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WHEN ARE TUITION INCREASES
NEEDED AT ACADEMIC
INSTITUTIONS?

Prepared by the Office of Academic Affairs
The University of Texas System

August 2017

Purpose

The purpose of this report is to outline economic factors and trends in state appropriations that influence the need for U. T. System academic institutions to propose tuition and fee increases in order to sustain operating revenue for FY 2019 and FY 2020. Decreases in inflation-adjusted state appropriations pose significant funding challenges for U. T. System academic institutions. In addition to national inflationary trends in both the CPI and HEPI, many of Texas's major metropolitan areas are booming, creating extraordinary salary pressure for skilled staff such as auditors, accountants, fundraisers, IT staff, and information security personnel.

Furthermore, other economic factors also contribute to higher education cost escalation, including the rising costs of informational technology, investments in high quality but often-costly student success initiatives, and faculty recruitment and retention. Unfunded mandates such as ever-increasing eligibility for the Hazlewood Legacy exemption also cause significant amounts of foregone tuition and fee revenue. Increases in tuition and fees are required to combat the rising costs of higher education operations, to maintain and expand the quality of education that students expect of a U. T. institution, and to begin to narrow the competitiveness gap between U. T. System institutions and national peers. New tuition and fee revenue allows for the investment in student success initiatives that help students graduate, gain employment, and contribute to Texas and regional economies. Finally, rising costs, without the ability to offset those costs, are putting additional pressure on emerging research institutions to reach Tier One status in the absence of comparable funding levels of their respective peer institutions. This white paper outlines four major factors that contribute to economic challenges faced by U. T. System institutions that inhibit their ability to maintain competitiveness among peer groups.

1. To remain competitive, U. T. System institutions must have available resources to pay market-based salaries and benefits necessary to attract top talent and maintain or improve institutional quality and excellence.

To remain competitive, U. T. System institutions must have the resources to pay market-based salaries and benefits necessary to attract and retain top talent and to maintain overall institutional quality. One national measure of institutional competitiveness is operating revenue per FTE student. Operating revenue per FTE student is the addition of tuition and fee revenue plus state appropriations per FTE.

For all U. T. System academic institutions, state appropriations declined from 62% to 41% of operating revenue. For the flagship institution and emerging research institutions, state appropriations shifted by a similar amount from 58% to 42% and from 63% to 38%, respectively (Tables 1-2). Based on the most recently available national comparison data (FY 2015), The University of Texas at Austin ranked last in a measure of competitiveness (operating revenue per FTE) among their national peer group (when AUF funding is excluded) and ranked 13 of 14 when AUF funding is included in the calculation.¹ The University of North Carolina at Chapel Hill received \$12,431 more operating revenue dollars per FTE than U. T. Austin in FY 2015. Table 1 below illustrates U. T. Austin's comparison among peers.² As Table 1 indicates, when considering only state appropriations and tuition revenue, U. T. Austin would require close to a \$6,300 increase per FTE to become even with the middle-of-the-pack peer, The University of Minnesota. According to the U.S. News and World Report Current National University rankings, nine of thirteen peers rank higher than U. T. Austin and received between \$2,732 and \$6,286 more revenue per FTE than U. T. Austin received in FY 2015.³

Table 1: Total State Appropriations and Tuition Revenue per FTE Student – University of Texas Austin and Peer Comparisons (FY 2015)

Peer Institutions	Total State Appropriations and Tuition Revenue	Total FTE Students Fall 2014	Total State Appropriations and Tuition Revenue / FTE	Rank	U.S. News Rank National Univ.
University of North Carolina -Chapel Hill	\$874,191,748	26,066	\$33,538	1	30
University of Michigan-Ann Arbor	\$1,285,245,000	42,056	\$30,560	2	27
University of California-Berkeley	\$1,074,546,000	36,269	\$29,627	3	20
University of Washington-Seattle	\$1,169,575,709	41,323	\$28,303	4	54
University of California-Los Angeles	\$1,141,471,000	41,036	\$27,816	5	24
University of Minnesota-Twin Cities	\$1,188,315,627	43,381	\$27,393	6	71
University of California-San Diego	\$812,059,000	30,134	\$26,948	7	44
Purdue University-Main Campus	\$929,609,306	36,573	\$25,418	8	60
Michigan State University	\$1,061,382,789	46,157	\$22,995	9	82
Ohio State University-Main Campus	\$1,227,489,974	53,581	\$22,909	10	54
University of Illinois at Urbana-Champaign	\$977,791,987	42,813	\$22,839	11	44
Indiana University-Bloomington	\$917,136,813	41,045	\$22,345	12	86
University of Wisconsin-Madison	\$801,614,887	39,858	\$20,112	13	44
The University of Texas at Austin	\$789,529,821	48,690	\$16,215	14	56
The University of Texas at Austin (w/ AUF)*	\$1,027,719,821	48,690	\$21,107		

Source: Integrated Postsecondary Education Data System (IPEDS) Data; Notes: Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012. *Note: The U. T. System Available University Fund (AUF) Report was used to determine the AUF distribution for U. T. Austin. This figure was then added onto U. T. Austin’s state appropriations and tuition revenue amounts that were reported in IPEDS.

Historically, most of the other seven U. T. System academic institutions rank within the lower half of their selected national peer group since they tend to receive less state appropriations and tuition revenue per FTE than their national peers.⁴ Compared to national peers, four U. T. System academic institutions rank near the bottom and are between \$5,000 and \$8,000 + (per FTE) away from reaching the revenue for the top peer in each institutional comparison group (table 2).

**Table 2: FY 2015 Total State Appropriations and Tuition Revenue per FTE Student
U. T. System Academic Institutions (excluding U. T. Austin) and Baseline Peer Comparisons**

	Rank Among 10 Peers	Total State Appropriations and Tuition Revenue per FTE Student	Top Ranking Peer	Total State Appropriations and Tuition Revenue per FTE Student for Top Ranking Peer
<i>Emerging Research Universities</i>				
U. T. Arlington	9	\$12,930	U Mass - Boston	\$21,638
U. T. Dallas	9	\$17,175	University at Buffalo	\$24,986
U. T. El Paso	11	\$11,945	Wright State University	\$16,871
U. T. San Antonio	10	\$12,868	University of Toledo	\$17,618
<i>Comprehensive Universities</i>				
U. T. Rio Grande Valley	NA	NA	NA*	NA*
U. T. Permian Basin	4	\$12,939	New Jersey City University	\$16,665
U. T. Tyler	5	\$12,447	University of West Florida	\$16,891

Source: Integrated Postsecondary Education Data System (IPEDS) Data; **Notes:** Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012. TRBs and other special items cannot be used for student support. UTPB was only compared to eight peers versus the standard ten since one peer lacked data one dramatically transformed structure to the extend it is no longer a viable peer comparison option for UTPB. *UTRGV data are not available since the most recent available data from this national data source are from 2014 – 2015 prior to the first entering class at UTRGV.

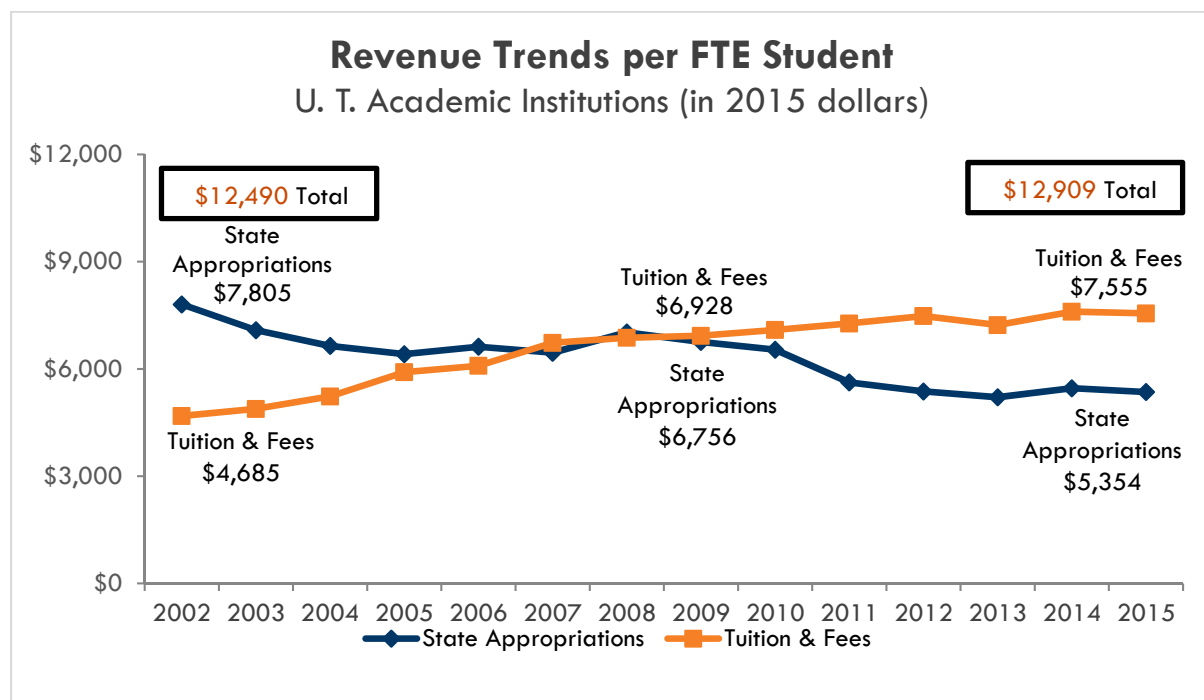
Finally, in addition to the challenges created by declining inflation-adjusted state appropriations, the budget and appropriations structures can also negatively affect academic institutions. For example, at faster growing institutions like U. T. Dallas and U. T. Arlington, the state appropriations funding is based on student enrollment in the past biennium, not the current biennium, resulting in a lack of state funding, in real time, for increasing enrollment. Therefore, many academic institutions are challenged to serve a growing student population on appropriations that are not responsive to regional and institutional demographics and population growth.

2. Declining Inflation-Adjusted State Appropriations Are Impacting Institutional Competitiveness

The U. T. System is one of the largest higher education systems in the United States and one of the largest employers in the State of Texas. Between FY 2015 and FY 2016, the total budget for U. T. System increased from about \$15.9 billion to almost \$17.0 billion in total revenues and Available University Fund (AUF) transfers.⁵ Tuition and Fee Revenue (Operating) and State Appropriations are two of the largest sources of revenue for academic institutions.

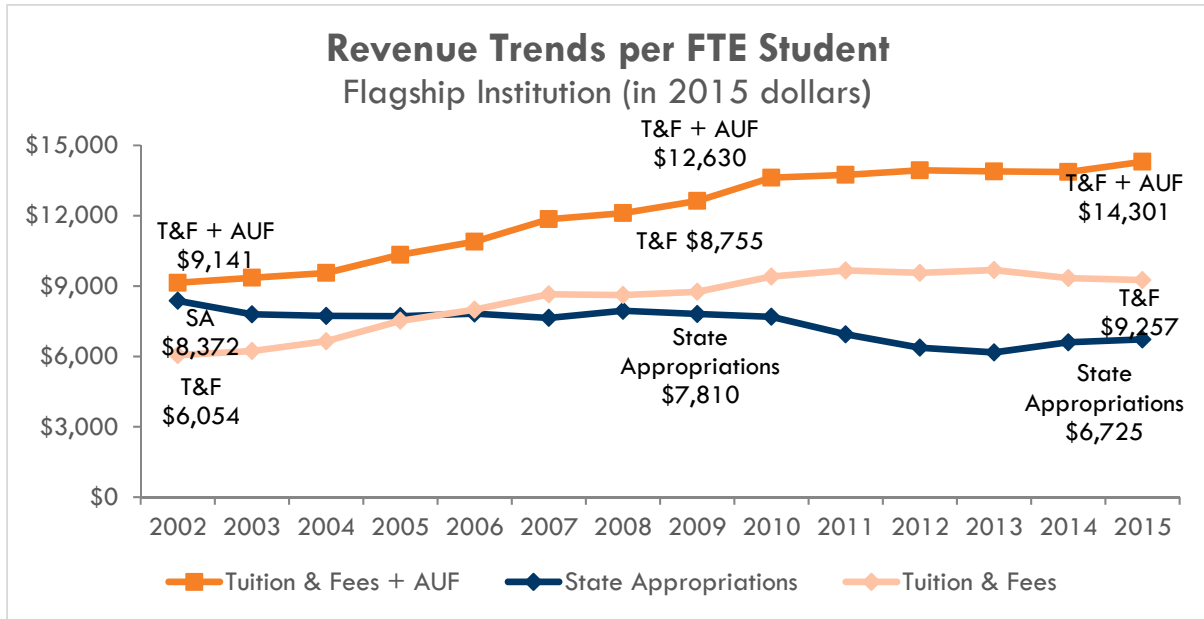
The following figures represent tuition/fee and state appropriation trends per full-time equivalent (FTE) student between FY 2002 and FY 2015 (in constant 2015 dollars) for all U. T. System academic institutions (Figure 1), the flagship institution (Figure 2), and the emerging research institutions (Figure 3).

Figure 1: Revenue Trends per FTE Student – All U. T. System Academic Institutions



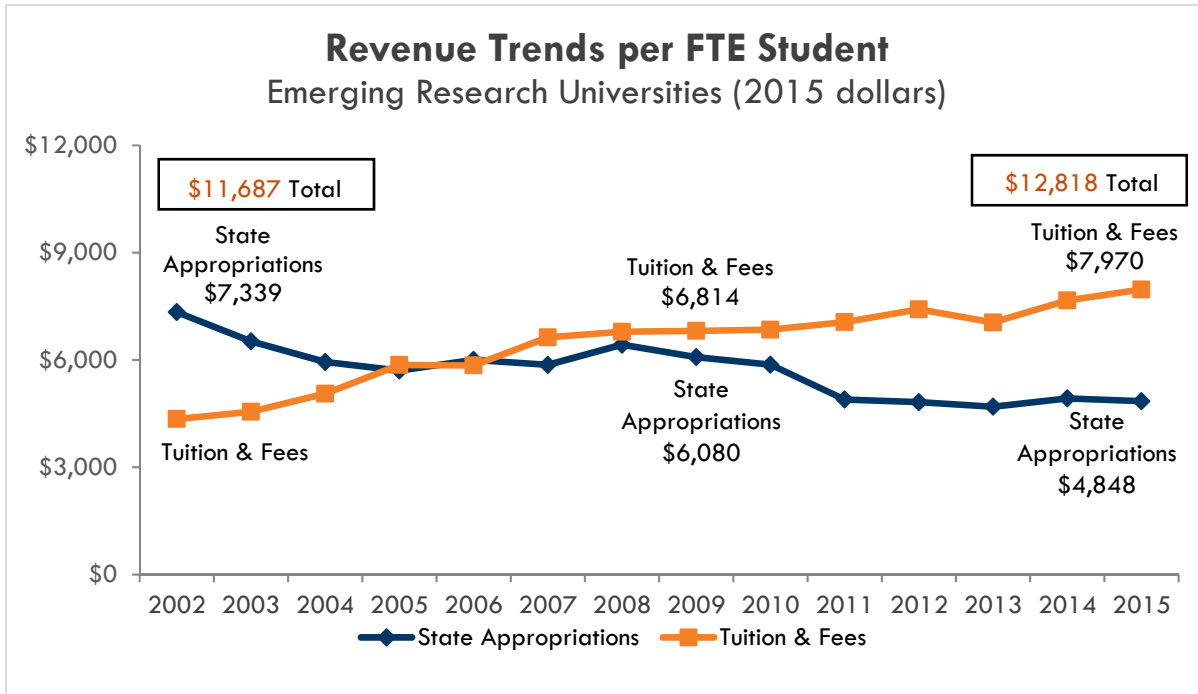
Source: Integrated Postsecondary Education Data System (IPEDS) Data; Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from the U. T. System and institutional peer setting process in 2012. U. T. System totals do not include UTRGV or AUF funding for U. T. Austin. Please note that the state appropriations data below also include tuition revenue bonds and other revenue that cannot be directly dedicated to the support of student services

Figure 2: Revenue Trends per FTE Student – Flagship Institution



Source: Integrated Postsecondary Education Data System (IPEDS) Data; **Notes:** Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012. **Notes:** The U. T. System Available University Fund (AUF) Report was used to determine the AUF distribution for U. T. Austin. This figure was then added onto U. T. Austin’s state appropriations and tuition revenue amounts that were reported in IPEDS. Beginning in FY 2013, funds (\$8M) were also provided for the medical school, but those amounts are not included in the FY 2015 AUF figure above.

Figure 3: Revenue Trends per FTE Student – Emerging Research Institutions



Source: Integrated Postsecondary Education Data System (IPEDS) Data; **Notes:** Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012. **Notes on Figures 1 – 3:** Tuition and fee revenue is net of scholarship and fellowship discounts and waivers. State Appropriations include general revenue support from the State of Texas for instruction and operations, infrastructure support, special items, *tuition revenue bond debt service*, and group health insurance and employee benefits. All revenue and expense data were adjusted to the FY 2015 base year for inflation using the Consumer Price Index - Urban (CPI - U) for September of each year.

As demonstrated in Figures 1 – 3 above, tuition and fee revenue per FTE largely replaced state appropriations per FTE as the larger percent of operating revenue between FY 2002 and FY 2015.

3. Inflation and Regional Economic Factors Are Impacting Institutional Competitiveness

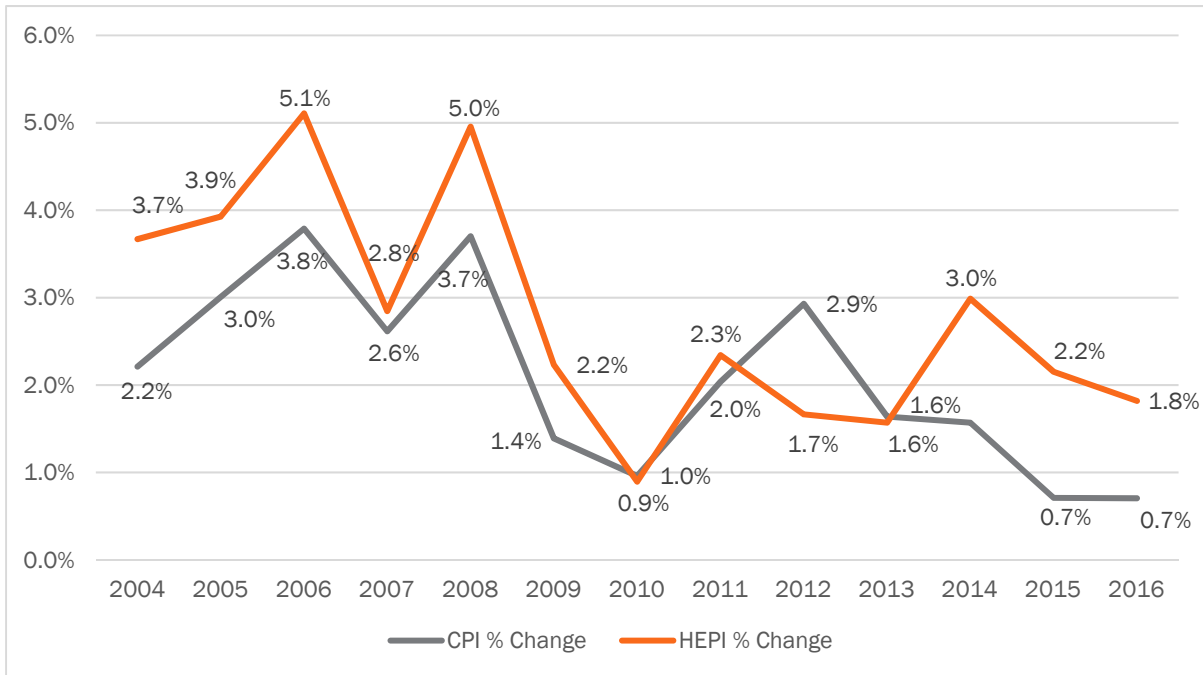
Higher education costs are increasing because of inflation and market forces that affect salaries of high-skilled staff and faculty.

Both the Consumer Price Index (CPI) and the Higher Education Price Index (HEPI) are widely recognized as financial indicators. The CPI is tracked and published by the U.S. Bureau of Labor Statistics and reflects inflation that urban consumers experience in day-to-day living expenses.⁶ The CPI measures differences in price levels in geographic areas over time using eight major expenditure categories, including housing, apparel, transportation, medical care, recreation, and education.

The HEPI is an inflation index that is tracked and published by The Commonfund and accounts largely for increases in the primary cost drivers of higher education such as faculty and administrative salaries, benefits, utilities, and other operational costs of higher education institutions.⁷ HEPI is based on price data for more than 40 budget items derived from prices reported in a variety of surveys such as the CPI and other surveys published by the Bureau of Labor Statistics at the U.S. Department of Labor. HEPI is described as “the benchmark to effectively monitor changes in the purchasing power of higher education institutions.”

Unlike HEPI, the CPI includes additional categories that are not directly related to higher education indices such as housing, apparel, medical care, transportation, and recreation. The CPI also accounts for quality-adjusted prices, whereas HEPI is a more straightforward metric for accounting only for changes in higher education spending. Both HEPI and CPI account for price changes over time for a fixed market of goods and services and do not account for potential needs of institutions to address enrollment increases and to enhance quality. The figure below illustrates trends in percent annual increases in both the CPI and HEPI for each fiscal year (July – June) nationally between FY 2004 and FY 2016.⁸

Figure 4: Percent Annual Changes in CPI and HEPI – FY 2004 to FY 2016



Source: Commonfund Higher Education Index, Commonfund Institute, 2016 Update (<https://www.commonfund.org/wp-content/uploads/2016/10/2016-HEPI-Report.pdf>)

Although there have been fiscal years in which the CPI and HEPI converged, for the most part, annual increases in the HEPI are typically larger. Between FY 2015 and FY 2016, the HEPI increased by 1.8 points, and the CPI increased by 0.7 points.

Several Texas geographic areas are home to academic institutions that have experienced tremendous economic growth in recent years. The Bureau of Economic Analysis in the Department of Commerce issues a report on Gross Domestic Product (GDP) for metropolitan statistical areas as an indicator of regional economic growth in comparison to the national GDP increase (2.5% between FY 2014 and FY 2015).⁹ Compared to other large metropolitan areas statewide, Austin and San Antonio saw the largest percentage increases in the nation at 5% and 5.9% annual GDP growth in FY 2015. Additionally, the Dallas/Fort Worth/Arlington Metropolitan Area grew at 3.6% between 2014 and 2015, and Midland grew at a staggering 9.4%, the highest percentage change among metropolitan areas in Texas. El Paso and Tyler also experienced growth rates similar to or slightly higher than the national average.

While the overall unemployment rate, as of April 2017, for Texas is higher than the national unemployment rate (5.0% compared to 4.4%), many regions that are home to U. T. academic

institutions are experiencing lower unemployment rates and faster economic growth than the state and nation:

- Austin (3.2%);
- Midland (3.5%);
- San Antonio (3.6%);
- Dallas (3.8%);
- Arlington (3.8%)
- Tyler (4.1%).¹⁰

Although there is some expected volatility in the Midland-Odessa economy, the area saw unprecedented economic growth and price expansion throughout the past decade.¹¹ Tyler, El Paso, and San Antonio have all experienced moderate economic growth over the past five years, with gains in population, housing prices, and employment.¹²

Economic indicators that measure growth in metropolitan statistical areas illustrate that many regional economies that are home to U. T. System academic institutions are booming, prices and real GDP growth are increasing at higher rates than other areas in Texas and the U.S., and labor and property are more expensive than state and national averages. Recruiting faculty and staff and delivering high quality education simply costs more as regional economies outpace the growth of other regions.

4. In an environment where the cost of operating competitively is increasing and state appropriations revenue (in constant dollars) is remaining flat or declining, institutions have implemented operational efficiencies.

In an environment where the cost of operating competitively is increasing and state appropriations revenue (in constant dollars) is remaining flat or declining, institutions have implemented efficiencies that result in lower administrative costs. However, institutional efficiencies have been heavily relied on as primary cost-saving mechanisms for so long that the law of diminishing returns may be taking effect.

Education and related costs per degree and per FTE student are metrics used to compare institutional administrative expenses. Among U. T. System academic institutions, administrative

costs as a percentage of expenses remained relatively constant over the past eight years. Education and related expenditures per degree granted has remained substantially lower than the median of each institutional baseline peer group at five academic institutions. The cost per degree at U. T. Austin is more than \$17,000 less than the median peer comparison. In FY 2015, education and related expenditures per FTE were less than the median of baseline peers systemwide.¹³ As a component of the tuition and fee process, institutions will continue to explore reductions in administrative expenses and improvements in productivity and institutional efficiencies before tuition and fee increases are considered.

Conclusion

Benchmarking and peer data indicate that operational revenue per FTE at U. T. System academic institutions remains well below peer leaders and peer medians, and increases in tuition and fees would still place U. T. academic institutions among the most affordable both statewide and among peers. Institutional efficiencies have maintained or reduced administrative cost ratios.

Revenue growth for U. T. System academic institutions (both tuition and fee revenue and state appropriations) has not kept pace with CPI, HEPI, and other regional economic factors that influence institutional competitiveness. The cost escalation of higher education related goods and services has resulted in a need for increased investment so that institutions can recruit and retain faculty and students, maintain excellence, and continue to fund infrastructure and technology needs that are aligned with strategic planning and priorities at each institution. State appropriations, in 2015 constant dollars, have declined significantly since the beginning of tuition deregulation from 2003 to present. Modest increases in tuition and fees at U. T. System academic institutions would better enable institutions to keep pace with the cost escalation index and to recruit and retain the excellent faculty, staff, and students that enable U. T. System institutions to be among the best in the nation.

The amount of tuition increases proposed by each institution is carefully determined through a collaborative and strategic process that involves students and stakeholders. Any increases are considered within the context of the eight key principles of the U. T. System tuition philosophy.

ENDNOTES

¹ Integrated Postsecondary Education Data System (IPEDS) Data; Notes: Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012.

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² Integrated Postsecondary Education Data System (IPEDS) Data; Notes: Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012

³ U.S. News and World Report, National University Rankings (<https://www.usnews.com/best-colleges/rankings/national-universities>)

⁴ Integrated Postsecondary Education Data System (IPEDS) Data; Notes: Tuition revenue = tuition and fee revenue (minus discounts and allowances); Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012

⁵ University of Texas System Administration Operating Budget Summaries, FY 2015 and FY 2016 Adjusted Budgets (https://www.utsystem.edu/cont/Reports_Publications/summaries/2016/FY2016BudgetSummaries.pdf) and https://www.utsystem.edu/sites/default/files/documents/Operating%20Budget%20Summary%20for%20System%3A%20FY%202017/fy-2017-ut-budget-summaries_0.pdf

⁶ Bureau of Labor Statistics, Consumer Price Index FAQs (http://stats.bls.gov/cpi/cpifaq.htm#Question_1)

⁷ Commonfund Higher Education Price Index, About HEPI (<https://www.commonfund.org/commonfund-institute/higher-education-price-index-hepi/>)

⁸ Commonfund Higher Education Index, Commonfund Institute, 2016 Update (<https://www.commonfund.org/wp-content/uploads/2016/10/2016-HEPI-Report.pdf>)

⁹ U.S. Department of Commerce, Bureau of Economic Analysis, 2015 Update, Released September 2016 (https://www.bea.gov/newsreleases/regional/gdp_metro/gdp_metro_newsrelease.htm)

¹⁰ United States Department of Labor, Bureau of Labor Statistics, April 2017 Reported Unemployment Rates (<https://www.bls.gov/regions/southwest/texas.htm#eag>)

¹¹ Midland Development Corporation, Midland Economic Indicators (<http://midlandtxedc.com/midland-economic-indicators>)

¹² Tyler Economic Development Council (<http://www.tedc.org/economic-trends>), The Borderplex Alliance Occupational Wages and Regional Data (<http://www.borderplexalliance.org/regional-data/el-paso/overview/occupational-wages>), and San Antonio Economic Development Alliance (<http://www.10-35economicalliance.com/san-antonio-edf>).

¹³ Integrated Postsecondary Education Data System (IPEDS) Data; Notes: Full Time equivalent includes undergraduate, graduate, and first professional students based on fall headcounts. Peer institutions are baseline peers that resulted from last U. T. System and institutional peer setting process in 2012