2024 Capacity Study Report July 2024 M TEXAS A&M UNIVERSITY.





2024 Capacity Study Report

OVERVIEW

During the State of the University address and as part of the Quick Look Assessment, President Mark A. Welsh III issued the commission of the Student Experience Study and the Capacity Study. Both studies ran concurrently in an endeavor to provide comprehensive and holistic recommendations that address the immediate and future needs of main campus. The Capacity Study Committee was charged with reviewing the current infrastructure, teaching capacities, and staffing levels to identify the current and future capacity of enrollment on the main campus, as well as any near-term adjustments required to better serve the entire university community. The committee divided its work into five groups: instructional capacity, operational capacity, research and faculty spaces, student and event spaces, and transit and mobility capacity. The following report details the committee's findings and recommendations

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Executive Summary

Texas A&M University is one of the largest universities in the United States. Its location, physical size of its main campus, and the increasing demand for an Aggie degree (more than 65,000 freshman applications this year alone) uniquely position the university for growth. In recent years, concerns about the growth have been communicated by faculty, staff, and students, and a recent study of the student experience identified infrastructure and service gaps as potential threats to the high-quality student experience. In October 2023, President Mark A. Welsh III announced the need for a comprehensive analysis of the university's capacity to understand how Texas A&M's growth has been supported and to explore its threshold for continued growth. A cross-functional committee explored the university's capacity and provided an assessment of the current challenges as well as the recommendations for mitigating these challenges.

After a thorough analysis, the Capacity Study Committee recommends the university pause undergraduate growth on the main campus over the next five years while allowing graduate, online, and locations outside Bryan/College Station (B/CS) to continue to grow at modest rates. After those five years, growth should be well planned and forecasted to a minimum of 10 years out to plan infrastructure.

Over the last decade (2013-2023), the institution grew by almost 18,000 students, matching the increase in student population experienced 40 years ago (1973-1983). While the growth rate slowed dramatically in the 23 years that followed 1983, the university continued growing at a rate of about 500 additional students each of those years. Growth may be built into the DNA of this campus, as every dean has indicated a desire to continue to grow in the coming years, either with new degree programs, degrees at new locations, or an increased focus on graduate and online degree programs. The opportunity to meet that desired growth is certainly present. An analysis of admissions application data suggests that, despite growth, there are still thousands of qualified students who are not offered admissions each year due to capacity constraints, with many seeking entries to the largest undergraduate degree programs.

The university has done a remarkable job in many areas to manage the growth that has occurred over the past decade, while achieving markers of maintaining and enhancing the overall success of the university. Student course load each semester has remained largely constant. The average time to degree has remained at four years, and 61.7% of full-time freshmen graduated in four years (the highest in the university's history). Additionally, 81% of students have a job or were accepted into graduate school at the time of graduation. Further, with a few exceptions, the university has maintained or improved overall and



program rankings during this time (see table 5 in appendix), research expenditures have continued to climb, the number of National Academy faculty is at an all-time high (56), and faculty have continued to innovate, discover, and impact their respective fields across disciplines. As the number of students has increased by 33%, full-time equivalent staff and faculty across the university have increased at a similar pace.

However, the university has a significant number of areas that must be improved in order to best serve the current enrollment. Student support infrastructure (on-campus housing, dining, and student study spaces) is deficient, as are meeting spaces for student groups and events. On-campus housing has decreased to 20% of undergraduates, forcing students out into the community, which creates challenges for the local communities.

The overall student-to-faculty ratio has increased slightly from 23.0 to 23.6 from 2013 to 2023, and it remains higher than that of peer universities. The variability in student-to-faculty ratios across departments has resulted in increased pressures on faculty in certain departments, particularly those exceeding 30:1 in Engineering (4), Arts & Sciences (4), Agriculture & Life Sciences (3), Architecture (1), and Business (2). The university has elected to hire more Academic Professional Track (APT) faculty who teach more sections rather than as many tenure/tenure-track (T/TT) faculty who advance both the teaching and research missions. In addition, the university has increased the number of classrooms with a focus on larger rooms allowing increased section sizes (including a 40% increase in upper-level undergraduate sections of more than 100). The university has also dramatically increased (677%) the number of lower-level undergraduate semester credit hours taught online with students questioning the quality of some of those offerings. Availability of adequate research space is another constraint on the hiring of T/TT faculty, and for some faculty, it is impacting retention.

Likewise, the university growth has resulted in transit- and parking-related issues for faculty, staff, and students, particularly with 30% of students' academic homes now being on west campus, where parking needs have not kept pace. Parking has exhausted all its surplus capacity; the expected needs for the next year across campus are above capacity, and over 30% of the bus fleet (34 of 95) is older than the freshman class. Furthermore, recent new buildings sited on parking lots have exacerbated the shortage of parking supply. Students report increasing difficulty with internal campus operations, getting to classes, having time to get food, and locating study space, including space to participate in an online class. While staff growth has kept pace, there are targeted student-facing areas that need addressing.



Existing Efforts to Address Capacity Constraints

Before stating the recommendations, it is important to note that there are a number of initiatives recently implemented, moving forward, or planned that are already addressing capacity issues, including:

- Small reductions in the freshman and transfer cohorts in Fall 2024 should slow growth in B/CS.
- The planned construction of the Aplin Center will address some space needs for the College of Agriculture & Life Sciences, a larger visitor center, student study space, and dining.
- Renovations of Heldenfels Hall will address biological sciences laboratory teaching needs following the opening of the Instructional Laboratory & Innovative Learning Building (ILSQ) for chemistry teaching labs, renovations of the Heep Laboratory Building for research space, for Psychological & Brain Sciences and teaching lab space in Engineering, and renovations of the Academic Building for additional main campus classrooms.
- Expansion of Disability Resources to west campus in the Business Library & Collaboration Commons (BLCC) for additional testing center space.
- Construction of the second building in the Business Education Complex will add the needed teaching and office space for the Mays Business School.
- Planned facilities for the School of Performance, Visualization & Fine Arts (SPVFA) and the Department of Biology will add teaching and research spaces, and follow-on renovation of vacated spaces will allow the ability to address Architecture and other Arts & Sciences needs, respectively.
- Moving the off-campus transit hub from the Trigon area, expansion of Penberthy Boulevard and expanding the Memorial Student Center (MSC) bus hub will all increase infrastructure and improve safety for pedestrians and people using wheeled devices, while improving on- and off-campus transit issues.
- Recent Strategic Budget Council decisions also addressed capacity and student experience concerns through investments in academic advising, several student-serving offices, additional faculty, classroom enhancements, and retention of faculty and staff.



Priority Recommendations

In addition to efforts under way and with a pause in undergraduate growth in College Station, the committee recommends the following actions, many of which will take five plus years to fully implement:

ENROLLMENT GROWTH

- Create a 10-year enrollment forecast that identifies estimated revenue and expenses, infrastructure needs, faculty and staff plans, and needed transit changes.
- Pause undergraduate enrollment level for the next five years, targeting a freshman class of 11,750 and a transfer class of 3,250. This will result in 15,000 new undergraduate students each year. To ensure appropriate growth in new and existing programs with capacity, adjustments in some colleges' targets are needed. Any decrease in undergraduates within a college should be offset by an increase in graduate students within that same college.

FACILITIES FOR STUDENT SUPPORT INFRASTRUCTURE

- Create a west campus development plan that includes additional on-campus housing, dining, recreational spaces, student study spaces, parking, as well as classroom and academic support spaces, inclusive of faculty offices. In addition, consideration should be given to student support services that are located on or operating satellite offices on west campus.
- Increase the number of on-campus beds by 2,500 to allow 25% of B/CS undergraduates, particularly freshmen, to live on campus if desired. The university should maintain this ratio through any further growth. These additional beds would be funded through future housing revenue generated by these beds in addition to a modest adjustment in other on-campus housing rates. This expansion must include dining, recreation, study, and transportation needs. Currently, a housing feasibility group is analyzing this option.
- Add 28,000 square feet in dining by expanding the West Campus Dining Center, returning the Engineering space in Sbisa to dining, working with Barnes & Noble to shrink their footprint in the MSC basement to enable more dining space, and increasing the utilization of Duncan Dining Hall by the Corps of Cadets. The Aplin Center and coffee shops in Aggie Park and in the Roberts Building in the Business Education Complex will contribute to this target growth.
- Create a task force to examine the future of the University Health Services facility and operational needs. Over the past two years, the university has invested more than \$5M in new funding in personnel and operating budget, but the current facility is limiting services. Explore the option of satellite clinic(s) and an increase



in the Student Health Center fee for funding. The increase in the fee requires both legislative and board action.

• Utilize a centralized, user-friendly system (possibly expanding Ad Astra use) to manage space reservations across campus to improve coordination, ensure spaces are utilized efficiently, and allow access to a portion of classroom spaces for student groups to meet during evenings and on weekends, reducing the strain in the MSC and Rudder Tower.

CAMPUS MOBILITY

- To address some of the challenges with student mobility, the university should:
 - Build a west campus classroom facility (estimated at 108,000 gross square feet with projected costs of \$130M) with 100-seat or larger classrooms to fill needs identified by west campus academic units and allow core curriculum courses to be taught on both sides of campus. Work with departments teaching core curriculum on a class schedule that reduces the need for students to move across campus. The facility must include faculty offices and parking options for those whose department is on east campus but teach on west campus.
 - Engage with the community transportation agencies on safe connections to campus, including leading university coordination with city and Texas Department of Transportation (TxDot) projects, such as grade separation projects along University Drive.
 - Expand the current bus fleet by 10%, adding 9-10 buses at a cost between \$5.85M and \$7.65M. Explore funding options that include matching grant funds and the possibility of a new transit fee.
 - Adopt a minimum 20-minute offset start time for west campus courses, starting the day 20 minutes later than on east campus. Consider whether the start of the day for courses should remain at 8:00 a.m. or shift by 15-30 minutes. This will solve some transit concerns to and within campus. There is no intent to alter the official work hours of the university.
- Explore the feasibility of utilizing the Boring Company to build a tunnel system through campus to enhance the movement of people. An all-electric, zeroemissions, underground public transportation system circulating from the Polo Road Garage area to White Creek apartments called "The Aggie Loop" is estimated at \$250M-\$350M in construction and would take three years to complete. Funding for operation and maintenance costs would be needed.



FACULTY AND STAFF CHANGES

- Request the following offices to make a formal request for additional budget resources given the significant increase in demand for services (recognizing that several of these have already done so in the current budget year): Disability Resources, Career Center, Student Assistance Services, and Academic Success Center.
- Increase the academic advising budget using funds available in the FY25 budgets for Arts & Sciences, Business, and Engineering to reduce the undergraduate student-to-advisor ratio below 300:1 and invest the following two years to move below 275:1 for all colleges.
- Invest \$3M annually for salaries and benefits for each of the next five years in new T/TT faculty to rebalance the number of T/TT faculty with APT faculty, adding an estimated 100 faculty. Additionally, \$5M in one-time funds will be needed for faculty startup, matching colleges. While efforts in the past sought to reduce the overall student-to-faculty ratio, it is recommended to focus on new hires in strategic research priorities and departments with high student-to-faculty ratios that further the national reputation of Texas A&M.
- Invest in aggressive retention strategies of current faculty with \$3-5M annually in a university research renewal fund, matched by colleges. This would mitigate the current loss of about 50 T/TT faculty each year to other institutions, most often around promotion to associate professor.

SPACE UTILIZATION AND RENEWAL OF FACILITIES

- Consider additional research space after addressing the biological sciences building, SPVFA, and the renovation of vacated spaces. The university should investigate a second interdisciplinary research building to address multiple departments' needs and faculty collaboration in research. As additional faculty are hired in Engineering and to address current needs, additional research space needs should be considered.
- Develop university- and/or college-level policies for the use of office space for faculty, staff, and graduate students. Consider an adjustment in budgetary processes to charge for space-use across campus to enable more efficient and effective use of space. Update space allocation policies to be metric-based for research space and encourage the use of shared research space and equipment.
- Create a more proactive renewal/funding plan for campus facilities that will fully maintain newer buildings now and into the future. Establish criteria to prioritize funding toward other campus spaces that are critical to the teaching and research mission of the university. As a result, the budget for renovating and maintaining existing facilities must increase.



Limitations

Over the past decade, certain departments have altered their tracking methods, posing challenges for consistent internal comparisons over time. Technology systems have changed, such as the transition to the Workday human resources system in 2018 from the Budget/Payroll/Personnel (BPP) system. The academic realignment in Fall 2022 also affected the ability to compare data. Additionally, some units and facilities lack metrics such as usage and "turn-aways," necessitating the estimation of evidence. For instance, the MSC does not track the number of people entering the facility, and University Health Services does not track the number of people turned away from daily appointments. Several departments underwent renovations in the last decade, resulting in changes to the square footage allocated to students, whether increased, decreased, or modified. Furthermore, the ongoing impact of COVID continues to affect usage in various ways.

Committee Membership

Joe Pettibon	Vice President for Planning, Assessment, and Strategy
(Chair)	
Deb Banerjee	Professor, College of Engineering, Council of Principal
	Investigators, Faculty Senate
Scott Bauer	Director of HROE Analytics, Division of Human Resources and
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Evan Cox	Student Rep, Vice President of Campus Improvement, Student
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Matt Fry	Associate Vice President, Division of Research
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Asha Rao	Instructional Professor, College of Arts & Sciences, Faculty Senate
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Patrick Suermann	Interim Dean, School of Architecture, Council of Deans
Les Williams	Associate Vice President of Facilities and Energy Services,
	Division of Facilities and Utilities
Deborah Wright	Associate Vice President for Finance, Budget and Planning

Introduction

In line with the university's land-grant commitment to keep its doors open to as many Texans as possible, Texas A&M has grown from approximately 53,000 students in Fall 2013 to over 71,000 students in Fall 2023. The rapid boost in students at Texas A&M has caused a strain on foundational student services, the academic experience, infrastructure systems, and space on campus.

Students feel that the quality of their student experience has been negatively impacted by the rise in enrollment. Some student-facing services have longer lead times and insufficient one-on-one support. Employees in some departments, particularly those that serve students, are struggling to keep up with job duties and expectations, leading to widespread feelings of being overworked and under-supported. Even though staffing levels overall have kept up with the enrollment growth, this has not been consistent across all departments.

Campus buildings and facilities are under constant use, leaving little time for necessary repairs, upkeep, and improvements. The lack of downtime means major projects disrupt campus events and operations. There are insufficient study spaces, dining facilities are overcrowded, it can be difficult to find parking, and students often make do with inadequate accommodations for co-curricular activities. The rise in students has also increased offcampus stressors, affecting local housing, traffic, and other community resources.

While opinions vary, there is a strong consensus that Texas A&M's current infrastructure and resources are insufficient to support a continued rise in student population. Developing a long-term enrollment plan, combined with strategic investments and improvements to "fix the foundation," could ensure a sustainable and high-quality experience for students, staff, and the broader community. This strategy would allow Texas A&M to maintain its reputation as a "world-class" institution by ensuring that current enrollment and any future



growth is matched with adequate resources and planning. The committee identified six major themes during its study: (1) enrollment growth planning; (2) high-demand student serving departments; (3) academic experience; (4) facilities for student support infrastructure; (5) space constraints; and (6) mobility issues. This report addresses Texas A&M's current capacity needs and highlights the need to answer the following questions:

WHAT SIZE SHOULD TEXAS A&M BE?

Universitywide and unit-level planning efforts should align with the institution's vision and priorities. There are many options that could be considered in tackling campus' challenges, but ultimately, the decisions made should be tied to the institution's goals. These goals should be clearly communicated to campus stakeholders and routinely assessed and evaluated to ensure progress. This is imperative when considering the sizing of student enrollment, faculty, and staff, and the resources required to ensure adequate support. Texas A&M has consistently enrolled approximately 4% of total Texas high school graduates since 2003 (see table 6 in appendix). While enrollment growth has kept pace with the rising state population, the question needs to be asked – is the long-term strategic goal to continue to keep up with the state's growth, or should the university slow or pause to maintain a specific number of students?

WHERE DOES THE UNIVERSITY NEED TO "CATCH UP?"

Many of Texas A&M's current facilities and spaces have been outpaced by Texas A&M's sharp rise in enrollment over the last decade. This reality is a key challenge for various units across campus and has had a subsequent impact on the student experience. In the university's pursuit to "fix the foundation," the committee has identified units and spaces on campus that are experiencing insufficient resources, infrastructure, and spacing that must be prioritized to meet the needs of the campus community now and in the future.

HOW DOES TEXAS A&M PLAN FOR ITS INEVITABLE GROWTH?

As the university works to shape its overall enrollment size, campus will still see increases in its student numbers given the recent large entering class cohort sizes. Should the university work to curb this growth by holding future incoming undergraduate class sizes constant, campus will have time to make the adjustments needed to sustain current enrollment numbers. Nevertheless, the campus community must have the resources to support a campus that will continue to grow in the future.

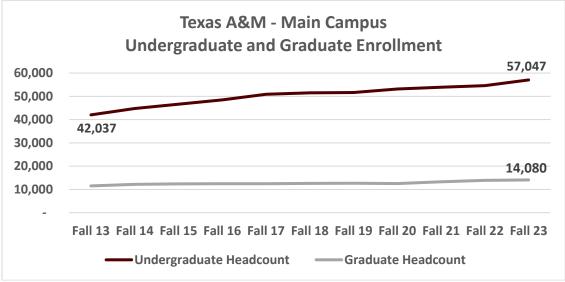


Enrollment Growth Planning

PLANNING FOR THE RIGHT SIZE

Fall 2023 Statistics:

- Fall 2023 Enrollment: 71,127 (57,047 undergraduates and 14,080 graduate/professional)
- Approximately 17,500 more students than Fall 2013 (33%)
- 36% increase in undergraduate students since Fall 2013
- 22% increase in graduate and professional students since Fall 2013
- Undergraduate students consistently make up 80% of the student population



Source: Academic and Business Performance Analytics (ABPA) Enrollment Profile, Texas A&M Reporting Selection, College Station Campus (excludes Texas A&M-Galveston, Texas A&M Health Science Center, and Texas A&M at Qatar)

The unprecedented surge in enrollment numbers over the last several years has posed an enormous challenge to the university's overall capacity. In the past, short-term enrollment targets have been set (and reached), but there has not been a comprehensive planning effort to address all the ways an enrollment upswing impacts the campus community. Instead, most planning has been done with short-term needs addressed (or not addressed) and in silos, bringing the university to where it is today. It is critical that the university develops a long-term plan so that enrollment targets and needs are examined simultaneously to provide the optimal student experience.

At a minimum, emphasis must be directed toward adjusting the incoming undergraduate class sizes to accommodate for the added future growth that the university is presently experiencing. Within the past decade, significant increases at the freshman level have been

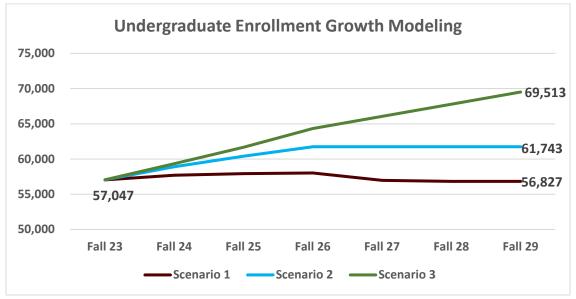


already "built in" to the overall campus size as the smaller graduating classes were replaced by larger incoming classes. Data shows that the incoming class in Fall 2023 had 2,600 more students than the class that entered in Fall 2019.

Changes in enrollment numbers can also have a significant financial impact on the university. Most of Texas A&M's state funding is obtained from a formula funding model that encourages growth and provides more funding for students enrolled in certain disciplines and levels. Tuition and fees charged to students provide another significant revenue stream to the university. Any changes to slow or pause the rate of growth could have a significant impact. Therefore, it is imperative that planning efforts also examine the potential financial and budgetary impacts to Texas A&M.

The graph forecasts three undergraduate enrollment growth scenarios:

- The first scenario shows the projection of slightly lowering the incoming students from Fall 2023, thus reducing first-time entering freshmen to 11,750 and transfers to 3,250 (15,000 total).
- The second scenario shows the impact of holding enrollment at the Fall 2023 headcounts of 12,865 freshmen and 3,402 transfers (16,267 total).
- The third scenario forecasts enrollment with future growth projected at the Fall '18-Fall '22 growth rates, which was an average increase of 436 entering freshmen and transfers (combined) per year.



Source: Office of Planning, Assessment and Strategy

Scenario 1 shows a slight decrease in Fall '27 as the large entering cohort from Fall '23 is replaced by a new entering cohort that is smaller. Scenario 2 shows an increase each year



until Fall '27, at which point growth is flat because future entering cohorts have the same headcount and have replaced smaller cohorts. Scenario 3 continues a steep growth trajectory, increasing undergraduate students by 22% within a six-year period. It is crucial that an enrollment growth plan be established to project and plan for future students' needs.

Recommendations:

- Create a 10-year enrollment forecast identifying estimated revenue and expenses, infrastructure needs, faculty and staff plans, and needed transit changes.
- Pause undergraduate enrollment level for the next five years, targeting a freshman class of 11,750 and a transfer class of 3,250.
 - This will result in 15,000 new undergraduate students each year. To ensure appropriate growth in new and existing programs aligns with campus capacity, adjustments in some colleges' targets are needed.
 - Any decrease in undergraduates within a college should be offset by graduate student growth within that same college.

STRATEGIC ADMISSIONS DECISIONS

Colleges across campus expressed a desire to grow their program offerings, and admissions data suggest that there is an increased demand by admissible students for specific majors at certain degree levels. In this context, "admissible" refers to prospective students who have met the same standards as admitted students at some point since the Fall of 2020. Furthermore, there are currently majors at the undergraduate level with high student-to-faculty ratios that also have high demand (i.e., admissible applicants that are denied admission to the major). The first-year applicant pool most clearly demonstrates this phenomenon in the following chart:

Major	Number of Admissible Applicants Denied Admission into the Major	Student Headcount to Faculty FTE
Engineering (lower division)	1,891	450
Business Administration	1,225	230
Other Engineering	1,139	n/a
Biology	868	31
Biomedical Sciences	517	n/a
Public Health (lower division)	509	n/a
Psychology	462	40
Animal Science	417	39
Mechanical Engineering	382	23
Computer Science	369	31
Kinesiology	363	27

Majors With Over 300 Admissible Freshman Applicants Denied Admission (Fall 2024)



Source: Admissions Office (# of applicants) and ABPA Texas A&M by the Numbers (student headcount to faculty FTE ratio). Note: Admissible applicants refers to prospective students who have met the same standards as admitted students at some point since Fall of 2020.

Allocating additional resources to these colleges to aid stabilization may allow Texas A&M to increase its yield on high-performing students and identify opportunities for increase in targeted programs that are supported by applications. Evaluating majors with less demand may also provide an opportunity to reevaluate tactics for re-allocating resources and targeting programs with capacity.

Transfer enrollment has been the only declining population on campus since 2019 but that has mirrored a decline in applications both at Texas A&M and nationally. Graduate populations represent a tremendous opportunity for shaping enrollment growth. However, demand and selectivity vary widely across colleges, signaling a rise in graduate enrollment may present unique challenges. As shown in the chart, the average admit rate for 2022 and 2023 for colleges and schools other than the College of Arts & Sciences and the College of Engineering is already 73%. Further, a high enrollment rate at 66% represents little opportunity to improve yield rates.

All Colleges	2022	2023	Avg of 2022-2023	
Applied	19,170	16,025		
Admitted	8,282	7,011	Admit Rate	43%
Enrolled	4,487	4,677	Enroll Rate	60%
Arts and Sciences (AT)	2022	2023	Avg of 202	2 2022
Applied	3,802	3,403	AVg 01 202	.2-2023
Admitted	1,072	716	Admit Rate	25%
Enrolled	530	538	Enroll Rate	60%
Engineering (EN)	2,022	2,023	Avg of 2022-2023	
Applied	9,770	6,997		
Admitted	3,193	2,109	Admit Rate	32%
Enrolled	1,396	1,249	Enroll Rate 50%	
All Colleges Except AT and EN	2,022	2,023	Avg of 2022-2023	
Applied	5,598	5,625		
Admitted	4,017	4,186	Admit Rate	73%
Enrolled	2,561	2,890	Enroll Rate	66%

Graduate Applied, Admitted, and Enrolled Data

Source: Accountability & Metrics – ABPA. Unofficial counts of applicants and admits may vary based on policy and procedure in individual colleges and departments.

Recommendations:

- Update the change of curriculum processes and policies by altering undergraduate admission standards to allow for major-specific requirements, leveraging majors with capacity.
- Leverage all strategic increases at the graduate level to remove the burden of a ballooning undergraduate size. Continue to focus on growth goals and



investment at the graduate level and online, as this would not impact space constraints in College Station.

- Given the existing graduate level admission rates in Engineering and Arts & Sciences, buildout is possible from these current pools.
 - Over the last two years, Engineering and Arts & Sciences have had admission rates that are less than half those of the rest of the university (32% and 25% vs. 73% respectively).
 - Adjusting the current admission rate from 25% to 35% in Arts & Sciences alone has the potential to increase the total university graduate (including professional) enrollment by 3% (approximately 500) over a 2-year period.
 - Adding Engineering at that same admission rate increases the total university graduate enrollment by 4.6% (approximately 770).
- Evaluate and incentivize optimal admission rates across programs that align with the university's enrollment targets by considering:
 - The intersection of selectivity and national program rankings. It is important to note that selectivity is factored into national rankings and that selectivity varies broadly from program to program within colleges.
 - Programs with high selectivity may prevent growth if doing so will not negatively impact reputation and rankings.
 - For Texas A&M to remain competitive in the national market, opportunities to expand into online spaces must be explored.

High-Demand Student Serving Departments

CAREER CENTER

The Career Center offers a variety of career development services and has seen a substantial impact on its operation given the expansion in the student body. Since Fall 2013, the number of students advised has increased by 36%, and workshop presentations and outreach has increased by 99%. Given its high demand, the Career Center has shifted resources toward workshops to accommodate more students since the department does not have the staff capacity to increase the number of one-on-one advising appointments. The current student-to-career advisor ratio is 2,672:1, which far exceeds the national average of 375:1. The majors most advised by the Career Center are Biomedical Sciences (8%), Biology (6%), Psychology (4%), Allied Health (4%), and Public Health (3%).

The central Career Center's office space in the John J. Koldus building is insufficient, which restricts the department's ability to expand staff and services. The center lacks enough interview rooms to support a high volume of on-campus interviews and recruiting activities. The shortage of dedicated interview spaces limits the center's ability to accommodate employer needs during peak recruiting periods. On "take-over" days, times in the semester when employers use Career Center offices for interview rooms, Career Center

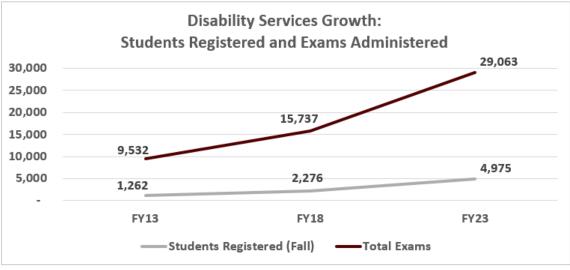


staff frequently work from home due to lack of available workspace. In addition to utilization of staff offices during peak interview periods, the Career Center reserves a high number of rooms in the MSC and Rudder Tower to accommodate employer interviews, which contributes to the overall strain on the MSC and Rudder Tower spaces. Schools and colleges often provide space for embedded career center staff, but they face their own space constraints that can lead to inconsistent and inadequate office space for career center staff.

DISABILITY RESOURCES

Disability Resources offers accommodations coordination, evaluation referral, disabilityrelated information, assistive technology services, and other services to help achieve an equitable learning environment for students with disabilities at Texas A&M. It has seen a significant spike in the demand for its services, exponentially outpacing the enrollment growth of students, while only increasing the number of staff in the past decade by three (25%). In the last decade, the number of students registered for Disability Resources has increased by 294%. Some of the increase is due to greater campus awareness of the resources and services offered, decreased societal stigma surrounding disability services, and more incoming students who received disability service support in high school that require services while they attend Texas A&M.

Some faculty members are not able to proctor their own accommodated exams because of space issues, therefore, most faculty rely on the testing center. The testing center offers various proctoring options needed for administering different types of tests (such as on a computer, with paper, or using a calculator). The number of exams proctored has increased by 205% in the last decade, with a 15% increase from FY22 to FY23.



Source: Disability Resources

In January 2020, Disability Resources moved into the new Student Service Building (SSB) with a testing center space it thought would be sufficient, but the need quickly outpaced the space. During final exams, it must reserve space in other buildings, including 10-12 rooms in



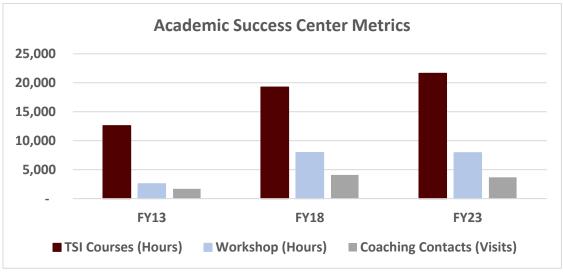
the MSC, to accommodate the number of students needing more time or reduceddistraction environments. Disability Resources was recently allocated additional space in the Business Library and Collaboration Commons (BLCC) for testing purposes. Discussions are currently underway about funding the space renovation.

STUDENT ASSISTANCE SERVICES

Student Assistance Services (SAS) seeks to connect Texas A&M University students with the appropriate guidance, resources, and support to address a variety of personal and academic matters. Some common issues that Student Assistance Services provides support for are referrals and resource connections, concerning-behavior follow-up, student welfare checks, Silver Taps and student deaths, and transition issues. Since FY14, the number of cases SAS has managed has increased by 380%. In addition to the increase in the number of cases, the cases continue to grow in complexity and in the amount of time needed to handle each case. In FY23, the highest number of cases handled by the department were food insecurity (26%), academic support (21%), mental health support (20%), and Tell Somebody (15%).

ACADEMIC SUCCESS CENTER

The Academic Success Center's (ASC) mission is to provide comprehensive resources that help all Aggies achieve their academic goals and realize their academic potential through tutoring, supplemental instruction, academic coaching, courses, and the Texas Success Initiative (TSI), a program that requires a high demand on staff.



Source: Academic Success Center

The chart shows the demand that the ASC has seen in the past decade in three specific programs: TSI courses, workshops, and coaching contacts. TSI courses have increased by 72% (up 12.6K to 21.6K), and workshops have increased by over 200% (2.5K to 7.9K). Coaching contacts have increased by over 100% (1.7K to 3.7K). Additionally, the number of students required to complete a success certificate has increased by 244%. ASC staffing levels



have not increased at the same pace, and the budget has declined slightly in the past year due to funding changes.

Recommendations:

- Request the following offices to make a formal request for additional budget resources given the significant increase in demand for services: Disability Resources, Career Center, Student Assistance Services and Academic Success Center. It is recognized that several of these offices have already done so in the current budget year.
- Reassess the referenced departments every four years to determine if the changes implemented have been successful in keeping up with the demand for service. Consider creating key performance indicators to monitor progress. Continue to evaluate and address space needs so departments can accommodate students.
- Construct a new Student Services Building and/or Student Center on west campus or integrate components within new facilities planned on west campus to accommodate the growing needs of the campus community. This facility would address various student needs and alleviate current space constraints across multiple services. By consolidating these high demand student services into a single, strategically located facility on west campus, Texas A&M can better serve the community's needs and support the continued growth and success of A&M students. Benchmarking other institutions who operate multiple student centers is imperative to ensure that an additional center would not fragment the campus experience even further. Additionally, transportation options would need to be considered to ensure connectivity between the two facilities so that the university can better leverage the usage of both spaces for larger conferences/conventions.
 - Expand the Career Center's presence on west campus to facilitate easier access for students and recruiters, mirroring the resources available in Koldus. Include interview spaces in the new building design to alleviate the need for staff to work remotely during high-demand periods, enhancing the efficiency and reach of career services across the campus. Create additional space for Career Center staff, so the inherent space access issues of the embedded model could be alleviated.
- Feature a dedicated testing center in the new building to alleviate pressure on the current Student Services Building (SSB) during peak exam periods for Disability Resources. Although an expansion of testing space is underway at the BLCC, it would be wise to assess whether the new SSB or student center could more effectively meet future testing space needs compared to the BLCC renovation.

Note: Additionally, the committee collected comparative data from the following departments as part of its process: Financial Aid, Multicultural Services, Registrar's Office, Risk and Compliance, Student Business Services, Student Conduct Office, Writing Center, University Police, Environmental Health and Safety, Human Resources, Technology Services, and Utilities. While each of these



departments plays an important role on campus and should be considered in long-term enrollment planning, the most critical current needs are in the departments discussed previously in this section.

Academic Experience

ACADEMIC ADVISING

As highlighted in the Student Experience Report, high-quality, accessible academic advising is essential to ensure Texas A&M offers a world-class student experience. The current student-to-academic advisor ratio makes the advising experience strenuous for advisors and students alike. It is imperative that the university make strategic investments to retain advisor talent and set university-wide expectations to enhance the academic advising experience across all academic units. The "best practices" cited student-to-academic advisor ratio is 300:1. Currently, Arts & Sciences, Business, and Engineering exceed this ratio. A key goal of the university should be to keep the student-to-academic advisor ratio to 275:1 or less.

Recommendation:

• Immediately increase the budget using funds available in the FY25 budget for Arts & Sciences, Business, and Engineering to reduce the undergraduate studentto-advisor ratio below 300:1. Continue to invest over the next two years to move the ratio below 275:1 for all colleges. NOTE: The Strategic Budget Council implemented this change in the FY25 budget to reduce all colleges below 300:1.

TENURE/TENURE-TRACK FACULTY HIRING

Faculty have a tremendous impact on Texas A&M students, both inside and outside of the classroom. While the overall student-to-faculty ratio has increased slightly in the past decade, as shown in the table, it remains higher than that of peer universities.

			Student to Faculty
Year	Faculty FTE	Student FTE	Ratio
Fall 2013	2,171	49,948	23.0
Fall 2014	2,216	53,044	23.9
Fall 2015	2,392	54,895	22.9
Fall 2016	2,484	56,768	22.9
Fall 2017	2,491	58,687	23.6
Fall 2018	2,618	59,749	22.8
Fall 2019	2,782	60,041	21.6
Fall 2020	2,732	61,400	22.5
Fall 2021	2,742	62,681	22.9
Fall 2022	2,734	63,853	23.4
Fall 2023	2,796	66,042	23.6



Source: ABPA; data includes Texas A&M self-supporting programs, out of state distance education, late registration between first and second census. Texas A&M-Galveston, HSC, and Texas A&M-Qatar students are excluded. Faculty includes those paid by Texas A&M funds, excluding Texas A&M-Qatar.

The Fall 2023 student-to-faculty ratio is 23.6, but there are several departments that exceed 30, as shown:

Department	Student Headcount to Faculty FTE
College of Engineering (lower-level (CLEN)	450
College of Business Administration (lower-level) (CLBA)	230
College of Arts & Sciences (interdisciplinary programs) (CLAT)	121
Communication and Journalism (CMJR)	44
Economics (ECON)	42
Ag Leadership, Education, and Communications (ALEC)	41
Industrial and Systems Engineering (ISEN)	40
Psychological and Brain Sciences (PBSI)	40
Ag Economics (AGEC)	39
Animal Science (ANSC)	39
Engineering Technology and Industrial Distribution (ETID)	38
Computer Science (CSCE)	31
Construction Science (COSC)	31
Biology (BIO)	31

Source: ABPA Texas A&M by the Numbers Student Faculty Ratio by Department dashboard.

The chart shows the departments whose ratio exceed the 30:1 ratio; additionally, there are two colleges who exceed 30:1. Engineering has a student headcount to faculty FTE ratio of 34:1, and Mays Business School's ratio is 33:1. Both Engineering and Business students start in a general major outside the department which results in an artificially lower student to faculty ratio for some departments. Depending on how these students progress from the general major to the specific major in the department, there are likely another six to eight departments in those two colleges that exceed the 30:1 threshold.

Overall, full-time equivalent (FTE) faculty hiring has mostly kept pace with enrollment, but based on the data, it hasn't been consistent across departments and colleges. In recent years, some departments have hired academic professional faculty (APT) to teach more classes, and in terms of headcount, APT faculty have grown by 51% over the past decade, many of these in part-time positions. A few colleges acknowledged that some tenure/tenure-track (T/TT) lines were converted to APT after faculty left or retired to address growth-related teaching needs.

In other colleges, even though T/TT lines were not converted to APT, there is still a need to add T/TT lines to maintain the research enterprise expected from an R1 university.

Students benefit from attending an R1 institution because of opportunities to interact and conduct research with T/TT faculty who are experts in their disciplines. In Fall 2013, the percentage of T/TT faculty FTE was 51% of the total faculty. In Fall 2023, that percentage had risen to 60%.

T/TT faculty headcount has decreased by 3% since 2013 with 105 leaving as part of the voluntary separation program (VSP) in 2016-2017. T/TT faculty FTE has increased by 49%. T/TT effort has increased over the years due to various reasons, including offering voluntary separation programs for those faculty who were less active in research and teaching, changes in administrations, rule adherence, and improvement of data capturing and reporting related to faculty and effort.

Recommendations:

- Invest \$3M annually for each of the next five years in new T/TT faculty to rebalance the number of T/TT faculty with APT faculty, adding an estimated 100 faculty. Additionally, \$5M in one-time funds will be needed for faculty start-up, matching colleges. While efforts in the past have sought to reduce the overall student-to-faculty ratio, it is recommended to focus on new hires in strategic research priorities and departments with high student-to-faculty ratios that further the national reputation of Texas A&M.
- Develop programs to proactively retain faculty, including identifying and addressing salary compression issues and support for equipment, training upgrades, mentorship, and leave time throughout the career of a faculty member. Retaining current successful faculty, even though it may require some investment, will be less expensive than hiring replacements.
- Better support and mentor T/TT faculty by reducing administrative burdens and enhancing support for graduate students. More support for graduate students in the form of tuition and fees fellowships or graduate assistantships can allow faculty to increase the number of graduate students they supervise and mentor.
- Conduct a comparison study of peer and aspirant institutions to determine the appropriate ratio of T/TT to APT faculty. The current university strategic plan has a goal of 65% T/TT faculty, but there is no indication how that number was selected. Though the university needs to add more T/TT faculty to maintain and grow its research enterprise, it is difficult to set a threshold based on current data.

STUDENT AND FACULTY INTERACTIONS

Students often remark that larger class section size makes it difficult for students to form meaningful interactions with professors and other classmates, an essential aspect of a strong academic classroom experience. The university has increased the number of classrooms with a focus on larger rooms, which allows for larger section sizes. There has been a 40% increase in upper-level sections of more than 100 students since 2013.



Online classes can also make it more difficult for students to engage with faculty. Since Fall 2013, the number of online 100-200-level semester credit hours (SCH) taken has increased by 677%. Meanwhile, the number of traditional, face-to-face (F2F) SCH in the 100-200 levels has increased only by 12% as show in the chart:

Delivery Method	2013 SCH	2018 SCH	2023 SCH	% Increase from 2013 to 2023
Traditional, Face-to-Face	537,526	542,161	602,961	12%
Online	17,996	81,257	139,863	677%
Other*	2,008	6,665	5,165	157%

100-200-level traditional, face-to-face versus online semester credit hours:

Source: Registrar's Office

*Other includes study abroad, internships, and undergraduate research

Recommendations:

- Encourage colleges to establish optimal section size recommendations based on the types of courses offered (i.e., 100-200-level service courses, 100-200-level major courses, 300-400-level major courses).
 - Establish college- and university-level expectations for faculty teaching expectations, with consideration for equitable workloads based on contributions to scholarship and teaching, and create scholarship benchmarks for when teaching expectations are reduced or increased.
 - When allocating faculty hiring within colleges, consider programs that cannot meet optimal section sizes.
- Monitor and minimize online-only offerings in 100- and 200-level service courses across campus.
- Maximize student interaction in large classes by utilizing peer-learning assistants. Develop robust peer leader training programs across campus to increase the quality and consistency in support students receive in class. This will allow faculty to increase their interaction with students since peer mentors are in the classroom.
- To maximize faculty-to-student interaction, increase course design support for faculty that teach large sections.

CLASSROOM UTILIZATION AND MEETING TIMES

Classroom utilization is high in 100-seat classrooms across campus. The chart provides data on main campus classrooms:



Room Capacity Range	Room Count	Total Enrollment	Instruction Total Hours/Week	Average Hours/Week Utilized	Average Fill Rate
600-699	1	6,971	35	35	77%
450-499	1	4,922	32	32	71%
350-399	2	5,278	49	25	61%
300-349	4	13,794	130	32	75%
250-299	6	18,316	199	33	68%
200-249	7	16,783	250	36	73%
150-199	8	13,071	259	32	64%
100-149	55	74,977	1,885	34	70%
75-99	16	12,306	486	30	59%
50-74	48	26,874	1,511	31	61%
25-49	128	52,234	3,749	29	66%
14-24	25	4,846	547	22	84%
Grand Total	301	250,372	9,130	30	67%

University Classroom Inventory Utilization (All College Station Classrooms) - Fall 2023

Source: Registrar's Office

Approximately 30% of classes were taught in the 100 to 149 seat classrooms in Fall 2023, more than any other capacity range. These classrooms were utilized at an average of 34 hours per week, with a fill rate of 70%. The utilization exceeds the target of 30-32 hours (36 max) per week. The fill rate falls within the target range of 65-75%. There were 55 classrooms with individual capacities ranging from 100 to 149 seats. Within this range, the average classroom size was 115 seats, with an average meeting enrollment of 79 students. This suggests that additional 100-seat spaces are a better fit compared to larger rooms nearing 150-seat capacity.

Of the 301 classrooms in the university's inventory, 210 (70%) are located on east campus. Classes taught by departments located on west campus are putting pressure on east campus classrooms. Recent department relocations to west campus and the Bush Library regions require students and faculty to travel between west and east campus for classes. This travel requirement limits scheduling options for departments and prevents students from taking some courses back-to-back due to travel times.

In Fall 2023, west campus departments scheduled 158 course meetings in east campus classrooms, totaling 337 hours per week of instruction and servicing 17,027 enrollments, as shown in the following chart:



Room Capacity Range	Meetings	Instruction Total Hours/Week	Total Enrollment	Average Meeting Size
600-699	3	6	1,493	449
350-399	2	5	625	313
300-349	3	6	716	230
250-299	28	63	6,413	221
200-249	16	33	2,089	131
150-199	4	8	436	113
100-149	24	58	2,239	86
75-99	17	36	1,142	65
50-74	19	47	868	44
25-49	41	72	982	22
14-24	1	3	24	24
Grand Total	158	337	17,027	93

Source: Registrar's Office

While some of this scheduling is strategically located for students taking courses on east campus, some scheduling likely results from a lack of access to classroom resources on west campus. By comparison, east campus departments requested much less classroom space on west campus, with 79 meetings scheduled, amounting to 129 hours per week of instruction and 2,017 enrollments. The chart provides additional data regarding on west campus classroom utilization by east campus departments.

Room Capacity Range	Meetings	Instruction Total Hours/Week	Total Enrollment	Average Meeting Size
100-149	4	5	264	55
75-99	5	10	256	49
50-74	3	2	79	26
25-49	63	102	1,373	22
14-24	4	9	45	11
Grand Total	79	129	2,017	27

West Campus Classroom Utilization by East Campus Departments - Fall 2023

Source: Registrar's Office

Inconsistent adoption of standard lecture times negatively impacts scheduling efficiency, classroom utilization, and the overall number of classes that can be offered in classroom spaces. The availability of utilization data is limited to centrally controlled classroom spaces. In Fall 2023, 4,538 distinct course meetings were scheduled in university classrooms. Of these, 3,630 (80%) were scheduled using standard timeslots or timeslots that nested within the standard lecture grid.



Room Capacity Range	On Standard Grid	Standard Start, Non-Standard Duration	Off-Grid	Total
600-699	15	0	0	15
450-499	12	0	3	15
350-399	20	1	1	22
300-349	57	0	2	59
250-299	84	4	4	92
200-249	95	3	6	104
150-199	107	4	6	117
100-149	727	67	124	918
75-99	203	13	8	224
50-74	570	48	89	707
25-49	1,581	150	262	1,993
14-24	159	38	75	272
Grand Total	3,630	328	580	4,538

University Classrooms Timeslot Adherence to Standard Grid – Fall 2023

Source: Registrar's Office

The chart shows that 328 meetings started at standard grid times but extended beyond the typical Monday/Wednesday/Friday (MWF) 50-minute and Tuesday/Thursday (TR) 75-minute durations. A total of 580 meetings were scheduled using off-grid meeting patterns, meaning they had non-standard start and end times. While off-grid scheduling can be necessary to accommodate extraordinary circumstances, it negatively impacts overall scheduling efficiency, particularly when a mix of on-grid and off-grid scheduling occurs in the same space.

Currently, at least 22 rooms totaling 1,080 seats are not on the Registrar's inventory. This includes 15 rooms on east campus with capacities ranging from 18 to 62 seats, five in the Vet School area with capacities between 20 and 200 seats, and two on west campus with 30 and 35 seats each. Identifying additional rooms used as classrooms (such as meeting rooms, conference rooms, special class labs, etc.) would require further review.

Classroom utilization rates at 8 a.m. are significantly lower than throughout the remainder of the business day, especially on MWF (see table 1 in appendix). In Fall 2023, 8 a.m. timeslots presented the greatest opportunity for scheduling additional classes with existing classroom resources, excluding late evening options. Approximately 32% (96 out of 301) of these timeslots were unused on MWF. Similarly, 19% (58 out of 301) of classrooms remained unscheduled for 8 a.m. classes on TR. Overall, the unutilized 8 a.m. timeslots account for 10,906 unused seats across the university's classroom inventory. Student demand and faculty constraints contribute to underutilized 8 a.m. time slots. One of the reasons is that faculty with children find it hard or impossible to drop off kids at school, prepare for class, and get to class by 8 a.m.



Several options were examined for adjusting class meeting times to better accommodate instructor and learner availability, focusing on scheduling standard adherence to improve efficiency (see tables 2-4 in appendix). The tables present the options the committee explored. The current start time for all of campus is 8 a.m. with a MWF and TR meeting pattern.

	Potential	Rationale
	Action	
Option 1	Start all of campus at 8:30 a.m. with a MWF and TR meeting pattern.	 Retains the same number of meeting time slots Reduces traffic across the city by spreading out employee and student start times Allows faculty with children to accomplish parental priorities Allows faculty greater time to prepare before teaching The last MWF class would shift from 3-3:50 p.m. to 3:30-4:20 p.m. However, most parents could still get to after-school pick-ups in the evening.
Option 2	Start all of campus at 8 a.m. with a MW and TR meeting pattern.	 Fridays would be reserved for non-traditional courses such as First Year Experience (FYE) sections, one-hour courses, and three-hour courses taught in a three-hour block. Two class meetings per room would be lost by shifting from a MWF to a MW block pattern. Offering classes one day per week on Fridays may lead to a smaller loss than two class meetings per room. Better utilization may be gained in each room with early and late meeting times being more favorable to students when they are four days a week instead of five.
Option 3	Start all of campus at 8:30 a.m. with a MW and TR meeting pattern.	 See bullets in option two. We may gain further utilization of the first section of the day by starting at 8:30 a.m.
Option 4	Start east campus classes at 8 a.m. and west campus classes at 8:30 a.m.	 Helps ease travel time issues for students and instructors moving between east campus and west campus for back-to-back courses, thus creating more viable options for required courses Timeslots offered mid to late afternoon (2:30-5:30 p.m.) are utilized at a higher rate than 8 a.m. slots.

	•	Other data indicate that both students and instructors are less likely to participate in 8 a.m.
		classes, so this should increase utilization.

Recommendations:

- Build a west campus classroom facility (estimated at 108,000 gross square feet with projected costs of \$130M) with 100-seat or larger classrooms to fill the needs identified by west campus academic units and allow core curriculum courses to be taught on both sides of campus. Work with departments teaching core curriculum to create a class schedule that reduces the need for students to move across campus. The facility must include faculty offices and parking options for those whose department is on east campus but have to teach on west campus.
 - This space could house core-courses offered by departments across campus, as well as major-specific courses for colleges on west campus. For freshman courses to be offered on west campus, housing and community areas should also be offered on west campus. If faculty are teaching away from their home departments, then designated parking and flexible space for faculty to meet with students, such as is available in ILCB, would be optimal.
 - Specifically, the data suggests that adding two classrooms with 200-250 seats and five to six classrooms with capacities ranging between 75 and 125 seats on west campus would allow west campus departments to relocate courses closer to their home buildings. This would, in turn, free up availability in east campus classrooms.
 - Adding 100-seat classrooms relieves pressure on existing spaces, enhances classroom-use flexibility, and meets Space Use Efficiency (SUE) thresholds. Doing so relieves pressure on larger and smaller classroom spaces through consolidation of small spaces and the splitting of large meetings, increasing flexibility. It provides an additional opportunity to decrease the average meeting size, and improves flexibility to schedule 65-100 student class meetings, while meeting the Space Use Efficiency (SUE) scoring minimum threshold of 65% seat fill rate.
- Optimize resource utilization by transferring departmental classrooms to the university's central management system. Departments should retain priority access, with remaining availability allocated through bulk assignment to meet other university needs.
 - Centralized management of classroom resources promotes efficient resource sharing, thereby maximizing their potential utilization. During university scheduling cycles, departments will maintain priority access. Any remaining availability will be allocated through bulk assignment processes, prioritizing optimization.



- After class schedules are finalized, any unassigned slots will be open for other university needs on a first-come, first-served basis.
- Identification of classrooms will be based on predominant use determined through onsite inspections and data analysis. A classroom should be defined as any space used for organized lecture or seminarbased instruction for 20 hours per week or more.
- Adopt a minimum 20-minute offset start time for west campus courses, starting the day 20 minutes later than on east campus. Consider whether the start of the day for the courses should remain at 8 a.m. or shift by 15-30 minutes. This will solve some transit concerns to and within campus. There is no intent to alter the official work hours of the university.

Facilities for Student Support Infrastructure

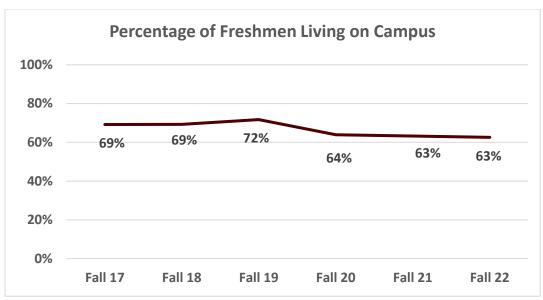
ON-CAMPUS HOUSING

There are many on-campus housing choices including 25 residence halls, the White Creek Apartments, the Garden Apartments, and the Corp of Cadets dorms. This diverse array of housing options serves to accommodate the unique needs of undergraduate students, graduate students, married students, and the Corps of Cadets. Housing rates vary depending on residence type, which provides students with a range of selections within various price points.

Research highlights first-year, live-on environments impact student outcomes including retention, GPA, sense of belonging, and involvement. In Fall 2023, on-campus, first-time in college (FTIC) students re-enrolled at a slightly higher rate than their off-campus counterparts (96% vs. 95%). Additionally, the average GPA for on-campus FTIC students was 3.4, compared to 3.3 for off-campus students. Residence Life supports academic success and engagement through programs and services such as Academic Peer Mentors, Living Learning Communities, and Community Councils. Moreover, several scholarship programs, including Regents' Scholars, require students to live on-campus as part of their experience.

The White Creek Apartments, completed in 2015, are the most recent on-campus housing addition. Since then, enrollment has increased by over 12,000 students (21%) with no additional on-campus housing added. On-campus housing is at a capacity, and over 2,200 students were on waitlists for Fall 2023.





Sources: (1) Academic and Business Performance Analytics (ABPA) Enrollment Profile, Texas A&M Reporting Selection, College Station Campus, Bryan/College Station Site, First Time in College Entry Status; (2) Data includes Residence Life dorms, Corp of Cadets dorms, and White Creek Apartments. It does not include the Gardens apartments.

In Fall 2023, only 63% of freshmen lived on campus. The lack of available housing has driven up rental rates for off-campus housing, and developers continue to build high-rise developments in Northgate to meet the needs of students who want to live near or on-campus. In conversations with Bryan and College Station city personnel, the cities expressed the desire for the university to continue to grow and are encouraging high-density housing projects. These projects increase tax revenue, specifically in the Northgate area. However, the "no more than four" rule is having an impact on the capacity of off-campus housing as discussed in the Student Experience report.

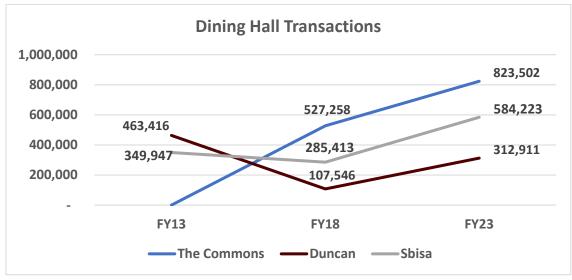
The Department of Residence Life is currently engaged in a feasibility study to understand the demand, needs, type, and amount of housing that could be considered on west campus. Constructing additional residence halls or on-campus apartments would alleviate the current housing shortage, ensuring that first-year students and others who wish to live oncampus have sufficient accommodation options. This would also reduce the pressure on existing Residence Life facilities, improving the overall living conditions.

CAMPUS DINING

Texas A&M's three main dining facilities – Sbisa Dining Hall, the Commons Dining Hall, and Duncan Dining Hall – service the dining needs of the campus community, primarily undergraduate students. Since the Fall of 2012, all first-year students living on-campus have been required to purchase a meal plan. Like other student-facing services, Dining Services has felt strain due to the enrollment surge. Over the last decade, dining hall visits have increased by 109% (up from 813K to 1.7M) and average daily transactions up 87%.



As the graph shows, Sbisa and the Commons (which was offline for renovations in FY13) have seen increases in dining transactions, but transactions at Duncan have declined by 32% in the past 10 years, though they have increased since 2018. Duncan's utilization rate in Fall 2023 was 55%, with many cadets choosing to eat at the Commons.



Source: Dining Services

Despite the overall rise in dining visits, dining hall seating has decreased by 18% with some of this decline attributed to conversion to retail space. The number of dining venues on campus has increased by 46% over the last decade. The limited dining hall seating has been a key challenge. Students study in dining halls but must leave when they are closed between meals. This might be a symptom of lack of convenient study and informal spaces in other places on-campus.

In the MSC, there are eight food retail concepts, and food lines stretch throughout the building starting at 10:30 a.m. The amount of seating is inadequate, so students sit on the floor. Even with adding furniture within the last year, there is not enough seating. West campus is largely a food desert which puts further strain on students, faculty, and staff who are in that area. While retail dining offerings on west campus have been expanded, the locations are already operating at capacity.

UNIVERSITY HEALTH SERVICES

University Health Services (UHS) was created in Fall 2022, with the merger of Counseling and Psychological Services (CAPS) and Student Health Services (SHS) under the new direction of the Health Science Center (HSC). It has received a significant investment of resources to expand mental health services, including embedding counselors in colleges and providing services in other locations.



	es (Directed by HSC)	
	Counseling Services (formerly CAPS)	Primary Care Services (formerly SHS)
Infrastructure	 Located in the Student Services Building, new in 2020 No parking adjacent to or near building 	 Located in Beutel Health Center, last renovated in 2016 Ten parking spaces for over 300 visits each day 4 EMS vehicles take up parking space
Operations	 Number of unique students served increased by 24% since 2013 Crisis appointments increased by 22% since 2013 Walk-in crisis counseling appointments are available Monday through Friday from 8-5 p.m. Average appointment wait time is 8 days 	 Number of unique students served declined by 7% since 2013, mostly due to a change in how walk-in visits are handled Clinic visits have increased by 21% since 2013 Increase in medical management of chronic conditions has demanded more clinician time than an office visit for less complicated issues, and these visits are requiring two appointment slots instead of one
Personnel	 Counseling staff retention was an issue during and after the pandemic so fewer appointments were available for follow-ups. However, recent budget increases have allowed more counselors to be hired. 	

Source: University Health Services

When the Beutel Health Center opened in 1973, it was planned and constructed with a vision of serving up to 22,000 students. However, its current location and parking are barriers to access to serving today's students. Even with three renovations (the last one in 2016) to increase the number of exam rooms and other spaces, the current space does not accommodate the needs of students. Furthermore, Beutel's limited space capacity does not allow for an expansion in specialty areas (e.g., dentistry) or hands-on training for health profession students should University Health Services desire to provide that. Ultimately, Beutel is old, outdated, costly to repair, and has far exceeded capacity to provide student care.

RECREATIONAL SPORTS

Recreational Sports operates nearly 540,000 square feet of recreational space that includes the main Student Rec Center, Southside Rec Center, Polo Road Rec Center, Penberthy

Complex, and Tennis Center. The departments utilize an additional 150,000 square feet in the evening hours when academic classes end in the Physical Education Activity Program (PEAP) building. This provides approximately seven square feet of rec space per student during the day and approximately nine square feet of rec space per student in the evening hours. This is below the industry best practice recommendation of 10-15 square feet per student.

Over the past decade, Student Rec Center entrances increased by 41% and unique visitors by 51%, highlighting its growing demand. The main Student Rec Center is the primary facility with heavy usage, recording 1,150,389 entrances in FY19 and maintaining high levels at 935,282 in FY23, with the decline due to the opening of other campus locations. The newly opened Southside Rec Center saw rapid adoption, with 378,240 entrances in FY23. Polo Road's usage showed an initial rise to 320,183 in FY22 before decreasing to 175,814 in FY23 due to changes in operations hours (stemming from the opening of Southside).

The university is committed to promoting wellness through providing high quality, exceptional facilities, and services to the campus community. Available, accessible recreational space should be considered when formalizing future campus expansion or development plans.

Recommendations:

- Create a west campus development plan as many of the above student infrastructure issues are the result of enrollment growth and movement of academic disciplines to west campus. The plan would include additional oncampus housing, dining, recreational spaces, student study spaces, parking, and classroom and academic support spaces, inclusive of faculty offices. In addition, consideration should be given to student support services being located or operating satellite offices on west campus.
- Increase the number of on-campus beds by 2,500 to allow 25% of B/CS undergraduates, particularly freshmen, the ability to live on campus if desired. The university should maintain this ratio through any further growth.
 - These additional beds would be funded through future housing revenue generated by them and a modest adjustment in other on-campus rates. This expansion must include dining, recreational, study, and transportation needs. A housing feasibility group is analyzing this option.
- Add 28,000 square feet in dining (including expanding the West Campus Dining Center), return the Engineering space in Sbisa to dining, and work with Barnes & Noble to shrink their footprint in the MSC basement for more dining space. The Aplin Center, coffee shops in Aggie Park, and the Roberts Building coffee shop in the Business Education Complex will contribute to this target growth. Increase the utilization of Duncan Dining Hall by the Corps of Cadets.



- Create a task force to examine the future of University Health Services facility and its operational needs. The university has invested more than \$5M in new funding the last two years in personnel and operating budget, but the current facility is limiting services. Explore the option of satellite clinic(s) and an increase in the Student Health Center Fee for funding. The increase in the fee requires both legislative and board action.
 - A west campus location for health and counseling services would offer convenient access for students who live and attend classes on that side of campus. This would reduce the burden on Beutel Health Center and the Student Services Building.
 - This would also make access to these services more convenient rather than building a single large health center on one side of campus versus the other.
 - Benchmarking other universities that have integrated recreation, health, and counseling services into a single wellness center will help create a holistic approach to student well-being.
- Add new recreational spaces to support student wellness and foster a sense of community on west campus if additional student housing is constructed on west campus. Constructing an additional satellite recreational center on west campus (like Polo Road and Southside) would both contribute to the current need caused by limited recreational space on-campus while also allowing for some breathing room if the university were to consider increasing enrollment in the future.

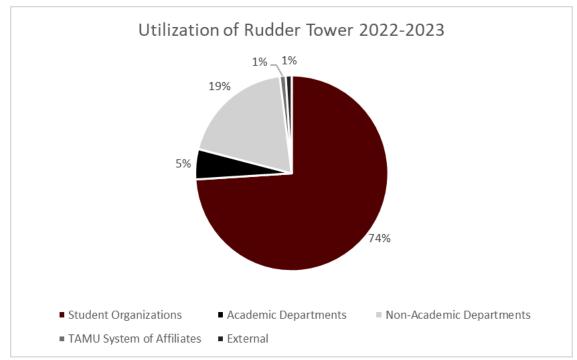
Space Constraints

RESERVABLE AND INFORMAL STUDENT MEETING SPACES

Students utilize reservable and informal student meeting spaces on campus to hold meetings, conduct study sessions, and socialize. These areas support both academic and cocurricular activities, and some of the key venues for these activities are the MSC, Rudder Tower, recreation centers, libraries (Evans, Evans Annex, Business Library and Collaborative Commons [BLCC], and the Medical Sciences Library [MSL]) and various classroom buildings.

The MSC serves as the living room for campus, and it lives up to that name as evidenced by the foot traffic and usage of space in the building. Students use all the seating throughout the building, including in the food court. The following chart shows that 74% of utilization in Rudder Tower is by student organizations:

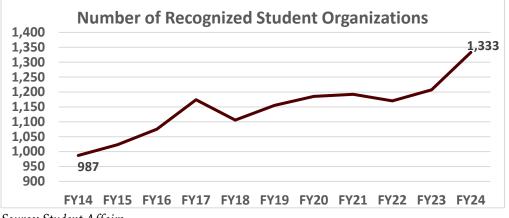




Source: University Center and Special Events

Student organizations must make reservations by semester for their general meetings in the MSC and Rudder Tower. Evening meetings are booked 5:30-6:30, 7-8, 8:30-9:30, and 10-11. There was a decline in reservations during and after the pandemic, but reservation rates are quickly rebounding, even as more meetings are being held virtually. Recently, more reservation requests have sought larger spaces due to growing student organization sizes driven by larger enrollment. Many student organizations now have 100-175 members, and the MSC only has four rooms to accommodate that size without utilizing two large ballroom spaces.

In addition to the growing number of students within organizations, the number of student organizations has increased by 35% in the last decade.



Source: Student Affairs



The graph illustrates the number of recognized student organizations from FY14 to FY24. There is a general upward trend in the number of organizations, with some fluctuations along the way. Notably, there is a significant increase from FY23 to FY24, indicating substantial growth.

The student assigned space for the MSC and Rudder Tower is currently 520,000 square feet. When the MSC was last renovated in 2013, student enrollment was approximately 55,000 students. Since then, the university has grown significantly while students assigned square footage has remained constant. The Association of College Unions International recommends 10-15 square feet of student space per student. To attain that standard, Texas A&M would need to increase its student space square footage by 250,000.

Most classrooms are utilized for academic purposes, such as tutoring and presentations, rather than for student organization meetings. Although some student organizations utilize the Registrar's reservation process for classrooms in the evenings and weekends, the tracking system does not provide clear information regarding usage patterns. Spaces and availability, including study spaces, lounges, group study space, event space, meeting space, open access computer labs, maker space, and the management of these spaces within academic buildings is incredibly varied. Student organizations or students associated with a particular school or college can reserve space if they know the reservation process.

Library facilities continue to become more popular as alternative student meeting locations to the MSC and Rudder Tower. Library staff have observed more student organizations making reservations for social usage of the space.

Recommendations:

To optimize the use of existing spaces, particularly academic classrooms and library areas:

- Encourage the cocurricular use of academic classrooms and library spaces. Allow student groups to access a portion of the classroom inventory for meetings during the evenings and on weekends, thereby reducing the strain in the MSC and Rudder Tower.
- Utilize a centralized, user-friendly system (possibly expanding Ad Astra use) to manage space reservations across campus to improve coordination and ensure spaces are utilized efficiently.
 - This system could be housed within University Center & Special Events (UCEN) to streamline the booking process for students, faculty, and staff, ensuring fair and organized access to these space resources.
 - One consideration is initiating a pilot program with select academic buildings that will allow for the testing and refinement of the centralized reservation system. Contingent on the pilot's success, the program could be expanded to include more buildings and spaces across the campus.
 - Based on current Facilities Management provided data, the following buildings may be worth considering for the pilot program: Evans Library/Annex, ILCB, Zachary, and Wehner.

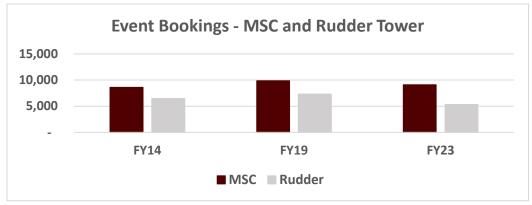


RESERVABLE EVENT SPACE

Texas A&M offers a variety of reservable spaces that students, staff, faculty, and community members utilize for events (beyond meeting spaces). UCEN coordinates reservations and event planning for:

- The MSC
- Rudder Complex
- All Faiths Chapel
- Aggie Park
- Other outdoor spaces on campus as requested

The pandemic affected event usage at the MSC and Rudder Tower, and while it has not reached pre-pandemic levels, it is trending in that direction.



Source: University Center and Special Events

Other reservable spaces include venues controlled by Athletics, Student Rec Centers, Texas A&M Hotel and Conference Center, and college and school facilities. Student organizations are the largest users of reservable event space within the University Center Complex. External entities wanting to reserve space must be sponsored by a student organization, university academic or administrative unit, or A&M System member. There are many challenges regarding on-campus event space as discussed in this chart:



On	-Campus Reservable Space: Main Challenges
	 Large event spaces (300+) are in short supply on-campus and create heavy demand for the few spaces on campus that can accommodate large groups many within the University Center Complex. Because of increased demand and limited supply, members of the Texas A&M community must be creative in looking for space on
Event Space	 campus to hold programs and events. The Student Engineers' Council has relocated its annual career fair from campus to the Legends Event Center in Bryan due to space needs.
	• Outdoor spaces continue to be in high demand. The addition of Aggie Park increased capacity, but the demand has quickly caught up. In the first year of Aggie Park (2022-2023), there were 156 outdoor events, not including tailgating. From September 2023 to May 2024, there have been 210 reserved events, and this trend is expected to continue.
	 Recreational Sports has experienced a notable rise in student organization requests to use the Rec Center for non-recreational activities. This trend places a strain on the facilities and detracts from the Rec Center's primary mission.
Utilization	 Current utilization rates of many student and event spaces significantly exceed established best practices and industry standards. Standard meeting rooms and larger event spaces are heavily
	 overbooked, often requiring rapid turnover and intensive use beyond recommended levels. For example, spaces that should ideally support six meetings per night are being scheduled for up to 24, placing immense pressure
Cost	 on custodial services and maintenance staff. The majority of reservable and affordable event spaces are on the east campus, and there are few options on the west campus. Some facilities on campus, such as those controlled by Athletics, are prohibitively expensive for many campus constituents, limiting accessibility and the maximization of utilization of these spaces.
	 Overuse not only degrades the quality and functionality of the facilities but also leads to increased operational costs and potential safety concerns. Student organizations frequently inquire about using space at the Texas A&M University Hotel and Conference Center due to the
	MSC's lack of availability for event spaces. Despite interest, many student organizations find it difficult to meet the price points of the hotel, limiting their ability to utilize its facilities for events.



	• Early reservations for conferences, large seminars, banquets, socials, and other events are completed annually. This process is
Reservation	not always conducive to organizations and departments that need
Process	to plan several years in advance.
	• UCEN's semester-based planning for student organization general
	member meetings often deters other university constituents from
	planning conferences and events that require greater lead time.
	• Differing reservation processes among key large-space providers
	creates logistical challenges for the A&M community members
	when exploring all options available for planning large events.
	• Academic spaces, like large lecture halls, are not utilized well in the
	evenings and weekends due to a lack of understanding of how to
	reserve and access those spaces.

Visit College Station data shows:

- The number of tourism and conference events held on-campus has declined from an average of 10 between 2014 and 2019 to four between 2022 and 2024.
- The share of requests the university could accommodate fell from 49% to 37%.
- A decrease in attempts to utilize the city's preferred access agreement between 2014 and 2021 because of issues accessing space. Requests declined from a 2014-19 average of 20 to a 2022-24 average of 10.

The turn-away rate has stabilized under new collaboration mechanisms post-pandemic, but the university turned away 17% of requests between 2022 and 2024. Turn-away data cites space and staffing constraints (mostly Athletics and the MSC), high costs at Athletics facilities, and the university's limited ability to plan events three years in advance. Some events are not booked due to forces outside the university or even the community's control. Brazos Valley Partnership data show many turn-aways occur for events with short turnarounds.

Recommendations:

Exploring greater collaboration between UCEN, the Texas A&M Hotel and Conference Center, and the Athletic Department will help to better leverage large event spaces in the following ways:

- Coordinate the use of large event spaces across various entities to ensure that both campus events and external stakeholder needs are met, maximizing the utility of existing facilities and providing more options for event organizers (particularly external organizations seeking to bring larger conferences and conventions to College Station).
 - To achieve this, it is necessary to centralize the space inventory, management, and reservation processes. Re-examine staffing resources, access to campus spaces, and institute a mechanism that allows various



staff to work across multiple venues and departments (such as UCEN, Texas A&M Hotel, and Athletics).

- Implementing a unified scheduling system will help to avoid conflicts and ensure optimal use of large venues. This system will facilitate better communication and coordination among the different departments, leading to more efficient space management.
- Promote joint initiatives and programs that utilize these spaces effectively to foster a sense of community and collaboration within the university.
 - These initiatives can include large-scale events, conferences, and other activities that benefit from the shared use of facilities.
 - Partnership with the city of College Station as well as their potential future convention and conference center plans will enhance the overall Texas A&M brand.
- Build a new center on west campus to address the issue of the existing MSC's limited ability to host gatherings, conferences, and larger events.
 - This would ease overcrowding and provide localized access for west campus students, faculty, and staff. This new facility should include meeting rooms, large event spaces, and additional dining areas, making it a vibrant hub for campus life.
 - Moreover, the expansion could incorporate specialized performance venues to address the lack of spaces on-campus dedicated to artistic performances and events, ensuring a well-rounded and vibrant environment for all campus activities.

LIBRARIES

Over the past decade, the total library square footage has remained constant at 723,541 square feet. Across five locations in B/CS, the University Libraries can only seat approximately 6,582 students if every seat is full. That represents approximately 9% of the current student population. The ratio of students to available physical seats increased by 37%, from eight students per seat in FY13 to 11 students per seat in FY23. Physical visits to campus library facilities decreased by 10%, from 3.1M to 2.8M over that same time. However, visits have begun to trend upwards again since FY21. Despite no increase in square footage, the library has maximized service and study spaces for students and academic partners.

After managing study and programming spaces for efficiency and effectiveness, the library has reached capacity with respect to growth. Based on feedback given to library staff, students appreciate having staffed spaces where they can easily access support when using library services and facilities. Many students expressed a desire for even more staff availability. Additionally, they value having spaces that are safe, comfortable, and welcoming. The current student population prefers individual and group study spaces that allow for privacy, and demand outpaces supply. Open study spaces (quiet and non-quiet) are heavily demanded by students as well. At Evans Library, there are 319 individual study spaces in which the facilities coordinator reported 100% utilization and 20 group study spaces also at 100% utilization.

OFFICE SPACE

Texas A&M's full-time equivalent faculty and staff have grown by approximately 30% since Fall 2013. Faculty members hire graduate assistants to assist in research and teaching, and the number of graduate assistants has also grown significantly over the past decade. Many colleges indicated they are beyond office space capacity for tenure/tenure track faculty, academic professional track faculty, graduate students, and post-docs. In some colleges, APT faculty already share offices. Any increase in T/TT faculty will also increase the need for office space for graduate students and post-docs.

Recommendations:

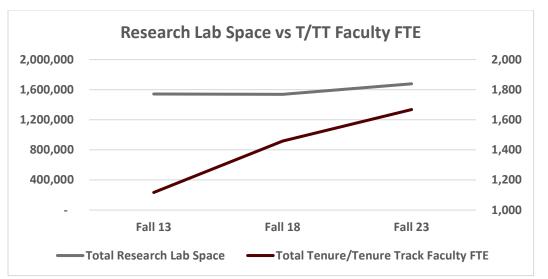
- Develop university and/or college level policies for the use of office space for faculty, staff, and graduate students. Consider sharing offices or using hot desks, which allow for greater use of a designated space.
- Consider an adjustment in budgetary processes to charge for space use across campus to enable more efficient and effective use of space.

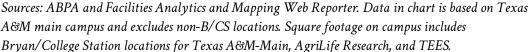
RESEARCH AND LAB SPACE

Research lab space on campus has increased by 9% over the past decade, while National Science Foundation (NSF) research expenditures have increased by 48% (Texas A&M-Main, AgriLife Research, and Texas Engineering Experiment Station [TEES] combined). However, the most recent research expenditure data indicates a trend toward a plateau. It cannot be determined if this is due to limitations on research capacity, such as the number of T/TT faculty, space, and resources, or if it is due to COVID-19 funding that is no longer available.

According to a survey sent to the colleges, some colleges (Agriculture & Life Sciences, Architecture, Education & Human Development, Arts & Sciences, Engineering, and Performance, Visualization and Fine Arts) indicated the need for additional research space or updates to existing facilities to maintain their current research programs. These needs did not account for any additional increase in the number of T/TT faculty. The graph shows that while there has been significant growth in T/TT full-time equivalents, research space has grown at a slower rate and not kept pace with faculty hiring.







Recommendations:

- Investigate a second interdisciplinary research building to address multiple departments' space needs and faculty collaboration in research. Additional research space should be considered after addressing the biological sciences building, SPVFA, and the renovation of vacated spaces. As additional faculty are hired in Engineering and to address current needs, additional research space needs should be considered.
- Invest in aggressive retention strategies of current faculty with \$3-5M annually in a university research renewal fund, matched by colleges to mitigate the loss of about 50 T/TT faculty each year to other institutions, most often around the promotion to associate professor. NOTE: The Strategic Budget Council recommended \$2.5M in one-time funds to seed a new program in FY25.
- Update research space allocation policies to be metric-based and encourage the use of shared research space and equipment.
- Consider sharing renovated and new spaces among colleges (with the College of Medicine as a model). Although this model may lead to better space utilization and strength in faculty collaborations, there are some concerns about potential negative impacts.
 - Shared research space instead of individual faculty laboratories may impact the recruitment of mid-career and senior faculty.
 - Sharing research space on a communal model could lead to intellectual property contamination and related complications, especially for faculty interested in research commercialization.



DEFERRED MAINTENANCE ON BUILDINGS

The current deferred maintenance process utilizes a system deployed by SSC that looks at building systems, grades them, and arrives at a statistical value for deferred maintenance. This leaves room for improvement because a certain project in a specific year cannot be pointed to. In addition, buildings built in the last five years do not show any deferred maintenance because in the present sense, deferred maintenance is all in the future. The A&M System requires that all other campuses besides Texas A&M use Gordian Solutions, which assesses the campus and estimates current as well as future deferred maintenance projects.

Focusing on any building that has at least 1% occupancy of Texas A&M E&G and is at least 10,000 GSF, the deferred maintenance breaks down as follows:

	Count of	Total Building			Total TAMU	
Age Range	Buildings	DM	Total GSF	TAMU E&G DM	E&G GSF	TAMU DM/GSF
<5	13	\$ -	1,479,530	\$-	1,135,101	-
<10>=5	14	\$ 7,752,377	896,314	\$ 5,331,135	621,661	\$ 9
<15>=10	21	\$ 11,209,261	1,580,049	\$ 5,177,812	784,048	\$ 7
<20>=15	11	\$ 7,803,667	876,628	\$ 6,015,482	713,725	\$ 9
<30>=20	13	\$ 52,771,699	1,438,261	\$ 36,026,941	885,794	\$ 37
<40>=30	23	\$ 107,721,662	1,780,073	\$ 64,702,326	1,080,867	\$ 61
<50>=40	22	\$ 126,559,260	1,852,260	\$ 89,003,856	1,273,862	\$ 68
<60>=50	12	\$ 73,320,291	1,193,376	\$ 59,281,771	948,552	\$ 61
<70>=60	12	\$ 76,119,377	374,425	\$ 46,518,555	257,867	\$ 203
<80>=70	10	\$ 44,366,436	732,897	\$ 23,613,891	356,870	\$ 61
<90>=80	3	\$ 9,093,764	86,947	\$ 4,444,544	49,977	\$ 105
<100>=90	8	\$ 47,211,724	1,401,316	\$ 24,474,170	1,213,170	\$ 34
>100	15	\$ 95,722,444	755,976	\$ 83,947,214	605,546	\$ 127
Grand Total	177	\$659,651,962	14,448,052	\$448,537,695	9,927,040	

One strategy could be to ensure that all buildings that are less than 20 years of age have a well-planned and funded maintenance strategy and allocated resources to move us in that direction over the next five years. With older buildings, a different approach of identifying the specific issues and work with occupants to identify pain points, and then attack the challenge using clear and actionable projects.

On the following page is a snapshot of the data for West Texas A&M as produced by Gordian that would be consistent with this approach on older buildings:



Row Labels	2024	2025		2026		2027	2028		2029	2030		2031		2032	2033	G	rand Total
BIVINS NURSING LEARNING CENTER	\$ 945.252		é	1.712.787	ė	7 7 77	¢ 502.690	ė	94 005	¢ 164 9	40	\$ 107,336	é	10 202		Ś	3,626,92
Modernization	\$ 786,852		Ś	86.283	~	1,121	Ş 333,000	-	0-0000	\$ 10-hc		0.01	Ŷ	10,302		Ś	873.13
D2093XX0161XX0005 - Renovate Small Bathroom (1 to 3 Un			ŝ	54.088				-			-		_			ŝ	54.0
D2093XX0161XX0006 - Renovate Small Bathroom (1 to 3 Un			ŝ	32.195	-			-			_					ŝ	32.19
H1043XX0041XX0001 - Fully Renovate Space	\$ 786.852		-	,				-								ŝ	786.85
Repair/Maintenance	\$ 158,401		Ś	1.626.503	Ś	7.727	\$ 593.680	Ś	84,995	\$ 164.8	40	\$ 107,336	Ś	10.302		Ś	2,753,71
B20131191010 - Repair day brick wall			Ś	1.207.965	-	,		<u> </u>	<i>.</i>	. ,		. ,	-			Ś	1.207.96
B20334101030 - Replace rool-up door (single)	\$ 18.029		-	-,	-			-								Ś	18.02
B 30136201020 - Replace gutter					_			-				\$ 5.151				Ś	5.1
B 30136201070 - Replace downspout			_		_			-				\$ 1,736				Ś	1.7
C 30132140030 - Refinish drywall					_			-		\$ 81.1	32					Ś	81.1
C 30231120020 - Refinish concrete floor finished			_					-			_	\$ 18.029				Ś	18.0
C 30234120020 - Replace vinyl sheet flooring			_		-			-				\$ 3,863				Ś	3.8
C 30235100020 - Replace carpet								1				\$ 56,664				Ś	56.66
C 30331050040 - Replace plaster ceiling			ŝ	69,542	_			-								ŝ	69,54
D202322RRR0004 - Replace water heater, electric			_		Ś	7,727										S	7,72
D20331300120 - Replace pipe and fittings			ŝ	348,996	-	ć		-								S	348,99
D2093946RR0005 - Replace compressor			_										Ś	9,015		ŝ	9.01
D3043XX0294XX0003 - Replace Control Point Tech 3	\$ 140,371				_			<u> </u>								S	140,37
D3053280RR0059 - Replace single zone rooftop unit					_								\$	1,288		ŝ	1,28
D40131103030 - Rebuild pressure backflow preventer										\$ 2,5	76					\$	2,57
D5013220RR0072 - Replace switchgear							\$ 51,512									\$	51,5
D50132740030 - Replace secondary transformer							\$ 157,113									\$	157,11
D5013XX0130XX0001 - Replace Motor Control Center			_				\$ 70,830									\$	70,83
D50231280010 - Replace branch wiring							\$ 314,226									\$	314,22
D50232400030 - Replace incande scent lighting fixture			_					\$	84,995							\$	84,99
D50337600030 - Replace fire alarm control panel										\$ 81,1	32					\$	81,13
E1023XX0141XX0001 - Replace Interior Signage								1				\$ 21,893				ŝ	21,89

Recommendations:

- Create a more proactive renewal/funding plan for campus facilities that will fully maintain newer buildings now and into the future.
- Establish criteria to identify other campus spaces that are critical to the teaching and research mission of the university for priority funding. As a result, the budget must increase for renovating and maintaining existing facilities.

Mobility Issues

Leaders from various entities in the community have come together to understand the future of transportation, including special events, transportation planning and funding, construction, and transit. With anticipated expansion, there are concerns around transit and mobility in peak periods.

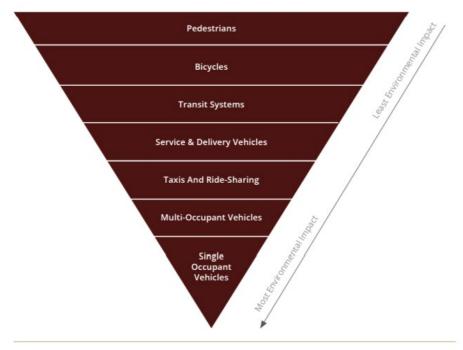
Ongoing construction projects highlight the major challenges that come with expanding mobility infrastructure while maintaining daily operations. Looming community construction projects only increase the strain on already congested corridors. Further development surrounding campus has increased pedestrian, bicycle, and vehicular conflicts, highlighting the need for connected corridors between campus and the community. As new challenges emerge with inevitable growth, every decision, investment, and opportunity must consider the safety, accessibility, and mobility of the B/CS community.

In this pursuit, Texas A&M University must collaborate with the surrounding communities to ensure transportation growth is intentional. This coordination plays a key role in the student, faculty, and staff experience so Texas A&M and the B/CS community is a place where people want to learn, live and work. Six themes will help in achieving this vision:



- Multiagency planning and coordination
- Capacity, congestion, and construction
- Parking
- Transit
- Micromobility
- Special events

Overall, the themes highlight how effective management of transportation and mobility on a university campus significantly impacts the entire campus community. Through implementing strategies from the <u>Mobility Master Plan</u>, analyzing capacity assessments, and planning for congestion mitigation, the university can enhance accessibility, reduce stress, and improve overall campus safety, efficiency, and comfort.



Mobility Plan Hierarchy

Source: Texas A&M Campus Master Plan 2017

The <u>Mobility Plan Hierarchy from the Campus Master Plan</u> diagram shows the modes of transportation with the least negative environmental impact to the most impact. Funding transportation infrastructure according to mode hierarchy will create a unified effort for low negative environmental impact. These planning decisions will affect generations of future Aggies, so it is important to ensure the university enriches the campus experience and connects people to places, not simply builds to accommodate more cars. The ongoing multiagency planning and coordination with the community has put Transportation Services in a position to be successful at making Texas A&M and the B/CS community the best place to learn, live, and work.



MULTIAGENCY PLANNING AND COORDINATION

Campus

Transportation Services has completed numerous efforts to define the direction of mobility on campus including the Campus Master Plan, Sustainability Master Plan, Mobility Master Plan, and a departmental Strategic Plan. These plans call for prioritizing access by transportation mode and to encourage a "park once" philosophy to reduce congestion. Furthermore, these plans recommend creating separate paths for various transportation modes to reduce conflict points and suggest enhancing current infrastructure like sidewalk size, multimodal paths, lighting, and shade.

Community

Texas A&M has cultivated a relationship with the B/CS community by dedicating time and resources and has a role in the community's transportation planning, design, and implementation process. In this role, Texas A&M serves as an advisor and voting member of various committees for the B/CS Metropolitan Planning Organization (MPO) that help shape the area's transportation vision and direction. Current planning efforts include projects to improve safety and to decrease roadway congestion, such as the configuration and expansion of both FM 2818 and State Hwy 6, and the grade separation planned for the intersection of George Bush Drive and Wellborn Road. Other plans include:

Area of B/CS	Current Planning Efforts
Community	
Northgate District	• Increased housing density will add about 1,700 beds in the
	coming years.
	• Northeast Gateway District Plan will develop the area adjacent
	to campus, prioritizing mixed-use development to support
	pedestrian and bicycle activity and increase the need for
	connections with Texas A&M.
Texas Avenue and	• Northeast Gateway District Plan addresses a need to assess the
George Bush Drive	feasibility of a grade-separated facility at this intersection to
Intersection	determine whether keeping automotive or bicycle and
	pedestrian traffic at grade is possible and determine a preferred
	facility design.
University Drive	• A feasibility study conducted by The Texas Department of
(FM 60)	Transportation (TxDOT) explored grade separation projects
	that prioritize pedestrian and bicycle connections between
	B/CS and Texas A&M.
	• Design solutions such as tunnels, bridges, and at-grade
	pedestrian crossings were analyzed across the corridor along
	with high-level cost estimates ranging from \$18 to \$76 million
	per location (see Appendix: Image 7 for a sample rendering).

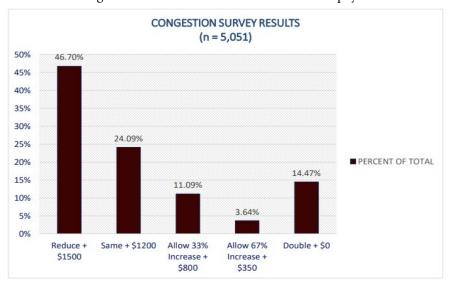


The Brazos County MPO is also responsible for the regional traffic model that estimates traffic demand on the street network, looking at population, employment, and type of trip. For example, there are home-based-work trips between residential areas and employment areas. By design, the model assigns vehicle trips to the streets based on travel times between the beginning and ending location of the desired trip and allows for more traffic to be assigned on a street than available capacity. Model runs are available for 2022, 2035, 2045 and 2050:

- 2022 includes the approximate number of students on campus at that time.
- 2035 has nearly 9,000 more students than in 2023.
- 2045 has 15,000 more students than 2023.
- 2050 includes 16,800 additional students than 2023.

In 2022, at least one section of each major street touching campus (see Appendix: Image 8) had more vehicles wanting to travel on the road than available space; a demand to capacity ratio of over 1.0 (orange or red line). With student and community growth over time, the demand to capacity ratio will grow to 1.25 (red line), meaning at least 25% more vehicles want to travel on the street than there is space available (see Appendix: Images 9-11).

In 2019, the Brazos County MPO in partnership with the Texas Transportation Institute (TTI) conducted a survey that garnered over 5,000 responses to understand how the community chooses to address transportation funding shortfalls, which is critical in mitigating congestion. Respondents were asked to select an acceptable level of congestion based on the amount of additional fees, tolls, and other revenue streams they would be willing to pay per household. The results in the graph show that 24% of respondents were willing to pay an additional \$1,200 more per household to keep congestion at current levels or reduce it to 2007 levels. Another 14% were not willing to pay any additional money and would rather congestion double from its current level than pay to reduce it.



Source: 2019 Bryan/College Station Survey Results



Recommendations:

- Engage with the community transportation agencies to create safe connections to campus, including leading the university coordination with city and Texas Department of Transportation projects, such as the grade separation projects along University Drive.
- Continue implementing the 2022 Mobility Master Plan, which presents the Transportation Mode Hierarchy that prioritizes pedestrians and alternative modes of travel.
- Include Transportation Demand Management (TDM) in congestion mitigation efforts conducted by various agencies in the B/CS community.
 - Congestion mitigation is critical as the population of the area has surpassed the 200,000 threshold which designates the region by the federal government as a transportation management area (TMA).
 - As a TMA, the planning efforts must first consider operational improvements that include micromobility, transit, and other transportation modes before adding roadway capacity.

CAPACITY, CONGESTION, AND CONSTRUCTION

Campus

As previously mentioned in the Mobility Master Plan, the campus has areas where transportation mode separation is lacking, creating risk and congestion. In these cases, adequate capacity for each mode is also lacking:

- Ross Street, at the intersections of Spence, Ireland, Asbury, and Houston streets
- Gene Stalling Boulevard at West Lamar Street
- John Kimbrough Boulevard at Olsen Boulevard
- Spence Street at Lubbock Street
- Trigon area

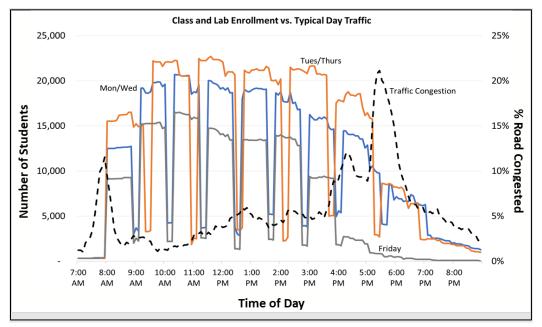
The plan also identifies city and state roadways bordering the campus where congestion and conflict statistics are high, such as University Drive from Olsen Boulevard to Polo Road, George Bush Drive from Bizzell Street to Penberthy Boulevard, and Wellborn Road from George Bush Drive to F&B Road. Additionally, it indicated that much on-campus congestion is due to non-affiliated vehicles "cutting through" using campus streets rather than travelling around the campus perimeter, such as on Bizzell Street, Olsen Boulevard and Penberthy Boulevard.

Texas A&M's class enrollment is largest on Tuesdays and Thursdays, with close to 25,000 students between 9 a.m. and 4 p.m. Monday and Wednesday enrollment follows a similar



trend with close to 20,000 students enrolled between 9 a.m. to 4 p.m. Friday classes have the least enrollment with close to 15,000 students enrolled between 9 a.m. to 3 p.m.

The percentage of road congestion is calculated for the roads surrounding and leading to Texas A&M University throughout the day. When overlaying the percent of the roads congested graph with Texas A&M's class and lab enrollment, road congestion spikes around 8 a.m. and 5:30 p.m. This correlates with the peak number of students and faculty trying to get on campus and off campus around the same time the B/CS community is getting to their work location during the normal 8 a.m. to 5 p.m. workday. The following graph shows activity from a typical day (October 18, 2023).



Source: Transportation Services

When the campus or community will be impacted by construction projects, Transportation Services generally communicates the impact to the campus, regardless of who is completing the construction. Transit will be impacted by several planned construction projects including Bush-Wellborn Crossing and Highway 6 expansion.

Community

The B/CS area is the 15th largest Texas metropolitan area with 250,000 residents and college students. During a class day, the Texas A&M campus is the 4th largest downtown, with more than 75,000 students, faculty, and staff. Other peer cities have dispersed employment patterns which make it easier to serve their populations with their street network.



TTI publishes an annual report on the most congested road segments in Texas. Eight of the top ten most congested roads in Brazos County either border Texas A&M or are road segments that connect the university to student housing (see Appendix: Images 12-13). To address congestion in the area, TxDOT along with the cities of Bryan and College Station have undertaken numerous road construction projects.

The following is a list of major construction projects that were recently completed, are underway, or are planned for the near future:

Location	Construction Project Description
Stotzer Parkway (FM 60) and Harvey Mitchell Parkway (FM 2818) Diverging Diamond Interchange	 Completed in 2017 This alternative intersection design addressed safety and traffic delays.
University Drive Pedestrian Improvements between Texas Avenue and Wellborn Road	 Completed in 2018 Consolidated left turn movements to the signalized intersections and provided pedestrian refuge when crossing Dedicated pedestrian signal phase minimizes conflicts between vehicles and vulnerable road users
Holleman Drive and Wellborn Road Intersection Improvements	 Completed in 2023 Removed a severe "hump" when crossing the railroad tracks thereby enhancing traffic flow through the intersection
Harvey Mitchell Parkway (FM 2818) Superstreet	 Completion expected by Fall 2024 Additional through lane in each direction and reconfiguration of the signalized intersections to improve traffic flow and safety
SH 6 – Central B/CS Improvements	 The estimated \$588 million project is expected to begin in the spring of 2025 with construction lasting four to five years. Widening the freeway to six lanes Interchange improvements at Harvey Road, University Drive, Briarcrest Drive, William Joel Bryan Parkway, and SH 21 Reconfiguration of the Texas Avenue exit Bicycle/pedestrian improvements
Bush-Wellborn Crossing Improvements	 This planned \$103 million grade-separated intersection project is scheduled to begin in the spring of 2026. Will require road closures throughout the project

• Addresses a major congestion point in the
transportation network while also improving safety
for drivers, cyclists, and pedestrians

As private housing can be less expensive, timelier to build, and taxable, community stakeholders want to increase off-campus housing, particularly through high-density properties near campus. Such properties also support walking and micromobility options.

There are gaps in route connectivity across campus and the B/CS community that prevent us from properly and fully supporting multimodal transportation, which is one part of the solution for getting people through the last mile of their journey to their destinations, such as once they get off the bus or park their vehicle.

New solutions to avoid multimodal congestion would significantly increase safety, efficiency, customer satisfaction and comfort. One solution is the Boring Company Loop. The Boring Company creates safe, fast-to-dig, and low-cost transportation that prevents traffic and enables rapid point-to-point transportation. Tunnels minimize usage of valuable surface land and do not conflict with existing transportation systems. A network of tunnels can alleviate congestion and grow with campus. The proposed Aggie Loop is an all-electric, zero-emissions, underground public transportation system in which passengers are transported directly to their final destinations with zero or few stops along the way. The Aggie Loop would circulate from the Polo Road Garage area on east campus to the White Creek apartments on west campus. There would be six surface stations and three subsurface stations located in pedestrian hot spots. In addition to the construction costs, there would be annual operations and maintenance costs (see Appendix: Images 14-16 for maps and conceptual price estimates).

Recommendations:

There is no single solution to the challenges. They will need to be solved with the timely coordination of multiple solutions that each target different components of the problem.

- Focus on enhancing the student experience, multimodal transportation, and safety through on-campus projects that are in the planning stage:
 - Moving the off-campus transit hub from the highly congested and tightly configured Trigon to greatly limit traffic in the area and create more space for separated multimodal paths. This will also move several off-campus routes to Ross Street, which will better facilitate students who need access to the engineering corridor.
 - Redesigning Penberthy Boulevard between George Bush Drive and John Kimbrough Boulevard to add lanes for vehicular traffic, multimodal paths on both sides of the roadway, and lighting (\$4.5M project).



- Expanding the MSC bus hub so all on- and off-campus routes come to this single location for ease of transfers and connectivity. This change will also serve to move all bus routes away from the Bush/Wellborn intersection so the construction of the grade separation will not interfere with bus service.
- Adding a multimodal path connection between the Academic Plaza and the Old Main underpass, improving the connection between the east and west campuses to increase safety and convenience for pedestrians and customers using wheeled devices to travel between destinations.
- Transportation Services contracted with an engineering firm to complete a traffic signal study that included intersections on west and east campuses. Mass quantities of converging traffic of multiple modes at these key intersections warrant adding traffic signals.
- Further limit personal vehicle traffic on campus and prioritize transportation infrastructure development according to the Campus Master Plan mode hierarchy, which aligns with the Mobility Master Plan and the Transportation Management Area requirements.
- Implement strategies aligned with the Campus Master Plan and Mobility Master Plan to further reduce mode conflicts by relocating and removing some traffic access gates in the north area of campus so no free flow vehicular traffic occurs on Ross Street.
- Transportation Services contributed campus-oriented projects to the Metropolitan Planning Organization for their Metropolitan Plan Update, which can serve as a basis for consideration for federal funding for regional projects.
 - The projects prioritized for inclusion were University Drive grade separated crossings for pedestrians and people on wheeled devices, oncampus traffic signals, reconfiguration of campus street intersections with George Bush Drive, renovating F&G Road to include lighting, drainage, and multiuse paths, Pickard Pass extension to the west to reach Reed Arena, permanent overhead electronic, programmable message signs on key event corridors, South College multiuse path and roadway reconfiguration, and safe and accessible intersection crossings on Bizzell Street at New Main Drive.
- As noted in other sections of this report, explore the feasibility of building out west campus to reduce the need for students to move from east and west campus. Campus services and transit options need to be considered to ensure the campus experience is not negatively impacted by west campus growth.
- Explore the feasibility of utilizing the Boring Company to build a tunnel system through campus to enhance the movement of people. The project is estimated at \$250M-\$350M in construction and would take three years to complete. Funding for operations and maintenance costs would also be needed.



PARKING

Campus parking is at capacity. Each fall, student parking is sold out except for permits for Fan Field. During the academic year, there is very little flexibility in campus parking lots or garages during business hours Monday through Thursday for accommodating conferences, career fairs, performances, or sporting events. After-hours events are much easier to accommodate.

The campus parking space inventory has remained roughly the same over the last 10 years, fluctuating between 35,000 and 38,000. The number of spaces varies when construction temporarily closes parking lots for expansion or when new parking areas are developed. Motorcycle parking space inventory has increased slightly over these years from about 900 spaces to about 1,100 spaces.

There are some inefficiencies within the parking system. If policies were changed, it could provide parking access to more customers without building more parking spaces. When there are larger parking facilities where assigned customers can park in the first available space and spaces are not individually reserved for specific customers it allows more customers to park in the facility. For example, a parking lot with 1,000 spaces where each space is assigned to a specific customer only serves 1,000 customers. If the same lot were sold instead to a specific set of customers, but each customer could park in any available space, it could serve 1,060 students living on-campus or 2,000 student commuters. Each lot on campus has a ratio of the number of permits that can be sold per space and still guarantees customers assigned to that location will have a place to park when they arrive. Each lot has unique characteristics that affect the ratio, and using close observation and data analysis, it can be calculated to maximize the number of customers served without leaving anyone without a place to park.

Recommendations:

- Enable the campus community members to park once and use other modes to move around campus, or to not drive to campus at all, by introducing new options to move people safely, comfortably, and conveniently.
 - The campus and community plans both call for increased use of other options over driving personal vehicles to campus and to maintain current parking space count to population ratio.
 - The Campus Master Plan calls for eliminating parking in the core of campus to reduce conflicts and to make way for green space and infrastructure for walking and biking. The plan also directs building garages nearer the perimeter of campus. Garages cost approximately \$25,000 per space to build. It could prove more affordable and reduce conflicts and congestion if revenue were spent enhancing other-mode infrastructure and availability to decrease the demand for parking. The



plan suggests maintaining the current (2017) ratio of the number of parking spaces to campus population.

- Establish stakeholder buy-in and create culture change using a well-communicated, campus initiative.
- Continue to monitor the number of permits sold per space, particularly in lots where it can be difficult to find a spot and adjust permits sold as needed.

TRANSIT

Campus

Texas A&M University's transit operation is the 7th largest transit agency in the state based on ridership to, from and around campus and within the community.

Texas A&	M Transit Operations in Review
Ridership Data	 Annual ridership was 5.6M in FY23 with a projected increase in FY24 to 6.2M rides. Fall daily ridership is approximately 42,000 with 3,000-4,000 passengers on weekends, not including game day service.
Service Hours and Number of Routes	 Annually, transit runs 160,000 service hours with approximately 800 hours (about 1 month) of service per day. Transit operates 19 different transit routes, of which 7 are on campus and 12 are off campus.
Route Services	 The east to west movement utilizes Route 06 and 08 operating between the General Services Complex, the MSC and Park West. Route 01 is considered a circulator route servicing the MSC, Engineering Corridor, Corps dorms and Quad, Sbisa Dining Hall, Wehner, West Campus Garage and Reed Arena. The busiest stops and areas serviced are the MSC, Trigon, Reed Arena, Wehner, and the Park West stops.

Source: Transportation Services

Class change creates significant issues in travel especially when students are traveling from east to west campus, or the reverse. These issues are exacerbated depending on time of day and physical locations. The 20-minute class change period is not enough time to transport students between the east and west campus and expect them to be in their next class on time.



The current transit system is constrained by budget, an aging bus fleet, and has surpassed capacity within the existing facility. In the past, students paid a designated transportation fee of \$70 per semester. This, plus additional charter revenue funded transit operations. In 2012, the transportation fee was rolled into the University Advancement Fee. Transit then received an allocation annually from this fund. The allocation was based on the student population in 2012 but has not grown with student enrollment. Over the years, this has posed significant financial issues for this operation requiring ongoing requests for central funding.

Of the 95 full size buses, 34 (36%) have been in service between 18-24 years. Twenty-four buses in the fleet were produced by a manufacturer who went out of business. Replacement parts for those units are extremely difficult to locate and purchase.

The transit facility needs expensive repairs and requires significant expansion to accommodate current and future staff. Staffing levels far exceed the building's capacity, there is no training room for the 40-50 drivers who require classroom sessions as a part of their training. There are over 50 full-time staff who are required to use one restroom for males and one for females. There are 400 full-time and student drivers who are in and out of the office who share these same restroom facilities. The training office, a supervisor's office, and the conference room are not accessible. The bus lot is at capacity for parking buses and any expansion of the fleet would require parking off-site. The driver training lot is inadequate for the number of drivers training at one time. The testing for a commercial driver's license is done on the bus parking lot when buses are out on route. As buses are in and out of the parking lot, this poses a hazard and can compromise the testing requirements.

Community

Brazos Transit District (BTD) provides transit services in 16 counties. Fixed routes, ADA paratransit, and demand and response services are offered in Brazos County on weekdays. BTD is recognized as the Federal Transit Administration designated recipient for federal transit funding. In this role, BTD will continue to work with Texas A&M on federally funded bus purchases. This partnership has already contributed to the purchase of electric and diesel buses. Texas A&M and BTD partner with one another allowing anyone with an A&M ID to ride the BTD system for free and anyone with a BTD ID may ride the Texas A&M buses.

Recommendations:

• Expand the current bus fleet by 10%, adding 9-10 buses at a cost between \$5.85M and \$7.65M. It is notable that the current cost of a bus has increased by 30% in the last four years. Explore funding options that include matching grant funds and the possibility of a new transit fee.



- Relocate the transit facility and seek federal grants with matching support from the university (\$10M).
 - With the bus lot at capacity, increasing the fleet size by any number would require additional parking for buses in a new location because the current is landlocked.
 - Select and fund micro-transit options to supplement moving people around campus so the mass transit buses can be used to move more people to and from campus.
 - Explore the feasibility of utilizing the Boring Company to build a tunnel system through campus to enhance the movement of people.

MICROMOBILITY

Campus

Micromobility is defined as lightweight, wheeled vehicles such as bicycles, scooters, and boards, with drive systems which may be electric only, electric assist, or analog. It may be personally owned, borrowed, leased, or rented. Micromobility is blossoming on campus. It is perceived to be reducing demand for transit service and personal vehicle parking and an important factor in solving campus mobility problems.

2021-2023 Micromobility Use									
Mobility Type	Usage								
Personal E-bike	688% increase								
Personal electric scooter	546% increase								
Personal owned bikes	26% increase								
Personal owned vehicle	0.09% reduction								
Veo electric bikes	233% increase								
Walking	36% increase								

Faculty, staff, and students have raised concerns regarding the safety of use of these vehicles on campus. Not all users follow the state laws or campus-policies, adhere to dismount zones, cross at marked crosswalks, adhere to designated routes, causing more accidents, near misses, and safety concerns. A campuswide transportation safety and etiquette campaign is scheduled to soft-launch this summer with a full launch fall 2024.

Community

The MPO Technical Advisory Committee (TAC) adopted a resolution whose goal was to define a process that would expedite the planning and programming of Active Transportation related projects. This policy designated bicycle- and pedestrian- only projects will comprise a minimum of 5% funds available to the MPO for allocation to projects identified in the Metropolitan Transportation Plan (MTP). Additionally, the policy designated the creation of a standing regional Bicycle/Pedestrian Committee, known as the



Active Transportation Advisory Panel (ATAP), consisting of regional stakeholders and citizen activists.

The Bryan/College Station MPO developed the Regional Bicycle and Pedestrian Master Plan to help facilitate the coordination of active transportation planning efforts and provide a framework for future development of the regional active transportation network on a regional level. The Master Plan identifies the current bicycle and pedestrian network and places for future connections (see Appendix: Image 17).

Recommendations:

- Continue working with the local transportation agencies and cities to identify and support projects that add connections between Texas A&M and the communities.
- Continue to support last-mile connections between campus and the communities to reduce the use of single-occupancy vehicles on campus.
- Continue to prioritize infrastructure projects that separate transportation modes and wide, shared use paths.
- Implement and create a culture of transportation safety and etiquette around all modes including the most recent addition, micromobility.
- Utilize tools to get better data counts about different modes of transportation, including volume by mode and where trips originate and terminate.

SPECIAL EVENTS

Campus

The campus has a highly collaborative coordination between departments and community agencies to effectively manage large events. Transportation Services has extensive operational and communication plans and generally leads marketing efforts to the campus and guests attending events, so all have resources to learn about transit, parking, and traffic changes associated with events.

Often, multiple events are planned independently and at the same time. These independent plans usually do not consider the impact to resources when all are occurring at the same time, such as police, emergency services, Transportation Services staff, traffic congestion, parking availability, bus resources, or mitigations that may be important to ensure the safety of the people on campus and the success of the events.

The number of special events occurring during the regular workday is increasing. Additionally, these special events are increasing in size, and sometimes outgrow what the university can accommodate. For example, the Student Engineer's Council (SEC) career fair has not been held on campus due to parking restraints.



Community

The City of College Station and the City of Bryan partnered with Texas A&M University to help reduce congestion on Texas A&M gamedays and other special events through the Kyle Field Transportation Plan. The plan supports safe and efficient traffic management and operational techniques to reduce congestion on gamedays. This includes separating transportation modes to create safe pedestrian corridors, shuttling between on- and offcampus parking lots, maximizing signal timing, and providing real-time traffic information to the public. College Station invested \$5 million for their Intelligent Transportation System (ITS) plan and The Texas A&M University System invested \$1 million in capital funding to support gameday operations.

Large events such as the George Strait concert and Mexico and Brazil soccer match have necessitated paid parking in neighborhoods to help alleviate congestion near the stadium. College Station is conducting a paid parking pilot program to determine the feasibility.

Recommendations:

- Continue exploring multimodal options to provide different transportation modes to handle the influx of traffic and continue working with both cities to explore coordinated options to streamline how people get from the community to campus for events.
- Identify a mechanism to record campus events in advance, including details, plans, resources required, and oversight, so an appropriate council can review and approve them.
- Examine incorporating more event traffic management strategies during weekday peak periods in the mornings and evenings and during some class changes.



Appendix

Table 1 – University Classrooms

University Classrooms - Unscheduled Rooms by Timeslot and Capacity Range

Fall 2023

							Capacit	y Range						
	_	14-24	25-49	50-74	75-99	100-149	150-199	200-249	250-299	300-349	350-399	450-499	600-699	Total
	MWF 0800-0850	7	43	21	3	13	1	4	2	1	1	0	0	96
	MWF 0910-1000	4	9	1	0	2	0	0	0	0	0	0	0	16
	MWF 1020-1110	2	8	0	1	1	0	0	0	0	0	0	0	12
	MWF 1130-1220	2	7	0	0	1	1	0	0	0	0	0	0	11
	MWF 1240-1330	1	8	0	0	1	1	1	0	0	0	0	0	12
	MWF 1350-1440	0	4	1	3	2	1	0	0	0	1	0	0	12
	MWF 1500-1550	3	9	6	3	2	2	3	1	0	0	0	0	29
0-min)	MW 1610-1725	5	11	11	1	9	1	1	0	1	0	0	0	40
5	MW 1745-1900	8	63	32	10	21	3	3	2	2	1	0	0	145
(15	MW 1920-2035	10	89	38	11	31	4	3	4	3	1	0	0	194
đ	MW 2055-2210	13	100	45	14	34	5	5	6	3	2	0	0	227
les	TR 0800-0915	6	34	7	3	3	1	2	0	0	1	1	0	58
Ē	TR 0935-1050	1	2	0	0	0	0	0	0	0	0	0	0	3
	TR 1110-1225	1	2	3	0	1	0	0	0	0	1	0	0	8
	TR 1245-1400	1	4	3	0	2	0	0	0	0	0	0	0	10
	TR 1420-1535	1	5	0	0	1	1	0	0	0	0	0	0	8
	TR 1555-1710	5	11	3	0	1	0	0	0	0	1	0	0	21
	TR 1730-1845	8	55	23	9	20	4	0	2	2	2	1	1	127
	TR 1905-2020	8	91	35	14	30	6	3	3	3	2	0	0	195
	TR 2040-2155	11	101	43	14	34	6	5	3	3	2	0	0	222
	Total	97	656	272	86	209	37	30	23	18	15	2	1	

University Classrooms - Unscheduled <u>Seats</u> by Timeslot and Capacity Range Fall 2023

Capacity Range

		14-24	25-49	50-74	75-99	100-149	150-199	200-249	250-299	300-349	350-399	450-499	600-699	Total
	MWF 0800-0850	155	1648	1301	271	1479	168	851	578	313	374	0	0	7138
	MWF 0910-1000	85	317	66	0	233	0	0	0	0	0	0	0	701
	MWF 1020-1110	46	272	0	96	108	0	0	0	0	0	0	0	522
	MWF 1130-1220	43	231	0	0	148	194	0	0	0	0	0	0	616
	MWF 1240-1330	22	265	0	0	135	194	204	0	0	0	0	0	820
	MWF 1350-1440	0	132	50	249	264	194	0	0	0	374	0	0	1263
_	MWF 1500-1550	62	311	360	265	210	350	641	285	0	0	0	0	2484
min)	MW 1610-1725	100	386	682	84	1120	196	215	0	336	0	0	0	3119
	MW 1745-1900	164	2335	1939	871	2539	561	619	573	600	374	0	0	10575
(15	MW 1920-2035	208	3279	2330	959	3703	677	619	1123	913	374	0	0	14185
ğ	MW 2055-2210	279	3706	2737	1253	4069	873	1083	1707	913	730	0	0	17350
nes	TR 0800-0915	129	1221	411	255	338	156	421	0	0	374	463	0	3768
Ē	TR 0935-1050	20	60	0	0	0	0	0	0	0	0	0	0	80
	TR 1110-1225	22	84	174	0	103	0	0	0	0	374	0	0	757
	TR 1245-1400	22	132	208	0	224	0	0	0	0	0	0	0	586
	TR 1420-1535	20	174	0	0	116	152	0	0	0	0	0	0	462
	TR 1555-1710	106	383	196	0	124	0	0	0	0	374	0	0	1183
	TR 1730-1845	166	2056	1427	805	2315	701	0	579	613	730	463	605	10460
	TR 1905-2020	166	3338	2144	1253	3554	1029	667	867	913	730	0	0	14661
	TR 2040-2155	232	3755	2614	1253	4069	1029	1104	867	913	730	0	0	16566
	Total	2047	24085	16639	7614	24851	6474	6424	6579	5514	5538	926	605	



Days		3:00 Start F/TR	8:30 Start	MWF/TR
MWF	8:00 AM	8:50 AM	8:30 AM	9:20 AM
MWF	9:10 AM	10:00 AM	9:40 AM	10:30 AM
MWF	10:20 AM	11:10 AM	10:50 AM	11:40 AM
MWF	11:30 AM	12:20 PM	12:00 PM	12:50 PM
MWF	12:40 PM	1:30 PM	1:10 PM	2:00 PM
MWF	1:50 PM	2:40 PM	2:20 PM	3:10 PM
MWF	3:00 PM	3:50 PM	3:30 PM	4:20 PM
MWF	4:10 PM	5:25 PM	4:40 PM	5:55 PM
MWF	5:45 PM	7:00 PM	6:15 PM	7:30 PM
MWF	7:20 PM	8:35 PM	7:50 PM	9:05 PM
MWF	8:55 PM	10:10 PM	9:25 PM	10:40 PM
TR	8:00 AM	9:15 AM	8:30 AM	9:45 AM
TR	9:35 AM	10:50 AM	10:05 AM	11:20 AM
TR	11:10 AM	12:25 PM	11:40 AM	12:55 PM
TR	12:45 PM	2:00 PM	1:15 PM	2:30 PM
TR	2:20 PM	3:35 PM	2:50 PM	4:05 PM
TR	3:55 PM	5:10 PM	4:25 PM	5:40 PM
TR	5:30 PM	6:45 PM	6:00 PM	7:15 PM
TR	7:05 PM	8:20 PM	7:35 PM	8:50 PM
TR	8:40 PM	9:55 PM	9:10 PM	10:25 PM

Table 2 – Option 1: Start all of campus at 8:30 with MWF and TR meeting pattern



meet	ing patt	ern. Fi	riday w	ould be	reserved	for non-traditio	mal courses.
Ι	Days	8:00 Start MW/TR-			Option 2	8:30 Start MV	V/TR-Option 3
Ν	ИW	8:0	0 AM	9:1	5 AM	8:30 AM	9:45 AM
Ν	MW 9:35 AM		10:5	50 AM	10:05 AM	11:20 AM	
MW 11:1		11:1	0 AM	12:	25 PM	11:40 AM	12:55 PM
Ν	ИW	12:4	5 PM	2:0	00 PM	1:15 PM	2:30 PM
Ν	ИW	2:2	0 PM	3:3	5 PM	2:50 PM	4:05 PM
N	ИW	3:5	5 PM	5:1	0 PM	4:25 PM	5:40 PM
N	ИW	5:3	0 PM	6:4	5 PM	6:00 PM	7:15 PM
N	ИW	7:0	5 PM	8:2	20 PM	7:35 PM	8:50 PM
Ν	ИW	8:4	0 PM	9:5	55 PM	9:10 PM	10:25 PM
	TR	8:0	0 AM	9:1	5 AM	8:30 AM	9:45 AM
	TR	9:3	5 AM	10:5	50 AM	10:05 AM	11:20 AM
	TR	11:1	0 AM	12:2	25 PM	11:40 AM	12:55 PM
	TR	12:4	12:45 PM		00 PM	1:15 PM	2:30 PM
	TR	2:2	2:20 PM		5 PM	2:50 PM	4:05 PM
	TR	3:55 PM		5:10 PM		4:25 PM	5:40 PM
	TR	5:30 PM		6:45 PM		6:00 PM	7:15 PM
	TR	7:05 PM		8:20 PM		7:35 PM	8:50 PM
	TR	8:40 PM		9:55 PM		9:10 PM	10:25 PM
		3-hr (F)				
F	8:00	AM	10:30	AM			
F	10:50	AM	1:20	PM			
F	1:40	PM	4:10	PM			
		2-hr (
F	8:00		9:40				
F	10:00		11:40				
F	12:00		1:40 PM				
F	F 2:00 PM		3:40	PM			
1-hr (F 8:00 AM		6) 8:50	ΔМ				
F 9:10 AM		10:00					
F			10:00 AM 11:10 AM				
F			12:20				
F	12:40	PM	1:30	PM			
F	1:50	PM	2:40	PM			
F	3:00	PM	3:50	PM			
~							

Table 3 – Options 2 and 3: Start all of campus at either 8:00 or 8:30 with a MW and TR meeting pattern. Friday would be reserved for non-traditional courses.



Table 4 – Option 4: Start east campus classes at 8:00 a.m. and start west campus classes at 8:30 a.m.

Days		ampus MWF/TR	West Campus 8:30 Start MWF/TR		
MWF	8:00 AM	8:50 AM	8:30 AM	9:20 AM	
MWF	9:10 AM	10:00 AM	9:40 AM	10:30 AM	
MWF	10:20 AM	11:10 AM	10:50 AM	11:40 AM	
MWF	11:30 AM	12:20 PM	12:00 PM	12:50 PM	
MWF	12:40 PM	1:30 PM	1:10 PM	2:00 PM	
MWF	1:50 PM	2:40 PM	2:20 PM	3:10 PM	
MWF	3:00 PM	3:50 PM	3:30 PM	4:20 PM	
MW	4:10 PM	5:25 PM	4:40 PM	5:55 PM	
MW	5:45 PM	7:00 PM	6:15 PM	7:30 PM	
MW	7:20 PM	8:35 PM	7:50 PM	9:05 PM	
MW	8:55 PM	10:10 PM	9:25 PM	10:40 PM	
TR	8:00 AM	9:15 AM	8:30 AM	9:45 AM	
TR	9:35 AM	10:50 AM	10:05 AM	11:20 AM	
TR	11:10 AM	12:25 PM	11:40 AM	12:55 PM	
TR	12:45 PM	2:00 PM	1:15 PM	2:30 PM	
TR	2:20 PM	3:35 PM	2:50 PM	4:05 PM	
TR	3:55 PM	5:10 PM	4:25 PM	5:40 PM	
TR	5:30 PM	6:45 PM	6:00 PM	7:15 PM	
TR	7:05 PM	8:20 PM	7:35 PM	8:50 PM	
TR	8:40 PM	9:55 PM	9:10 PM	10:25 PM	



US News Graduate Rankings College	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
and Program Names	Overall									
	Ranking									
Bush School										
Homeland Security								6	8	
Leadership								21	23	21
Local Government Mangement								25		
Non- Profit Management								18	27	21
Overall - Public Affairs						32	28	23	28	26
Political Science	25		24			24	28			
Public Policy Analysis									34	
College of Arts and Science										
Applied Mathematics								14	13	13
Biology PhD	71		75	73		73	62	68		68
Chemistry Analytical	19		19	24				17	11	11
English PhD	59		51			51	73			
Chemistry PhD						24	24	21	27	27
History PhD	80		69			69	67			
Computer Science PhD	40		40	43		43	43	38	41	45
Earth Science PhD	32		32	31		31	31		39	39
Economics PhD	42		39			39	43	38		38
Geology								36		
Inorganic Chemistry	5		5	5		5	5	5	5	5
Nuclear Physics								9	7	7
Overall - Mathematics	41		41	39				32	34	34
Physics	44		44	47				41	47	47
Psychology	67		66			66	66	68		68
Psychology - Industrial Organization								7		7
Sociology PhD	46		47			47	41			
Statistics Doctoral program			15	20		20	20	13		13
Topology Mathematics								20		
College of Business										
Accounting		35	28		15			41	40	35
Full Time MBA	27	31	38	36	40	44	38	41	45	47
Marketing										29
Management								26	15	27
Part Time MBA								36	56	53
College of Education								-	-	
Curriculum and Instruction Program								26		24
Special Education			21		24	19				
Educational Administration Program						19		26		
Educational Psychology Program						23		22	16	
Elementary Teacher Education Program								21		
Overall Education	46	39	38	37	33	34	39	32	31	39

Table 5 – U.S. News Graduate Rankings 2015-2024

Continued on next page



US News Graduate Rankings College	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
and Program Names										
	Overall									
College of Engineering	Ranking									
College of Engineering	8	10	7	7	10	8	9	0	10	10
Aerospace Engineering	-	10			10	-	-	8	10	-
Agriculture Engineering	2	3	2	3	3	4	3	7	8	8
Biomedical Engineering	36	37	39	38	38	37		38	34	34
Chemical Engineering	26	26	27	21	23	28		27	24	21
Civil Engineering	15	12	12	15	14	14		15	14	12
Computer Engineering	21	23	21	17	27	28		23	20	24
Electrical Engineering	18	19	22	21	23	22		25	23	20
Industrial Engineering	10	15	13	13	11	12		12	10	11
Material Engineering								26	20	16
Mechanical Engineering	16	16	17	16	17	17		14	14	16
Nuclear Engineering	3	3	4	3	5	6	4	3	3	6
Overall Engineering	12	11	11	12	15	13	11	10	10	12
Petroleum Engineering	2	2	3	2	2	2	2	2	2	2
College of Vet Medicine										
Overall Veterinary Medicine	7		7	7		7	7		10	10
School of Public health										
Overall Public Health Programs						37	37	31	36	38
School of Law										
Overall Law			92		80	60	53	46	29	26
Dispute Resolution						6	8	4	7	5
Business-Corporate Law								69	68	54
Clinical Training								23	51	80
Constitutional Law								84	79	78
Contracts-Commercial Law								59	47	41
Criminal Law								111	119	52
Environmental Law								38	32	25
Health Care Law								75	67	52
Intellectual Property Law						8		6	9	6
International Law							7	57	58	52
Legal Writing								50	32	11
Tax								70	62	76
Trial Advocacy								67	80	66

Table 5 (continued) – U.S. News Graduate Rankings 2015-2024

Source: ABPA



	Texas Graduating	% of Texas High School
Year	High School Class	Graduates Served by A&M
2022	396,228	4.2%
2021	388,517	4.4%
2020	384,600	4.3%
2019	382,451	4.0%
2018	372,919	4.1%
2017	360,606	4.5%
2016	350,684	4.3%
2015	339,626	4.4%
2014	333,286	4.6%
2013	328,584	4.4%
2012	316,758	4.0%
2011	319,588	3.9%
2010	314,079	3.9%
2009	308,427	3.9%
2008	300,488	4.0%
2007	290,662	4.1%
2006	283,698	4.0%
2005	271,218	4.0%
2004	270,911	3.8%
2003	263,571	3.8%

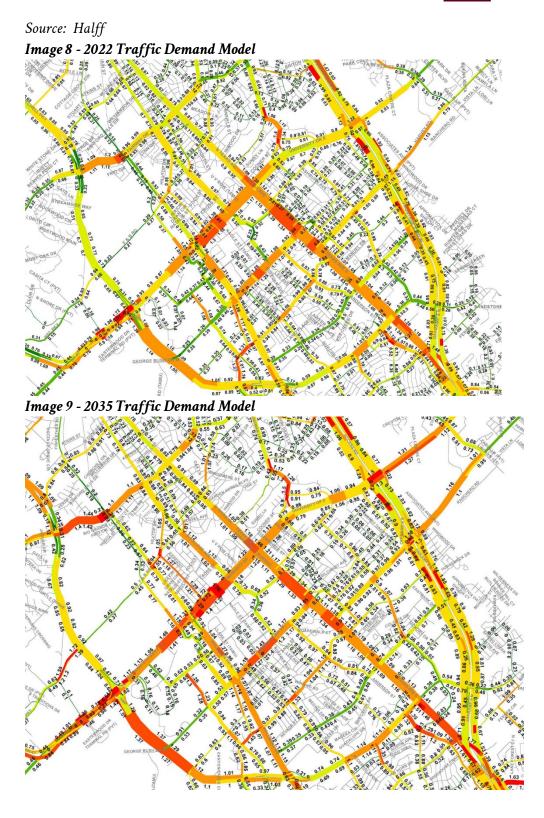
 Table 6 - Percentage of Texas High School Graduates Served by Texas A&M

Source: Texas Education Agency and ABPA

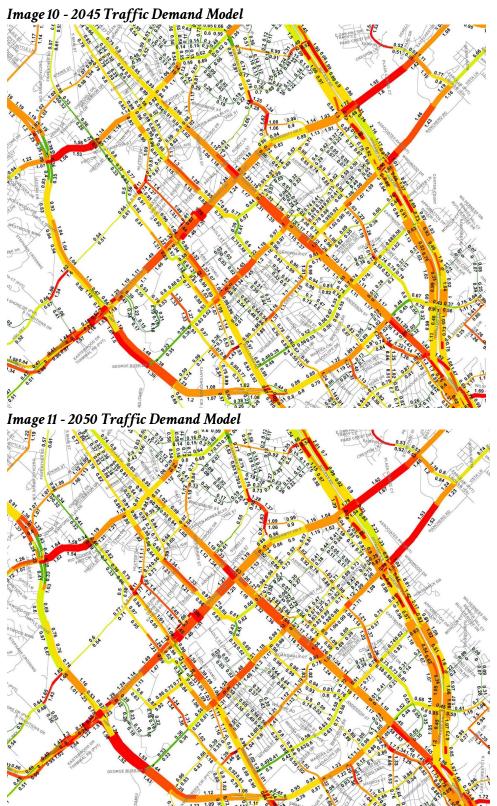
Image 7 - Polo Road/Century Square and University Drive Bicycle and Pedestrian Connection Example











Source of Images 8-11: Texas Transportation Institute

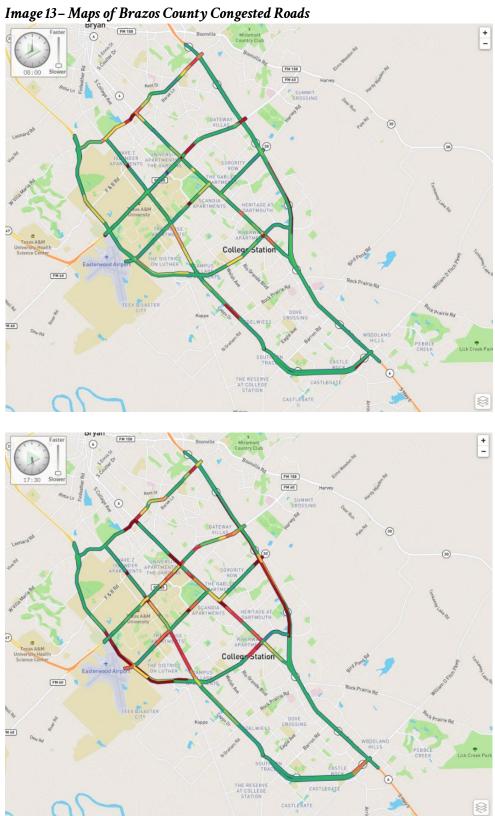




Image 12 – Top 10 Most Congested Roads in Brazos County

Rank	Road Name	Road Name From		Annual Delay per Mile (person- hours)
1	George Bush Dr	Harvey Mitchell Pkwy	S Texas Ave	106,113
2	S Texas Ave	E Villa Maria Rd	Earl Rudder Fwy	102,813
3	S Harvey Mitchell Pkwy	George Bush Dr	Earl Rudder Fwy	93,308
4	University Dr	SH 47	Earl Rudder Fwy	91,291
5	Villa Maria Rd	N Harvey Mitchell Pkwy	Boonville Rd	85,996
6	SH 21	N Harvey Mitchell Pkwy	Earl Rudder Fwy	61,310
7	Wellborn Rd	University Dr	William D. Fitch Pkwy	59,853
8	Holleman Dr	Harvey Mitchell Pkwy	Texas Ave S	39,565
9	University Dr	Earl Rudder Fwy	Boonville Rd	36,981
10	William D. Fitch Pkwy	Wellborn Rd	Earl Rudder Fwy	36,153





Source of Images 12 and 13: Texas Transportation Institute



Image 14 – Route and Station Locations **ROUTE AND STATION**

LOCATIONS AGGIE LOOP

6 Surface Stations

- Polo Road Ross Street
- Commons
- West Campus
- White Creek Reed Arena
- 3 Sub-surface Stations Fish-Pond
- MSC
- Kyle Field



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AND CONFIDENTIAL

Image 15 – Conceptual Price Estimate

CONCEPTUAL PRICE ESTIMATE SUMMARY

Each option includes the base requirements for Loop:

- Tunnels
- Stations .
- NFPA 130 Compliant Egress
- Operations Control Center Maintenance Staff

- Ultimate cost is dependent on: Length of tunnel Quantity, size, and depth of stations
- Quantity, size, and depth of egress shafts
- Pricing excludes:
- Real Estate
- Utility relocation
- · Demolition of existing structures
- Taxes

Conceptual costs will be refined upon further project due diligence.

Jim Fitzgerald (External)

Option				
Name	Phase 1: Initial Build with 6 stall MSC station	Phase 1: Full Build with 10 stall MSC and Kyle Field stations	Phase 2: Full Build	Proof of Concept
Length (miles)	2.3	2.3	2.0	1.0
Surface Stations	2	3	3	2
Sub-surface Stations	1 (Optimized*)	3 (MSC & Kyle Field Large**)		1 (Optimized*)
Starting Point	Polo Road	Polo Road	MSC	Polo Road
End Point	Polo Road	Polo Road	Kyle Field	MSC
OCC / Maintenance Facility	Yes	Yes	Yes	Yes
Price	\$65M - \$79M	\$130M - \$159M	\$41M - \$50M	\$44M - \$54M

*6 Stalls for Loading / Unloading **10 Stalls for Loading / Unloading

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Image 16 - Conceptual Operating Cost Estimate

CONCEPTUAL OPERATING COST ESTIMATE OPERATIONS

Includes full-service operation and maintenance services for Full Aggie Loop (Phase 1 & 2) system:

- Station O&M
- Vehicle O&M
- Vehicle Drivers
- Operations Control Center
- PersonnelMaintenance Staff

Operating hours: M-F 6:00a – 10:00p

Ultimate operational cost is dependent on number of vehicles in circulation, utilization across peak and off-peak hours, and final alignment.

Conceptual costs will be refined upon further project due diligence. Im Fitzerald (External)

Source of Images 14-16: Boring Company

			Max. Annual
20	\$ 6.4M	\$ 7.2M	\$ 8.1M
40	\$ 7.6M	\$ 9.3M	\$ 11.1M
60	\$ 8.8M	\$ 11.4M	\$ 14.0M

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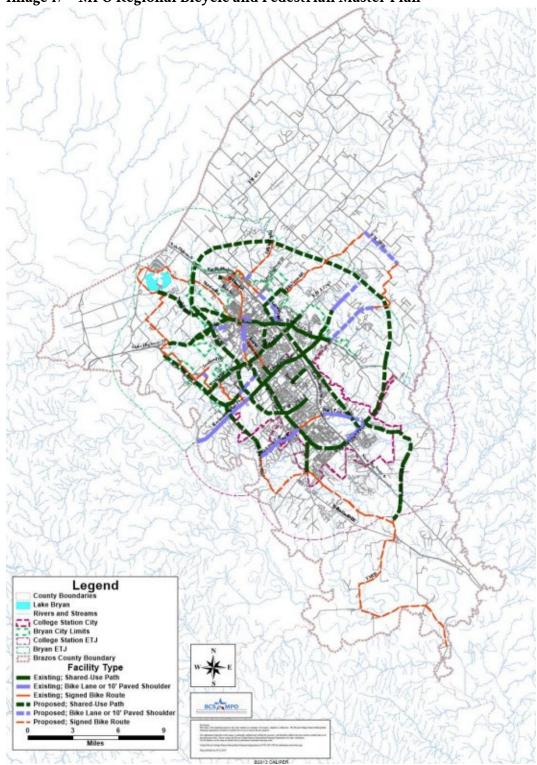


Image 17 – MPO Regional Bicycle and Pedestrian Master Plan

Source: MPO