transfer, including advising, and the lack of funding for financial aid for transfer students. A second category of concerns frequently cited was how community colleges function and advise students. Two institutions fear that the increase in dual credit offered through community colleges, without adequate care in advising high school students, will result in unusable credit and courses that will not be applicable to a bachelor's degree. Another institution indicated that the differences between a technical applied associate degree (AAS) and an academic degree (AA/AS) causes students to invest time in programs without understanding the limitation in transferability. Another institution cited the issue of students in academic programs who take courses that will not be applicable to their chosen major at a university because the students are encouraged to complete an academic associate degree at the community college. The emergence of competency-based education and the expansion of bachelor's degrees at community colleges also cause concerns about course applicability and efficiency. The expansion of applied bachelor's degrees at community colleges was cited as a duplication of effort, as the university already offers applied bachelor's degrees.

Programmatic issues also were cited as emerging barriers to transfer. One institution cited general education requirements that are part of the Texas Core Curriculum as restrictive when accepting and applying credits from out-of-state institutions. Three institutions expressed the need to put more degree programs online. The inability to meet the student demand for particular programs also continues to be a concern when program capacity is at its maximum.

Analysis and Observations – Performance Data

Applications, Acceptances, and Enrollments

There are differences among institutions in the proportions of the student population made up of new freshmen, continuing native students, Texas community college transfer students, transfer students from other universities, and graduate students. These differences are attributable to many factors including, but not limited to, location, population growth and migration patterns, longevity of existence as a stand-alone institution, historical mission of the institution, changes in degree programs, financial resources, and leadership.

For purposes of this report, the applications for undergraduate university admission are limited to two groups: first-time-in-college undergraduates (FTUG) and transfer students who are transferring from a Texas community college to a Texas public university. The data reveal that the number of applicants and the number of acceptances for FTUG are much higher than for transfers; however, a higher percentage of accepted transfer students actually enroll. This pattern is observed in data for all previous years of the study.

As indicated in table 3, statewide FTUG students applying for admission increased 8 percent from last year and peer groups experienced an increase ranging between 4 percent for

Research Institutions to 12 percent for Master’s and Emerging Research Institutions. With the exception of the Comprehensive Institutions, all peer groups also saw an increase in the number of community college transfer students applying for admission. Statewide, the number of students persisting through the enrollment funnels for FTUG and transfer students increased 2 percent. Doctoral Institutions were the only peer group to experience a decrease in the enrollment of FTUG, but they also saw one of the greatest increases (5%) in community college transfer students. Comprehensive and Research Institutions peer groups saw a decrease in the number of transfer students who were enrolled, but enrollment for their FTUG increased.

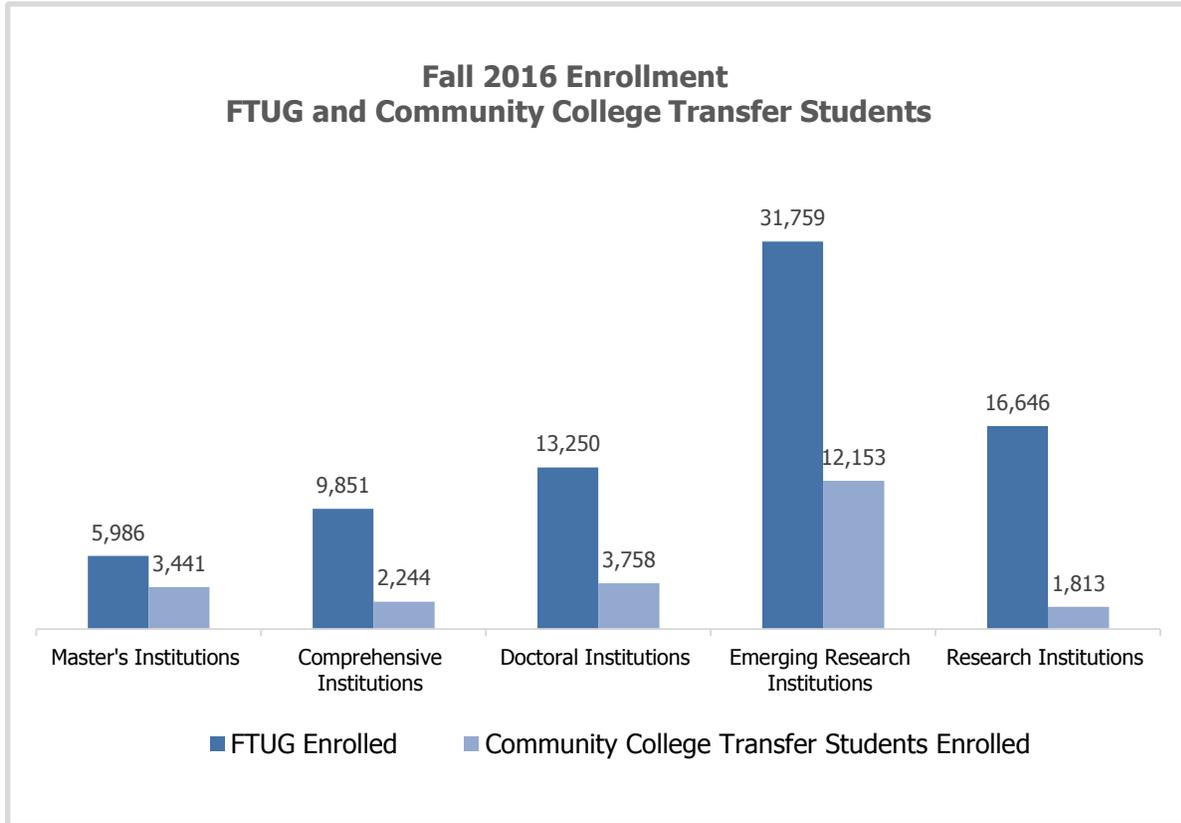
Table 3. Peer Group Comparison of Fall 2016 to Fall 2015, Texas FTUG and Community College Transfer Applicants, Acceptances, and Enrollments

Peer Group	FTUG Applicants					Community College Transfer Applicants				
	Apply	Accept	% of Apply	Enroll	% of Accept	Apply	Accept	% of Apply	Enroll	% of Accept
Master's Institutions 2016	26,046	19,279	74%	5,986	31%	5,455	5,068	93%	3,441	68%
Master's Institutions 2015	23,210	16,920	73%	5,738	34%	5,255	4,872	93%	3,288	67%
Δ Master's	12%	14%		4%		4%	4%		5%	
Comprehensive 2016	35,099	26,803	76%	9,851	37%	3,604	3,350	93%	2,244	67%
Comprehensive 2015	33,621	25,874	77%	9,384	36%	3,725	3,471	93%	2,320	67%
Δ Comprehensive	4%	4%		5%		-3%	-3%		-3%	
Doctoral Institutions 2016	57,294	41,032	72%	13,250	32%	6,828	6,222	91%	3,758	60%
Doctoral Institutions 2015	53,842	40,696	76%	13,448	33%	6,453	5,868	91%	3,596	61%
Δ Doctoral	6%	1%		-1%		6%	6%		5%	
Emerging Research 2016	117,689	84,743	72%	31,759	37%	18,743	17,055	91%	12,153	71%
Emerging Research 2015	105,200	78,937	75%	31,548	40%	18,245	16,652	91%	11,826	71%
Δ Emerging Research	12%	7%		1%		3%	2%		3%	
Research Institutions 2016	56,991	34,507	61%	16,646	48%	3,991	2,198	55%	1,813	82%
Research Institutions 2015	54,603	32,071	59%	15,973	50%	3,986	2,252	56%	1,880	83%
Δ Research	4%	8%		4%		0%	-2%		-4%	
Statewide Summary 2016	158,638	129,164	81%	77,450	60%	33,003	29,994	91%	23,401	78%
Statewide Summary 2015	146,675	122,097	83%	76,040	62%	32,092	29,176	91%	22,902	78%
Percent change Statewide	8%	6%		2%		3%	3%		2%	

Source: CBM001 & CBM00B. FTUG applicants - students who applied on CBM00B with no previous college work, seeking a bachelor's or an associate degree. These results were matched to CBM001 for those coded as first-time undergraduates. Transfer applicants - students who applied as transfer on CBM00B, seeking a bachelor or an associate degree. These results were matched back six years to CBM001 to make sure students were FTUG at a CTC and not a university. These results were matched to CBM001 for same fall year as application year to see if student enrolled.

The fall 2016 enrollment for FTUG and community college transfer students in chart 1 shows the proportion of FTUG and community college transfer students in the new student population for each of the peer groups. Emerging Research Institutions, as a peer group, continue to attract both new freshmen and community college transfers in large numbers. Master’s Institutions enroll more community college transfer students in proportion to their FTUG and at a level which exceeds the other peer groups. For Research Institutions, the new student population for the fall semester is largely FTUG.

Chart 1. Comparison of FTUG and Community Colleges Transfer Students for Fall 2016 Enrollment by Peer Group



Source: CBM001 & CBM00B. FTUG applicants - students who applied on CBM00B with no previous college work, seeking a bachelor's or an associate degree. These results were matched to CBM001 for those coded as first-time undergraduates. Transfer applicants - students who applied as transfer on CBM00B, seeking a bachelor's or associate degree. These results were matched back six years to CBM001 to make sure students were FTUG at a CTC and not a university. These results were matched to CBM001 for same fall year as application year to see if student enrolled.

Table 4, "Fall 2016 Texas FTUG and Community College Transfer Applicants, Acceptances, and Enrollments," shows that statewide, and for the Emerging Research Institutions, the top destination for community college transfer students for fall 2016 was UH, with 2,344 students. For the two Research Institution flagships, TAMU enrolled 1,324 community college transfer students, more than twice as many as UT-Austin, which enrolled 489 community college transfer students. Among the other peer groups, the top destinations for community college transfer students were Sam Houston for the Doctoral Institutions, with 1,247 students; Tarleton State University (Tarleton) for Comprehensive Institutions, with 695 students; and University of Houston-Downtown (UH-Downtown) for Master's Institutions, with 745 students.

TAMU-Texarkana and North Texas-Dallas had an increase of more than 20 percent over 2016 in both FTUG and community college transfer students. Other institutions for which the number of community college transfer students included in the data increased at least 10 percent over 2016 are Midwestern State University (Midwestern), TAMU-Central Texas, Texas A&M University-Commerce (TAMU-Commerce), UTRGV, and UT-San Antonio.

Table 4. Fall 2016 Texas FTUG and Community College Transfer Applicants, Acceptances, and Enrollments

Institution	FTUG Applicants					Transfer Applicants				
	Apply	Accept	% of Apply	Enroll	% of Accept	Apply	Accept	% of Apply	Enroll	% of Accept
Angelo	3,972	2,930	74%	1,358	46%	233	186	80%	142	76%
Midwestern	3,219	1,931	60%	690	36%	329	296	90%	196	66%
Sul Ross	1,149	882	77%	343	39%	63	56	89%	32	57%
Sul Ross-Rio Grande	0	0	0%	0	0%	99	98	99%	72	73%
TAMU-Galveston	1,149	973	85%	401	41%	68	67	99%	52	78%
TAMU-Central Tx	0	0	0%	0	0%	233	213	91%	157	74%
TAMU-San Antonio	263	263	100%	0	0%	595	531	89%	332	63%
TAMU-Texarkana	2,606	1,782	68%	175	10%	177	170	96%	137	81%
UT-Tyler	2,512	1,739	69%	789	45%	763	752	99%	477	63%
UT-Permian	1,270	1,024	81%	464	45%	310	301	97%	175	58%
UH-Clear Lake	1,014	655	65%	258	39%	798	730	91%	528	72%
UH-Downtown	3,974	3,298	83%	924	28%	1,159	1,087	94%	745	69%
UH-Victoria	3,100	2,561	83%	306	12%	350	327	93%	208	64%
UNT-Dallas	1,817	1,241	68%	278	22%	278	254	91%	188	74%
Master's Institutions	26,046	19,279	74%	5,986	31%	5,455	5,068	93%	3,441	68%
Lamar	5,957	4,270	72%	1,445	34%	501	446	89%	270	61%
Prairie View	5,083	4,292	84%	1,710	40%	345	293	85%	131	45%
SFA	9,718	7,224	74%	2,332	32%	735	707	96%	482	68%
Tarleton	6,227	4,716	76%	2,127	45%	1,028	982	96%	695	71%
TAMI	3,737	2,934	79%	1,092	37%	449	420	94%	318	76%
WTAMU	4,377	3,367	77%	1,145	34%	546	502	92%	348	69%
Comprehensive	35,099	26,803	76%	9,851	37%	3,604	3,350	93%	2,244	67%
Sam Houston	12,271	8,830	72%	2,590	29%	2,011	1,920	95%	1,247	65%
TAMU-Commerce	5,167	3,484	67%	999	29%	984	898	91%	557	62%
TAMU-CC	8,826	7,883	89%	2,288	29%	618	575	93%	341	59%
TAMU-Kingsville	7,258	5,613	77%	1,240	22%	365	332	91%	213	64%
Tx Southern	8,427	4,551	54%	1,004	22%	547	301	55%	172	57%
TWU	5,512	4,417	80%	1,284	29%	1,098	1,067	97%	506	47%
UTRGV	9,833	6,254	64%	3,845	61%	1,205	1,129	94%	722	64%
Doctoral Institutions	57,294	41,032	72%	13,250	32%	6,828	6,222	91%	3,758	60%
TxStU	21,957	15,828	72%	5,668	36%	2,739	2,412	88%	1,701	71%
TTU	17,761	12,055	68%	4,349	36%	1,958	1,796	92%	1,424	79%
UT-Arlington	11,753	8,097	69%	2,825	35%	3,232	3,078	95%	1,845	60%
UT-Dallas	9,650	7,376	76%	2,983	40%	1,537	1,158	75%	937	81%
UT-El Paso	8,266	8,265	100%	3,133	38%	1,171	1,131	97%	836	74%
UT-San Antonio	15,014	11,478	76%	4,221	37%	1,714	1,559	91%	1,130	72%
UH	18,533	10,806	58%	4,189	39%	3,509	3,238	92%	2,344	72%
UNT	14,755	10,838	73%	4,391	41%	2,883	2,683	93%	1,936	72%
Emerging Research	117,689	84,743	72%	31,759	37%	18,743	17,055	91%	12,153	71%
TAMU	29,776	19,651	66%	9,111	46%	2,470	1,554	63%	1,324	85%
UT-Austin	27,215	14,856	55%	7,535	51%	1,521	644	42%	489	76%
Research Institutions	56,991	34,507	61%	16,646	48%	3,991	2,198	55%	1,813	82%
Statewide Summary	158,638	129,164	81%	77,450	60%	33,003	29,994	91%	23,401	78%

Source: CBM001 & CBM00B. FTUG applicants - students who applied on CBM00B with no previous college work, seeking a bachelor's or an associate degree. These results were matched to CBM001 for those coded as first-time undergraduates. Transfer applicants - students who applied as transfer on CBM00B, seeking a bachelor or associate degree. These results were matched back 6 years to CBM001 to make sure students were FTUG at a CTC and not a university. These results were matched to CBM001 for same fall year as application year to see if student enrolled.

Completion Rates

Completion rates are one measure of performance and success used by the Coordinating Board. For the study of community college transfer students, completion rates are determined as a percent of the fall cohort group of natives and transfers who are classified by their institutions as juniors and who graduate within the subsequent four years.

$$\text{Completion Rate for Natives} = \frac{\text{Natives in cohort who graduate in four years}}{\text{Total Natives in cohort}}$$

$$\text{Completion Rate for Transfers} = \frac{\text{Transfers in cohort who graduate in four years}}{\text{Total Transfers in cohort}}$$

There were 42,884 total natives and 15,150 total community college transfer students classified as juniors in fall 2012 and included in the cohort. Statewide, the completion rate for natives was 84 percent, with 35,956 natives graduating, and the completion rate for transfers was 64 percent, with 9,672 transfers graduating within four years of transferring and being classified as juniors.

The overall statewide performance of natives included in the 2012 cohort group of juniors is consistent with the performance of the native juniors in the previous report years with an increase of 1 percent. The performance of transfer students in the latest cohort demonstrated a decrease in the completion rate from last year's cohort transfers of 1 percentage point. However, as shown in table 5, the trend of the difference in completion rates between native and transfers each year widened. The difference between the completion rates of natives and transfers had remained stable at 18 percent for the years 2009-2011, with no notable change demonstrated in either group within the cohorts. This year, for the junior cohort, because of the decrease for transfer students and the opposite movement of native students, with a slight increase, the difference between the completion rates of natives and transfers is 20 percent, up 2 percentage points from last year's cohort study.

Table 5. Difference in Completion Rates for Junior Cohorts 2005-2012

Cohort Year	Total Juniors - Natives			Total Juniors - Transfers			Difference
	Total	Total Graduates	Percent Graduating in 4 years	Total	Total Graduates	Percent Graduating in 4 years	Percent Graduating in 4 years
FALL 2012	42,884	35,956	84%	15,150	9,672	64%	20%
FALL 2011	41,185	34,341	83%	14,069	9,076	65%	18%
FALL 2010	40,042	33,593	84%	13,824	9,121	66%	18%
FALL 2009	39,987	33,566	84%	12,462	8,277	66%	18%
FALL 2008	39,394	33,157	84%	11,569	7,930	69%	16%
FALL 2007	38,720	32,461	84%	11,517	7,875	68%	15%
FALL 2006	38,355	31,898	83%	11,951	7,991	67%	16%
FALL 2005	37,695	31,153	83%	11,486	7,709	67%	16%
Average			84%			67%	17%

Source: Coordinating Board CBM009

Table 6. Completion Rates for Junior Fall 2012 Cohort

Institution and Peer Group	Native Juniors			Transfer Juniors		
	Total	Total Graduates	Percent Graduating in 4 years	Total	Total Graduates	Percent Graduating in 4 years
Angelo	688	571	83%	39	32	82%
Midwestern	442	358	81%	115	64	56%
Sul Ross	101	76	75%	22	11	50%
Sul Ross-Rio Grande	*	*	100%	123	39	32%
TAMU-Galveston	170	149	88%	32	22	69%
TAMU-Central Tx				97	58	60%
TAMU-San Antonio	*	*	100%	422	250	59%
TAMU-Texarkana	23	21	91%	93	62	67%
UT-Brownsville	281	211	75%	233	117	50%
UT-Tyler	293	235	80%	305	184	60%
UT-Permian	167	130	78%	100	72	72%
UH-Clear Lake				810	513	63%
UH-Downtown	346	209	60%	830	420	51%
UH-Victoria	11	10	91%	180	98	54%
UNT-Dallas	11	11	100%	168	106	63%
Master's Institutions	2,536	1,984	78%	3,569	2,048	57%
Lamar	828	628	76%	105	51	49%
Prairie View	763	568	74%	65	47	72%
SFA	1,363	1,154	85%	270	184	68%
Tarleton	789	665	84%	445	317	71%
TAMI	537	404	75%	178	113	63%
WTAMU	698	591	85%	295	199	67%
Comprehensive Institutions	4,978	4,010	81%	1,358	911	67%
Sam Houston	1,331	1,122	84%	579	412	71%
TAMU-Commerce	368	300	82%	493	323	66%
TAMU-CC	661	511	77%	237	138	58%
TAMU-Kingsville	499	369	74%	147	124	84%
Tx Southern	441	271	61%	87	36	41%
TWU	442	355	80%	424	303	71%
UT-Pan American	1,859	1,345	72%	458	300	66%
Doctoral Institutions	5,601	4,273	76%	2,425	1,636	67%
TxStU	2,836	2,321	82%	840	579	69%
TTU	3,204	2,790	87%	471	335	71%
UT-Arlington	1,625	1,334	82%	1,332	802	60%
UT-Dallas	1,120	983	88%	784	528	67%
UT-El Paso	1,563	1,127	72%	539	313	58%
UT-San Antonio	2,219	1,794	81%	674	420	62%
UH	2,467	1,999	81%	1,264	722	57%
UNT	2,395	1,990	83%	1,132	736	65%
Emerging Research	17,429	14,338	82%	7,036	4,435	63%
TAMU	6,495	6,050	93%	511	446	87%
UT-Austin	5,845	5,301	91%	251	196	78%
Research Institutions	12,340	11,351	92%	762	642	84%
Statewide Summary	42,884	35,956	84%	15,150	9,672	64%

Source: Coordinating Board CBM009

Completion Rates and Financial Aid

Transfer students are eligible to receive many types of financial aid. Pell Grants are a need-based form of federal aid that are used in Coordinating Board reporting as an indicator of students who come from financially disadvantaged circumstances. Table 7 shows that in the peer group categories, with the exception of Research Institutions, the performance gap between natives and transfer students is greater for students without Pell. The cohort groups' difference statewide for students without Pell is 24 percentage points. There also is a performance gap between natives and transfer students eligible and receiving Pell, but it is not as great. The cohort groups' difference statewide for students with Pell is 15 percentage points.

Table 7. Peer Group Completion Rates for Junior Fall 2012 Cohort, With and Without Pell Grants

Peer Group	With Pell			Without Pell		
	Native Completion Rate with Pell	Transfers Completion Rate with Pell	Difference in Completion Rates	Native Completion Rate w/o Pell	Transfers Completion Rate w/o Pell	Difference in Completion Rates
Master's Institutions	75%	57%	18%	82%	57%	25%
Comprehensive Institutions	77%	67%	10%	85%	68%	17%
Doctoral Institutions	74%	67%	7%	80%	69%	11%
Emerging Research	79%	65%	14%	85%	60%	25%
Research Institutions	88%	80%	8%	93%	88%	5%
Statewide Summary	79%	64%	15%	87%	63%	24%

Source: CBM009

The differences in the performance gaps does not appear to be because of receipt or eligibility of Pell by transfer students, but rather, because of the difference in performance of native students receiving and not receiving Pell. Native students with Pell have a lower completion rate than natives without Pell. However, transfer students with Pell complete their degree at almost the same rate as transfer students without Pell.

The pattern of the differences in the performance gaps also was seen in previous years' study. Table 8, which follows, shows completion rates for natives who receive Pell has been, on average, 9 percent less than the completion rate of natives without Pell for the last five years of the cohort study, while the completion rate for transfer students without Pell has differed, on average, only 1 percent than transfer students with Pell. For native students, being without Pell seems to improve how likely the student is to graduate within four years after obtaining junior status. For transfer students, being able to graduate in four years after obtaining junior status is equally likely with or without Pell.

Table 8. Five Cohort Years of Native and Transfer Juniors Completion Rates, With and Without Pell

Cohort Year	Native Juniors			Transfer Juniors		
	Completion Rate with Pell	Completion Rate w/o Pell	Completion Rate Difference (w/o Pell - Pell)	Completion Rate with Pell	Completion Rate w/o Pell	Completion Rate Difference (w/o Pell - Pell)
2012 cohort	79%	87%	8%	64%	63%	-1%
2011 cohort	78%	87%	9%	64%	64%	0%
2010 cohort	79%	87%	8%	65%	68%	3%
2009 Cohort	79%	87%	8%	66%	67%	1%
2008 Cohort	78%	88%	10%	68%	69%	1%
Average Difference			9%			1%

Source: CBM009

As noted, state-level and peer-group data indicate that for community college transfer students who graduated, whether they received Pell Grants made little difference in their four-year completion rates. However, for individual institutions there are differences that do not mirror the collective pattern. Table 9 shows the completion rate for native juniors and community college transfer students who graduated at each institution and either received Pell or did not. A total of 21 of the 38 institutions have a better completion rate for their community college transfer students with Pell than for their transfer students without Pell. Most of these 21 institutions are in the Master's or Emerging Research peer groups. There also are six institutions which have a completion rate for natives receiving Pell higher than the completion rates of natives without Pell.

Table 9 also shows the number of students at each institution who graduated either receiving or not receiving Pell. The populations of natives and transfers differ in the proportions of students receiving or not receiving Pell. Most native students in the cohort who graduate did not receive Pell, but most of the transfer graduates did. Of native graduates, 41 percent received Pell, while 64 percent of transfer graduates were eligible for and received Pell.

Table 9. Completion Rates by Institution for Junior Fall 2012 Cohort, With and Without Pell Grants

Institution	Native Juniors				Transfer Juniors			
	Graduates with Pell	Graduates w/o Pell	Completion Rate with Pell	Completion Rate w/o Pell	Graduates with Pell	Graduates w/o Pell	Completion Rate with Pell	Completion Rate w/o Pell
Angelo	249	322	79%	87%	17	15	77%	88%
Midwestern	150	208	79%	83%	39	25	53%	60%
Sul Ross	49	27	71%	84%	10	*	56%	25%
Sul Ross-Rio Grande	*	*	100%	100%	31	8	32%	32%
TAMU-Galveston	31	118	84%	89%	12	10	75%	63%
TAMU-Central Tx					39	19	60%	59%
TAMU-San Antonio	*		100%		196	54	62%	51%
TAMU-Texarkana	11	10	92%	91%	35	27	63%	73%
UT-Brownsville	181	30	74%	79%	101	16	50%	52%
UT-Tyler	75	160	77%	82%	119	65	57%	66%
UT-Permian	56	74	79%	77%	42	30	75%	68%
UH-Clear Lake					281	232	64%	63%
UH-Downtown	164	45	62%	56%	274	146	52%	48%
UH-Victoria	8	*	100%	67%	53	45	50%	62%
UNT-Dallas	10	*	100%	100%	81	25	74%	43%
Master's Institution	986	998	75%	82%	1,330	718	57%	57%
Lamar	328	300	73%	79%	31	20	48%	49%
Prairie View	432	136	76%	71%	32	15	71%	75%
SFA	531	623	81%	88%	114	70	66%	71%
Tarleton	250	415	77%	90%	195	122	71%	71%
TAMI	324	80	75%	77%	92	21	62%	72%
WTAMU	230	361	81%	87%	130	69	68%	66%
Comprehensive	2,095	1,915	77%	85%	594	317	67%	68%
Sam Houston	489	633	80%	88%	227	185	69%	73%
TAMU-Commerce	170	130	79%	86%	216	107	65%	67%
TAMU-CC	229	282	73%	81%	101	37	58%	58%
TAMU-Kingsville	216	153	72%	77%	91	33	83%	87%
Tx Southern	219	52	61%	63%	31	5	46%	25%
TWU	202	153	76%	86%	208	95	72%	70%
UT-Pan American	1,070	275	74%	66%	265	35	65%	67%
Doctoral Institution	2,595	1,678	74%	80%	1,139	497	67%	69%
TxStU	869	1,452	79%	83%	332	247	69%	68%
TTU	735	2,055	81%	89%	196	139	71%	72%
UT-Arlington	724	610	82%	82%	529	273	61%	58%
UT-Dallas	282	701	88%	88%	336	192	70%	63%
UT-El Paso	807	320	72%	72%	257	56	59%	53%
UT-San Antonio	910	884	78%	84%	290	130	62%	63%
UH	987	1,012	80%	82%	443	279	60%	53%
UNT	804	1,186	80%	85%	439	297	69%	60%
Emerging Research	6,118	8,220	79%	85%	2,822	1,613	65%	60%
TAMU	1,371	4,679	91%	94%	180	266	85%	89%
UT-Austin	1,530	3,771	86%	93%	117	79	75%	84%
Research Institution	2,901	8,450	88%	93%	297	345	80%	88%
Statewide Summary	14,695	21,261	79%	87%	6,182	3,490	64%	63%

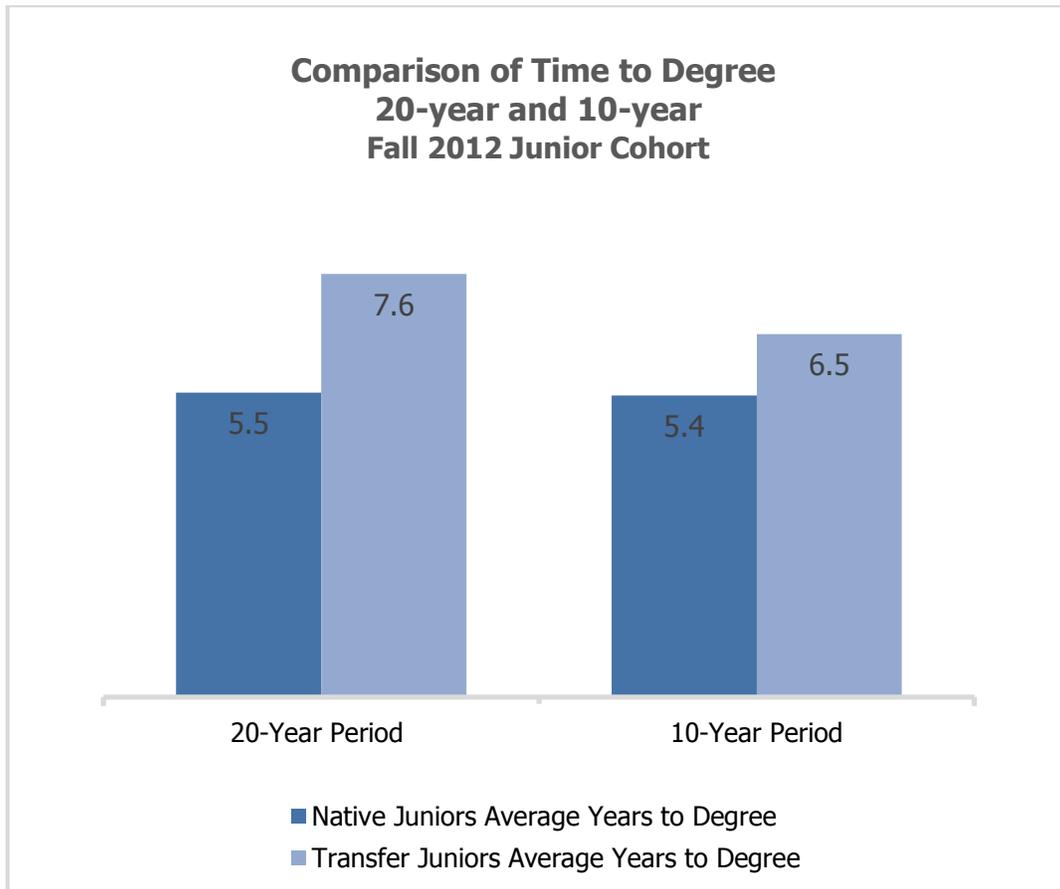
Source: CBM009 *FERPA Restricted

Time to Degree

Time to degree is another measure of student performance. Time to degree considers the number of years, the number of semester credit hours (SCH) attempted, and the number of semesters students take to complete their degrees. Within the junior fall 2012 cohort, time to degree is compared for native and transfer students.

For purposes of this report, the possible start date for a student's first enrollment in higher education is 20 years prior to graduation in 2016. The 20-year period was used for all reports except the 2016 report. A 10-year period was used for the 2016 report, which followed native and transfer juniors backward and forward in time from 2011, when they were classified as juniors. The use of different time periods to calculate time to degree in the 2016 report, versus previous years, caused time to degree to be reported as significantly lower than previous cohorts, even though no actual change had occurred. This report returns to the performance measure based on 20-year data to be consistent with reports for the 2005-2010 cohorts. Even so, the change in the time period for calculating time to degree revealed that a community college transfer student is more likely to "stop-out" from attending college for extended periods of time, with many returning to college after 10 years. For this year's cohort, the number of graduates that took longer than 10 years to graduate is 1,549. Out of those, only 85 are natives, and 1,464 are transfers. The natives who took longer than 10 years to graduate had an average time to degree of 12.9 years, and the transfers' time to degree was 14.6 years.

Chart 2. Comparison of Time to Degree Calculation with 20-year and 10-year Time Periods



As Table 10 indicates, previous transfer student groups that were part of the cohorts of the study had time to degree measures that clustered at 7.5 years, with the exception of the transfer juniors of the fall 2011 cohort, whose calculation was determined based on the shorter time period. As noted, using a different time period caused a significant change in years to degree for transfer students but minimal change in years for natives. For both groups in the 2011 cohort, no change related to the time period used (10 years or 20 years) was observed in either the number of semesters or the number of SCH in which natives and transfer students enrolled. The changes observed related to the cohorts from 2011 to 2012 are a slight decrease in SCH for both groups, and for transfer students, a slight increase in average number of semesters. Native students in the fall 2012 cohort completed their degrees in five and a half years, and transfer students took two years longer.

When measured by SCH, natives attempted, on average, 135 and transfer students attempted an additional seven to acquire 142 at graduation. Transfer students also enrolled in one additional semester. Natives appear more likely to be continuously enrolled. The “stop outs” that transfer students are more likely to take may result in inefficiencies, including finding degree requirements changed during their absence and repeating courses as refreshers. Whatever the cause, the result is that transfer students enroll in one semester more than natives, accumulate an additional seven SCH, and extend their time to degree by approximately two years.

Table 10. Statewide Summary Time to Degree, Fall 2005-2012 Junior Cohorts

Cohort Year	Natives				Transfers			
	Total Graduates	Average Time to Degree Years	Average Number of SCH Attempted	Average Number of Semesters	Total Graduates	Average Time to Degree Years	Average Number of SCH Attempted	Average Number of Semesters
2012	35,956	5.5	134.8	10.1	9,672	7.6	142.0	11.4
2011	34,341	5.4*	136.4	10.1	9,072	6.3*	142.9	11.3
2010	33,593	5.4	137.5	10.1	9,121	7.7	143.9	11.4
2009	33,565	5.4	138.4	10.0	8,277	7.7	144.0	11.3
2008	33,157	5.4	139.1	10.0	7,930	7.5	145.0	11.3
2007	32,461	5.4	142.3	9.9	7,875	7.4	144.2	11.2
2006	31,898	5.4	142.9	9.9	7,991	7.4	145.9	11.3
2005	31,153	5.4	143.6	10.0	7,709	7.3	146.3	11.2

Source: Coordinating Board, CBM001 CBM009 *Based on time period of 10 years instead of 20 years

Table 11 presents the differences in time expended in years, SCH attempted, and number of semesters enrolled by natives and transfers by institution. The difference in SCH attempted varied widely from institution to institution, with several institutions graduating, on average, their community college transfer students with fewer hours attempted than their native students. Those institutions are Angelo, Midwestern, UH-Downtown, Lamar University (Lamar), UT-Arlington, and University of Texas at El Paso (UT-El Paso). Angelo’s transfer students also had an average number of semesters enrolled lower than that of their natives, but Angelo has many more native students in the cohort than transfer students. All GAIs had an average time to degree in years for their transfer students that was higher than that of their natives.

Table 11. Average Time to Degree-Years, SCH Attempted, and Semesters for Fall 2012 Junior Cohort

Institutions and Peer Groups	Native Juniors			Transfer Juniors			Difference Between Transfer and Native Juniors		
	Average Time to Degree	Average No. of SCH Attempted	Average No. of Semesters	Average Time to Degree	Average No. of SCH Attempted	Average No. of Semesters	Average Time to Degree	Average No. of SCH Attempted	Average No. of Semesters
Angelo	5.8	133.9	10.8	7.6	126.7	9.8	1.8	-7.2	-1.0
Midwestern	5.7	140.7	10.7	8.1	135.0	11.4	2.4	-5.8	0.7
Sul Ross	5.6	140.2	9.9	7.9	158.9	11.6	2.3	18.7	1.8
Sul Ross-Rio Grande				8.1	139.1	11.7			
TAMU-Galveston	5.1	141.6	9.7	7.8	165.4	11.9	2.6	23.8	2.2
TAMU-Central Tx				6.9	136.4	10.6			
TAMU-San Antonio				9.3	144.0	12.2			
TAMU-TeXarkana	5.5	123.8	10.6	7.1	135.9	11.1	1.6	12.1	0.6
UT-Brownsville	6.2	134.5	11.1	8.7	136.7	12.0	2.6	2.1	0.8
UT-Tyler	5.4	128.5	10.1	7.5	135.4	10.8	2.1	6.9	0.7
UT-Permian	5.8	130.2	10.4	7.7	140.9	11.8	1.9	10.7	1.3
UH-Clear Lake				8.1	144.9	12.0			
UH-Downtown	6.5	146.8	11.8	8.6	142.1	11.9	2.1	-4.7	0.1
UH-Victoria	4.8	129.4	9.0	9.2	141.3	11.7	4.4	11.9	2.7
UNT-Dallas	4.7	120.6	9.0	8.6	137.0	12.1	3.9	16.4	3.1
Master's Institution	5.8	136.3	10.7	8.3	141.2	11.8	2.5	4.9	1.1
Lamar	5.8	142.5	10.9	9.1	138.8	11.7	3.3	-3.8	0.9
Prairie View	5.5	150.2	10.3	7.3	152.9	11.1	1.8	2.7	0.8
SFA	5.4	134.8	9.9	7.7	142.8	11.0	2.3	8.0	1.0
Tarleton	5.5	134.9	10.3	7.9	136.9	11.0	2.4	2.0	0.7
TAMI	6.0	137.9	11.0	6.9	148.2	11.5	0.9	10.3	0.5
WTAMU	5.7	128.1	10.5	7.8	133.5	11.4	2.1	5.4	0.8
Comprehensive	5.6	137.5	10.4	7.8	139.7	11.2	2.2	2.1	0.8
Sam Houston	5.3	135.4	10.0	7.2	147.2	11.6	1.9	11.8	1.6
TAMU-Commerce	5.6	135.5	10.1	7.9	140.7	11.4	2.4	5.2	1.3
TAMU-CC	5.6	141.8	10.4	8.3	146.2	11.9	2.7	4.4	1.5
TAMU-Kingsville	5.7	140.2	10.5	8.3	153.6	11.9	2.6	13.4	1.5
Tx Southern	5.8	156.7	10.7	8.9	168.1	13.2	3.1	11.4	2.4
TWU	5.4	139.7	9.9	8.3	140.6	11.2	2.9	0.9	1.2
UT-Pan American	6.3	144.1	11.6	8.6	143.7	12.2	2.2	-0.4	0.5
Doctoral Institution	5.8	141.0	10.6	8.0	144.9	11.7	2.3	3.9	1.0
TxStU	5.5	132.7	10.3	7.3	142.4	11.6	1.7	9.7	1.3
TTU	5.5	138.3	10.2	7.0	146.2	11.8	1.6	8.0	1.5
UT-Arlington	5.5	137.5	10.2	7.1	136.2	10.7	1.6	-1.3	0.5
UT-Dallas	4.9	133.9	9.2	7.3	145.4	11.4	2.5	11.5	2.2
UT-El Paso	5.7	140.8	10.7	7.6	140.2	11.7	1.9	-0.6	1.0
UT-San Antonio	5.8	139.4	10.8	7.8	144.8	11.8	1.9	5.4	1.0
UH	5.5	138.3	10.3	7.1	145.6	11.5	1.6	7.4	1.2
UNT	5.3	133.3	9.8	7.1	139.1	10.9	1.8	5.8	1.1
Emerging Research	5.5	136.6	10.2	7.2	142.0	11.3	1.8	5.3	1.1
TAMU	5.3	130.5	9.9	6.1	140.5	10.6	0.8	10.0	0.8
UT-Austin	5.1	127.1	9.4	6.5	142.2	10.7	1.4	15.1	1.2
Research Institution	5.2	128.9	9.7	6.2	141.0	10.7	1.0	12.1	1.0
Statewide Summary	5.5	134.8	10.1	7.6	142.0	11.4	2.1	7.2	1.3

Source: Coordinating Board, CBM001 CBM009

In years to degree, the range of averages for natives graduates at the GAIs is 4.7 years to 6.5 years. The range of averages for transfer graduates starts at 6.1 and reaches a high of 9.3 years. In SCH, the range of averages for natives at GAIs is 120.6 to a high of 156.7. The range for transfer graduates is 126.7 to 168.1 SCH. The range for natives for number of semesters enrolled is 9 to 11.8, while for transfers, the range of averages is 9.8 to 13.2 semesters.

Since the statewide average time to degree in years is the measure of performance that indicates the greatest difference between native juniors and community college transfer juniors, the question arises how and where students in the cohort have distributed their time while earning their degree. When looking at the cohort's progress toward bachelor's degree completion, there are two segments of time. Students in the junior cohort start in higher education at various points in times either at a public community college or a public university and progress toward junior status. A student in the cohort may start in higher education several years before or after another student in the cohort but because of various individual enrollment patterns reach junior status at the fall semester 2012 to be included in the cohort.

For native students in the cohort, their first enrollment and their higher education experience has been at the university. As mentioned, for transfer students in the cohort, their first enrollment and their higher education experience has been at the community college. Table 12 shows the time expended by graduating students in the cohort as they moved forward to junior status, by institution awarding the bachelor's degree. The statewide average for native students is 3.1 years and the statewide average for transfer students is 5.1 years for achieving junior status.

The other segment of time to consider is the time to graduation after acquiring junior status. This segment of time for the cohort students' progress toward bachelor's degree completion takes place concurrently for all the graduating students. The second segment of time takes place in the same environment and under the same conditions of student support at each university from the time of acquiring junior status. Table 13 shows how quickly students in the cohort move forward from junior status to graduation, by institution. While the transfer juniors do not advance as quickly as their native classmates toward graduation, the difference is small, with the transfer juniors enrolled for approximately four to five months or one semester longer, on average, statewide. The statewide average for native students is 2.1 years, and the statewide average for transfer students is 2.5 years from junior status to graduation.

Table 12. Average Time to Acquire Junior Status

Institutions and Peer Groups	Total Juniors Graduates		Natives Graduates		Transfers Graduates		Difference between Transfer & Native Graduates
	Total Junior Graduates	Average Time to Acquire Junior Status	Native Graduates	Average Time to Acquire Junior Status	Transfer Graduates	Average Time to Acquire Junior Status	
Angelo	603	3.6	571	3.5	32	5.7	2.2
Midwestern	422	3.7	358	3.3	64	5.9	2.6
Sul Ross	87	3.8	76	3.6	11	5.5	2.0
Sul Ross-Rio Grande	41	5.6			39	5.4	5.4
TAMU-Galveston	171	3.0	149	2.8	22	4.5	1.7
TAMU-Central Tx	58	4.9			58	4.9	4.9
TAMU-San Antonio	251	6.9			250	6.9	6.9
TAMU-Texarkana	83	4.5	21	3.0	62	5.0	1.9
UT-Brownsville	328	4.4	211	3.4	117	6.2	2.8
UT-Tyler	419	4.0	235	3.1	184	5.1	2.0
UT-Permian	202	4.1	130	3.5	72	5.1	1.6
UH-Clear Lake	513	5.3			513	5.3	5.3
UH-Downtown	629	5.3	209	4.1	420	6.0	1.9
UH-Victoria	108	6.1	10	2.6	98	6.5	3.9
UNT-Dallas	117	5.7	11	2.7	106	6.0	3.3
Master's Institutions	4032	4.6	552	3.4	2048	5.8	2.3
Lamar	679	3.6	552	3.4	51	6.6	3.3
Prairie View	615	3.2	568	3.0	47	4.9	1.8
SFA	1338	3.4	1154	3.1	184	5.0	1.8
Tarleton	982	4.2	665	3.3	317	5.9	2.6
TAMI	517	3.6	404	3.5	113	4.2	0.7
WTAMU	790	3.9	591	3.4	199	5.5	2.1
Comprehensive	4921	3.7	4010	3.3	911	5.4	2.2
Sam Houston	1534	3.6	1122	3.2	412	4.7	1.5
TAMU-Commerce	623	4.6	300	3.4	323	5.8	2.4
TAMU-CC	649	3.8	511	3.2	138	5.8	2.5
TAMU-Kingsville	493	4.0	369	3.3	124	6.0	2.7
Tx Southern	307	3.6	271	3.3	36	5.8	2.5
TWU	658	4.4	355	3.1	303	5.9	2.8
UT-Pan American	1645	4.2	1345	3.8	300	6.0	2.2
Doctoral Institutions	5909	4.0	4273	3.4	1636	5.6	2.2
TxStU	2900	3.5	2321	3.2	579	4.9	1.7
TTU	3125	3.3	2790	3.1	335	4.4	1.3
UT-Arlington	2136	3.7	1334	3.1	802	4.6	1.5
UT-Dallas	1511	3.3	983	2.6	528	4.8	2.2
UT-El Paso	1440	3.6	1127	3.2	313	4.9	1.7
UT-San Antonio	2214	3.7	1794	3.4	420	5.1	1.8
UH	2721	3.4	1999	3.1	722	4.2	1.2
UNT	2726	3.4	1990	2.9	736	4.6	1.7
Emerging Research	18773	3.5	14338	3.1	4435	4.7	1.6
TAMU	6496	3.0	6050	2.9	446	3.6	0.7
UT-Austin	5497	2.8	5301	2.7	196	4.0	1.2
Research Institution	11993	2.9	11351	2.8	642	3.7	0.9
Statewide Summary	45628	3.5	35956	3.1	9672	5.1	2.0

Source: Coordinating Board, CBM001 CBM009

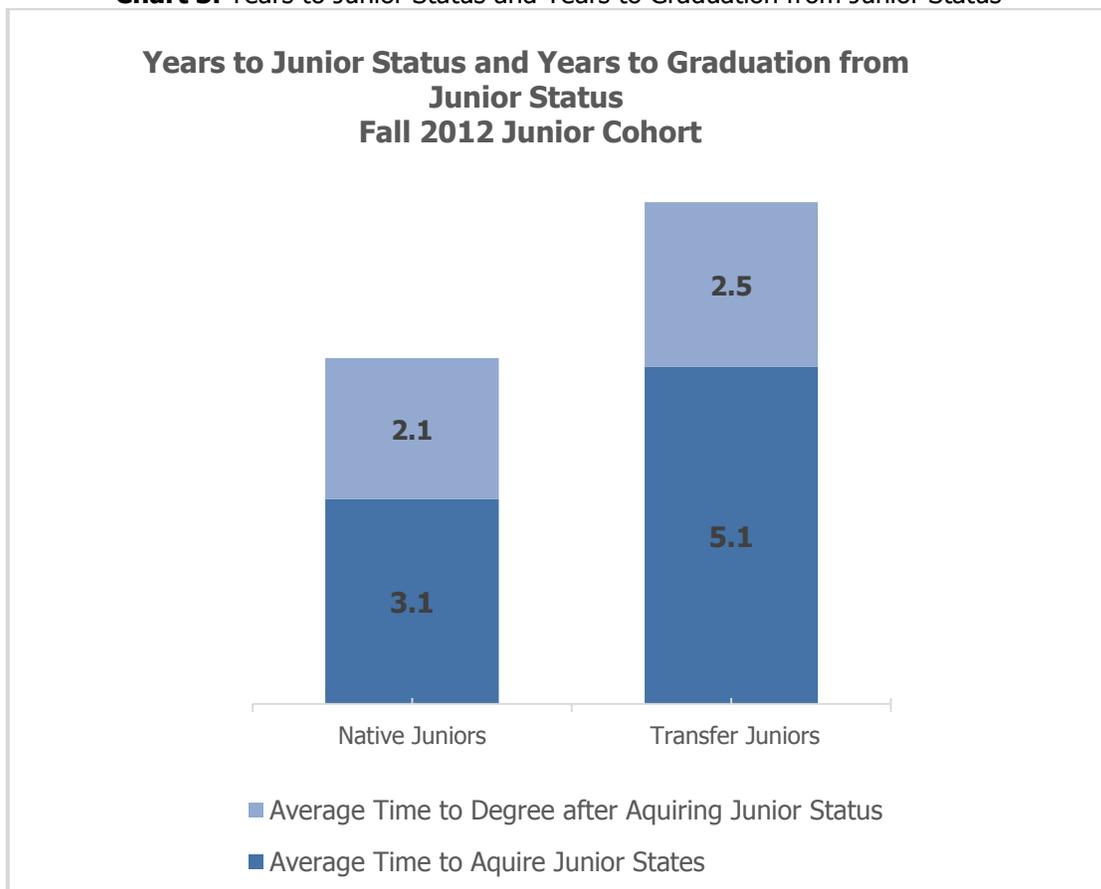
Table 13. Average Time to Degree after Acquiring Junior Status

Institutions and Peer Groups	Total Juniors Graduates		Native Graduates		Transfer Graduates		Difference between Transfer & Native Graduates
	Total Juniors Graduates	Average Time to Degree after Acquiring Junior Status	Native Graduates	Average Time to Degree after Acquiring Junior Status	Transfer Graduates	Average Time to Degree after Acquiring Junior Status	
Angelo	603	2.0	571	2.0	32	1.8	-0.1
Midwestern	422	2.2	358	2.2	64	2.4	0.2
Sul Ross	87	1.9	76	1.8	11	2.4	0.5
Sul Ross-Rio Grande	41	2.6			39	2.6	
TAMU-Galveston	171	2.2	149	2.1	22	2.7	0.6
TAMU-Central Tx	58	2.2			58	2.2	
TAMU-San Antonio	251	2.4			250	2.4	
TAMU-TeXarkana	83	2.3	21	2.3	62	2.3	0.0
UT-Brownsville	328	2.5	211	2.5	117	2.6	0.1
UT-Tyler	419	2.2	235	2.0	184	2.4	0.4
UT-Permian	202	2.1	130	2.0	72	2.3	0.3
UH-Clear Lake	513	2.6			513	2.6	
UH-Downtown	629	2.4	209	2.2	420	2.6	0.4
UH-Victoria	108	2.6	10	2.0	98	2.6	0.6
UNT-Dallas	117	2.4	11	1.8	106	2.5	0.6
Master's Institutions	4032	2.3	1984	2.1	2048	2.5	0.4
Lamar	679	2.3	628	2.2	51	2.5	0.3
Prairie View	615	2.2	568	2.2	47	2.5	0.2
SFA	1338	2.0	1154	2.0	184	2.4	0.4
Tarleton	982	2.0	665	1.9	317	2.3	0.4
TAMI	517	2.2	404	2.2	113	2.4	0.2
WTAMU	790	2.1	591	2.0	199	2.4	0.4
Comprehensive	4921	2.1	4010	2.1	911	2.4	0.3
Sam Houston	1534	2.0	1122	1.9	412	2.4	0.5
TAMU-Commerce	623	2.1	300	2.0	323	2.3	0.4
TAMU-CC	649	2.2	511	2.1	138	2.6	0.5
TAMU-Kingsville	493	2.2	369	2.1	124	2.3	0.3
Tx Southern	307	2.3	271	2.2	36	2.9	0.7
TWU	658	2.3	355	2.1	303	2.4	0.3
UT-Pan American	1645	2.3	1345	2.3	300	2.5	0.2
Doctoral Institutions	5909	2.2	4273	2.1	1636	2.4	0.3
TxStU	2900	2.2	2321	2.1	579	2.5	0.4
TTU	3125	2.2	2790	2.1	335	2.5	0.4
UT-Arlington	2136	2.3	1334	2.2	802	2.5	0.4
UT-Dallas	1511	2.3	983	2.2	528	2.4	0.3
UT-El Paso	1440	2.3	1127	2.2	313	2.6	0.3
UT-San Antonio	2214	2.2	1794	2.2	420	2.5	0.4
UH	2721	2.3	1999	2.2	722	2.7	0.6
UNT	2726	2.2	1990	2.1	736	2.5	0.4
Emerging Research	18773	2.2	14338	2.1	4435	2.5	0.4
TAMU	6496	2.1	6050	2.1	446	2.3	0.2
UT-Austin	5497	2.2	5301	2.2	196	2.6	0.3
Research Institutions	11993	2.2	11351	2.2	642	2.4	0.2
Statewide Summary	45628	2.2	35956	2.1	9672	2.5	0.4

Source: Coordinating Board, CBM001 CBM009

On average, both natives and transfers took longer than two years to reach the halfway point in a four-year degree program. However, unlike the progress from junior status to graduation, which shows similar performance, the progress of transfer students at the community college accumulating sufficient SCH to be classified as a junior when transferring is slower. Chart 3 combines the information of the two time periods: achievement of junior status from initial higher education enrollment and junior status to graduation. On a statewide basis, the same progress for achieving junior status takes longer for community college transfer students than for natives, but transfer students move forward to graduation at a similar pace to native students once they have transferred. The difference in the sum of time for each of the periods (to junior status and to graduation from junior status) and the time to degree, as indicated in table 11, is attributable to rounding and adding two averages. Even so, the pattern is approximately the same and occurs consistently at the institutional level.

Chart 3. Years to Junior Status and Years to Graduation from Junior Status



Conclusions

Community college transfer students graduate with a bachelor's degree at a lower rate of completion and take longer to do so than students who start and graduate from the same university. This difference between transfers and natives has been confirmed each year of the study of the junior cohort selected from reported data. While there has been some reduction in the number SCH attempted by students in pursuing their bachelor's degrees, it has been minimal and may be the result of the 120 SCH cap now in statute for the bachelor's degree at public institutions in Texas.

Completion rates and time to degree, in years, have changed little since first studied in 2010. These two measures of performance point to two different, but related, problems for transfer students and institutions. An improvement in completion rates requires greater numbers of students graduating. An improvement in time to degree in years requires students to continuously engage on the most efficient path to a degree.

The 2017 analysis of time to degree focuses on where and when challenges or barriers occur. One challenge, as evidenced by the distribution of time across transfer students' higher education experience, is the longer time spent in achieving junior status and leaving the community college. Texas is not unique in this particular challenge. A study of transfers among California public higher education institutions reveals a similar challenge. "Although the majority of California community college students enroll wanting to transfer, students transferred at an average rate of only 4% after two years of enrollment, 25% after four years of enrollment, and 38% after six years of enrollment. . . .The amount of time students take to transfer is a significant problem for all students, particularly for underrepresented students."¹

The data for the 2012 cohort shows that once the transfer students enroll at a university their pace in moving forward in a degree program is very close to the pace of the native students in the cohort. There are multiple circumstances that may contribute to this change of pace for the transfer students who graduate with a bachelor's degree. Some of the circumstances or conditions that may encourage faster progress are as follows:

- The student has caught up with college readiness and is no longer in developmental education.
- The student has chosen a major.
- The student is focused with a higher level of interest in courses within the major of their chosen degree program.
- The student may have an aversion to accumulating debt because of higher tuition cost.
- The student may have less choices in course scheduling because of course sequencing and set rotations of major courses, which requires more purposeful time management.
- The student finds a built-in community of learning and is engaged with students and faculty of similar interest.
- The student has a clearer vision of achievement and attainment with fewer uncertainties.

¹ Bustillos, L. T., et al. *The transfer maze: The high cost to students and the state of California*. Los Angeles: The Campaign for College Opportunity, September 2017.

There are characteristics and circumstances unique to each student that cannot be altered or controlled by institutions. There also are characteristics and circumstances unique to institutions as well. Working together, public institutions can adjust and change to make transfer easier for students.

More effective communication with prospective students planning to transfer is one strategy. The advising provided by community colleges is the second most often cited barrier to transfer. The first is transfer of excessive hours, which is often related to advising.

The perception that community college advising may, in some cases, be counter to students' best interests was addressed as part of the recommendations of a report by the American Council on Education's (ACE) Center for Policy Research and Strategy (CPRS). The report cited several studies on academic advising and student success and concluded, "These findings suggest the need to reexamine community college advising and consider new approaches in order to better serve students with baccalaureate aspirations."² One approach is to have universities involved in advising at the community colleges and for students to make a connection with a university as soon as possible, not waiting until just prior to transfer. The GAIs reported in the survey that one of the most effective efforts to increase enrollments of community college students was to have a regular and recognized presence on community college campuses, with some institutions establishing a full-time representative at key feeder institutions. This strategy facilitates the early connection between the community college student and a university. Universities are the best source for information about their own transfer process, and universities are the best source for information about their academic programs. This strategy requires a considerable commitment of staff and resources from the universities and a willing cooperation from community colleges.

Another way improve communication with prospective community college transfer students is to have recruiters, advisors, and faculty use the same communication tool for transfer, the TCCNS. Concurrent with the broad and consistent use of the TCCNS is the need to embrace statewide initiatives that use TCCNS and the Coordinating Board's ACGM. The TCCNS and ACGM are the building blocks essential to the success of the core curriculum, FOSC, and development of common learning outcomes for courses. When asked about the inclusion of common number information with course equivalents, universities responded with a wide range of placements within their publications and websites. Of concern is that the deeper one delves into the specifics of degree programs on institutional websites, the less prevalent the common course numbers. This may be reflective of the faculties' lack of awareness of the efforts to develop statewide lower-division curriculum through FOSC and to align courses through the ACGM Learning Outcomes Project, as reported by institutions in the survey. Unlike the ACGM Learning Outcomes Project and FOSC, faculty were reported to have a high level of awareness of core curriculum. However, faculty may be aware of and have a high level of interest in core curriculum requirements, not because it is intended facilitate transfer while providing a general education base for future learning, but because the inclusion of a course in core curriculum may boost enrollments of an otherwise marginally viable course. Administrative and faculty awareness, appreciation, participation, and promotion in development and change to the statewide initiatives are essential to moving the initiatives from the theoretical to the operational where students benefit directly.

² Turk, J. M., and Chen, W. *Improving the odds: An empirical look at the factors that influence upward transfer*. American Council on Education Center for Policy Research and Strategy, Washington, DC. 2017.

Communication with transfer students also can be improved by having a unified message about pathways between community colleges and universities. The unified message is the FOSC, which provides students with guarantees of course applicability at any public institution. An articulation agreement is often cited as a means to communicate degree requirements and information to students. Universities were asked in the survey about efforts and barriers to the creation of articulation agreements. The wide range in numbers of agreements at institutions indicate that there is not a uniform approach or meaning for articulation agreements. These agreements often have disclaimers about the possibility of change and cannot offer guarantees to students.

The U.S. Government Accountability Office (GAO) recently released a report of their study of the loss of credit during transfer, which results in a higher cost for education. The stakeholders surveyed as part of the GAO study indicated that, where there are not state policies or articulation agreements, the challenges for students in transferring are greater.³ Texas has policies and a statewide articulation agreement for individual courses through the TCCNS and for transfer of lower-division courses in a degree program major through FOSC.

Institutionally unique articulation agreements, however, could be counter to state policies regarding FOSC. Individual institutional articulation agreements either repeat the information of state policies and put an air of exclusivity on it or circumvent state policies to bring less standard approaches to curriculum. In its report, the GAO recommends that institutions post to their website a list of their articulation agreement partners. In the comments from the U.S. Department of Education to the GAO recommendation, there is a recognition of the negative consequences of differing numbers and approaches to articulation agreements. In the letter of response Assistant Secretary of Education, Kathleen Smith wrote:

The Department cautions that placing this kind of special emphasis on articulation agreements could seriously mislead students. A school's lack of articulation agreements is not a true measure of the school's credits' transferability. For example, a community college could have articulation agreements with a number of local four year colleges; but there could be many other colleges that will accept most, if not all, of the credits earned by students at the community college. A student who sees the few schools with articulation agreements listed on the school's website will think that he/she will not be able to transfer his/her credits to any other school. Alternatively, if the school notes on its website that the school has no articulation agreements, the student may erroneously believe that none of his/her coursework at that school would be accepted by other schools.⁴

The administrative and faculty efforts that are put into articulation agreements could be directed toward efforts to make the statewide initiatives more functionally operational at their institutions. Survey responses from Texas GAIs indicate that articulation agreements require a great deal of effort to create and maintain. The results of the efforts are rather abstract instruments disconnected and distant from students' advising and enrollment processes. To assess the effectiveness of an articulation agreement is difficult and anecdotal at best.

³ *Higher Education, Students Need More Information to Help Reduce Challenges in Transferring College Credits.* GAO-17-574, p. 10. United States Government Accountability Office. Washington DC. September 2017.

⁴ *Higher Education, Students Need More Information to Help Reduce Challenges in Transferring College Credits.* GAO-17-574. Appendix IV, p. 55. United States Government Accountability Office. Washington DC. September 2017.

Recommendations

To Increase the Number of Students Successfully Transferring:

- Community colleges should accelerate student progress to transfer by encouraging full-time enrollment when possible, including enrolling in summer school, enhancing advising aligned to the Texas Common Core (TCC) and Field of Study Curricula (FOSC), and filing a degree plan by the time a student completes 30 semester credit hours, as required by statute.
- Concurrently with the development of statewide curriculum alignment for degree programs, institutions must use these pathways (TCC and FOSC) and assess their degree programs to ensure they reflect the FOSC.
- As new FOSC are developed, the Coordinating Board will actively inform institutions of the new FOSC. Once institutions are informed, they must educate advisors to ensure that students are made aware of required courses.

To Improve Completion by Smoothing the Pathways Between Community Colleges and Universities:

- Texas public universities must be more diligent in aligning their courses with those in the *Lower-Division Academic Course Guide Manual* (ACGM) and in using the Texas Common Course Numbering System (TCCNS) because it provides the universal language to communicate lower-division program requirements and course information.
- GAI faculty and administrators should actively use the TCC, the ACGM Learning Outcomes Project, and FOSC to improve transfer and should not create multiple articulation agreements that compete or conflict with these statewide initiatives.
- GAI and community college administrators should provide faculty with joint professional development to increase their awareness of the significance of statewide initiatives to align courses and curriculum such as the TCC, the ACGM Learning Outcomes Project, and FOSC.

To Reduce Time to Degree:

- Universities should collaborate with community colleges to tackle difficult transcribing and degree-auditing issues to ensure correct application of the TCC and FOSC courses toward degree requirements.
- Universities should include the required number of semester credit hours to be completed in residence and the required number of semester credit hours to be completed at the upper division on their webpages for transfer students and have their representatives going to the community colleges well versed in the importance of these accreditation standards.
- Many students in Texas transfer to a GAI prior to achieving junior status. To include these important populations, future studies of transfer should include other students who transfer at different points in their academic career.

Appendices

(Available at: <http://www.thecb.state.tx.us/appendices>)

Appendix A: Institutional Profiles	32 - 69
Appendix B: The General Appropriations Act, House Bill (SB) 1, Article III-269, Section 49, 85th Texas Legislature Regular Session	70
Appendix C: Transfer Survey Instrument 2017	71
Appendix D: Institutional Survey Responses.....	80 - 270



This document is available on the Texas Higher Education Coordinating Board website:
<http://www.thecb.state.tx.us>

For more information contact:

Rebecca Leslie, Program Director
Academic Quality and Workforce
Texas Higher Education Coordinating Board
P.O. Box 12788
Austin, TX 78711
PHONE (512) 427-6231
Rebecca.Leslie@thecb.state.tx.us