

PATHWAYS TO ENERGIZING THE BASIN

A POLICY RESEARCH PROJECT



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The New Role of Anchor Institutions: Community Hubs and Opportunity Gateways

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INTRODUCTION:

The Permian Basin is a diverse region full of potential for growth and development in the cities of Midland and Odessa. The University of Texas Permian Basin can help facilitate this necessary change, providing an opportunity to unite the region. Quantitative and qualitative analyses were done over the past year, which allowed for informed strategy recommendations. A vision statement will help the university navigate the strategy recommendations:

The University of Texas Permian Basin will be a hub and connector for the region's engagement, enrichment, and innovation.

To support our vision statement, three key values came to mind, helping guide the goals for the region. The first key value is to improve cooperation throughout the region. UTPB is poised to act as a regional connector, uniting human capital and resources of regional hub cities. The second value is to increase diversity in the region. UTPB's new educational offerings should stand apart from Oil and Gas to help the region weather the cyclical nature of the local economy. The final value is to create a more equitable and inclusive region. UTPB must lead the way in increasing Hispanic and female representation among college-educated and high-earning residents.

These strategy recommendations will act as goals for the region, but these goals are nothing without actions behind them. The next section summarizes three goals, the action steps that accompany them, and key performance indicators that UTPB can use in a year to analyze how the goals are performing.

ANCHOR FRAMEWORK

“Anchor [institutions] are enduring organizations that are rooted in their localities.”¹

These institutions include universities, hospitals, municipal governments, corporations, and cultural organizations.² Their unique connectivity to the local region provides them with opportunities to leverage resources, in partnership with community stakeholders, to develop shared value. In order to foster shared values, an anchor institution can take on a variety of roles in the community—it’s an entity that provides products or services, an employer, a work-force developer, a real estate developer, a community capacity builder, a purchaser, and an entrepreneurial force.³ Through these roles in the community, anchors can lead collaboration and coalition building to address key social and economic issues within their region. While most of the scholarship has been focused on the role of urban anchor institutions, anchors are also vital to rural communities and regions that encompass multiple municipalities and counties. Anchor institutions play an instrumental role in the success of regional economies and ensuring the region’s future stability.

¹ Anchor Institution Task Force. Marga Inc. 2022.

² ICIC. “Anchor Initiatives.” Accessed May 9, 2022. <https://icic.org/research/anchor-initiatives/>.

³ ICIC. “Anchor Initiatives.” Accessed May 9, 2022. <https://icic.org/research/anchor-initiatives/>.

A Framework for a More Resilient Permian Basin

Stepping into our role as a partner with UTPB, we established a plan to evaluate the extent of the oil-dependent economy, high community turnover, and the relationship between institution and community. The interaction of these factors helped us to determine the tools UTPB has that can improve the Permian Basin and broaden the institution's appeal. We sought to understand the impact that the oil-based boom-and-bust cycle has on the local economy, especially in relation to housing and employment. The unique results of that boom-and-bust cycle helped determine which sectors of the local economy are successful, unsuccessful, and ripe for further investment. So too does the unique history of UTPB impact the position that it occupies in the region, vis-à-vis other colleges, large employers, and local entrepreneurs. Understanding these dynamics helped us to frame our stakeholder engagement and eventually produce the results necessary to formulate an action plan for UTPB that is narrowly tailored, actionable, and equitable.

Stability

It is difficult for a community to survive and thrive in the face of economic instability. Without a consistent and reliable source of jobs, residents leave for better employment prospects. Without large and accessible sources of funding, entrepreneurs look to big cities when developing their products. Eventually, facing an unsure future and declining revenues, the community is forced to cut essential services or placemaking investments, further devaluing the area. UTPB's home is the Permian Basin, an area of Texas that has experienced great economic expansion and periods of great deprivation.⁴ These extremes are driven by the region's dependence on the oil and natural gas markets, as the Basin is rich in these deposits.⁵ The region first boomed in the 1980s, with residents listed among the richest in the world. Then, the 1986 collapse devastated the region, and jobs dwindled.⁶ In the late 2000s, new methods for extracting natural gas enabled miners to extract previously unreachable deposits, leading to a massive boom that started to cool in 2014, when oil prices experienced a major fall.⁷ This downturn, however, was short-lived; Congressional action lifted a ban on crude oil production in 2015, and Texas became the world's third-largest oil producer, driving the Texas economy to occupy the 10th spot worldwide.⁸ A glance at basic economic data from Midland and Odessa Counties makes this cycle clear: the total GDP for Midland and Odessa Counties rises and falls in perfect synchronicity with this timeline. Most recently, though, this boom has slowed, and the GDPs of these communities have leveled off. The COVID-19 pandemic depressed global oil and natural gas demand, and a showdown between Saudi Arabia and Russia flooded the market with cheap crude oil, further driving down the price.⁹ The downturns caused by bust cycles have devastating effects on the community that UTPB serves.¹⁰ When oil and gas prices are cheap and demand is low, there are few jobs for residents, who often leave the community to seek greater economic opportunity. Additionally, in a bust cycle, the community does not benefit from any entrepreneurial activity, as the traditional sources of investment that would fund such activity aren't available. This dearth of innovation further drives residents to look elsewhere, and it damages the sense of place and community shared by the Permian Basin.

⁴ Thompson, Jesse. "Shale Oil Boom Gave Permian Basin a Second Life." Federal Reserve Bank of Dallas, 2022. <https://www.dallasfed.org/research/swe/2022/swe2201/swe2201a.aspx>.

⁵ Rapier, Robert. "Why the Permian Basin May Become the World's Most Productive Oil Field." Forbes Magazine, December 27, 2018. <https://www.forbes.com/sites/rpapier/2018/12/27/why-the-permian-basin-may-become-the-worlds-most-productive-oil-field/?sh=44f38e615ccb>.

⁶ Maraniss, David. "For West Texans, It's Merely Boom and Bust, as Usual." The Washington Post, February 11, 1986. <https://www.washingtonpost.com/archive/politics/1986/02/11/for-west-texans-its-merely-boom-and-bust-as-usual/27d9585e-8c22-4e80-aa5b-d696365c8cf7/>.

⁷ Blackmon, David. "Oil and Gas Boom 2014: A Great Time to Be a Texan." Forbes Magazine, January 9, 2014. <https://www.forbes.com/sites/davidblackmon/2014/01/09/oil-gas-boom-2014-a-great-time-to-be-a-texan/?sh=5717b2b436c9>.

⁸ Gardner, Timothy. "Congress Kills U.S. Oil Export Ban, Boosts Solar, Wind Power." Thomson Reuters, December 19, 2015. <https://www.reuters.com/article/us-usa-fiscal-oil/congress-kills-u-s-oil-export-ban-boosts-solar-wind-power-idUSKBN0U121U20151219>.

⁹ Perper, Rosie, and Bill Bostock. "Oil Is Down 21% After Its Biggest Drop in Decades Following Saudi Price Cuts That Sparked a Race to the Bottom With Russia." Business Insider, March 9, 2020. <https://www.businessinsider.com/oil-price-crash-market-drop-global-price-war-futures-coronavirus-2020-3>.

¹⁰ Elliott, Rebecca, and Christopher M. Matthews. "This Is What It Looks Like When a Texas Oil Boom Busts." The Wall Street Journal, July 11, 2020. <https://www.wsj.com/articles/this-is-what-it-looks-like-when-a-texas-oil-boom-busts-11594440031>.

Investing for Life

The quality of life that residents enjoy is an essential factor in the health and success of a community. Quality of life includes public transportation, public parks, utilities, and community recreation services, as well as aspects of the private sector, such as access to a broad range of shops or restaurants. Communities that offer their residents a high quality of life will attract more members and investment. Given that UTPB serves a community that has followed a boom-and-bust cycle, the quality of life falls short in encouraging prospective students and potential employers to relocate to the Basin. Midland and Odessa have secured some important community infrastructure investments; both cities have robust bus services and offer longer routes that connect the cities together, as well as performing arts centers, art galleries, public parks, and museums. However, these community hubs were not enough to prevent the population of the region from contracting during the latest bust cycle. UTPB reports experiencing this same problem; it has difficulty attracting students to its program and attributes part of that difficulty to the lack of economic opportunity that the students perceive in the region. Following graduation, the overwhelming number of jobs available for these students is centered around the oil and gas industry, which drives away graduates who desire other opportunities. Those who remain often see work and life in the region as a way to make money quickly before moving on. To strengthen the community it serves, as well as expand the student body and academic offerings, UTPB must enhance the quality of life in the Permian Basin by investing in both community infrastructure and entrepreneurship.

Differentiation

The final unique aspect UTPB faces in serving the Permian Basin is in defining the exact position it occupies within the community. Originally conceived as a two-year institution, UTPB launched in 1973 and served only juniors, seniors, and graduate students before the Texas legislature expanded the college to a four-year institution in 1991. Midland and Odessa are also home to two community colleges that offer two-year degrees and transfer pathways to UTPB and other four-year institutions. UTPB must develop a specific identity that differentiates it from these competitors. Fortunately, the university enjoys the advantages of belonging to the UT System and boasts a strong track record of success in nursing, engineering, and medicine. These features not only are unique to the university but also offer further opportunities for students in the region beyond the four years they spend on the UTPB campus. Our strategy will leverage the unique advantages of UTPB to expand the opportunity it offers to residents of the Basin.

Our Engagement

Anchor and Community Assessment

Our assessment of the community and of UTPB as an anchor was guided by three questions:

- **Stability:** What impact does the oil-based boom-and-bust cycle have on the Permian Basin?
- **Investing for Life:** What talent and investments are needed to spur and sustain growth?
- **Differentiation:** What is UTPB's unique role in the Permian Basin?

To answer these questions, we gathered data from Emsi Burning Glass Market Analytics, 1-Year Estimates from the 2019 American Community Survey (ACS), and the Integrated Postsecondary Education Data System (IPEDS) on various indicators of stability, growth, talent, and specialization. This data was pulled for three separate analyses: first, a community assessment centered on comparing the Permian Basin to similar communities across the U.S.; second, an industry cluster assessment focused on nine key clusters in the Permian Basin; and finally, an anchor assessment comparing UTPB to other educational institutions.

Our community assessment was designed to gauge current and future strengths, weaknesses, and opportunities by comparing the Permian Basin to peer communities on various indicators of economic health and diversity. The industry assessment focused on nine key industry clusters selected for their growth potential and prevalence in the local economy. We assessed the relative economic importance and potential of each cluster by comparing data from 2010, 2015, and 2020, and using Emsi projections to 2026. Using this data, we assessed a cluster's capability for competitiveness/prosperity, equity, and resiliency. Our institutional assessment was designed to weigh current and future trends in enrollment, degree completion, and other metrics to determine the strength of UTPB as it relates to the region and identify areas with room for growth. We relied on data from Emsi and IPEDS to compare fall enrollment and yearly completion trends between 2010, 2015, and 2020. Completion data was pulled from Emsi, while enrollment data was pulled from IPEDS.

Key Takeaways

Community Assessment:

- 1** Midland-Odessa has grown rapidly, and population and employment growth are projected to continue at an increasing rate.
- 2** Midland-Odessa has unique population needs based on lower levels of educational attainment and a high percentage of Hispanic residents.
- 3** Throughout the oil boom-and-bust cycle, Midland-Odessa remains relatively strong by many economic indicators.

Industry Cluster Assessment:

- 1** Midland-Odessa was dominated by Oil and Gas and Support Services in 2020.
- 2** Midland-Odessa is projected to still be dominated by Oil and Gas in 2026, but Support Services will drastically fall.
- 3** Minority employees are underrepresented in the highest-paying industry clusters, while females are overrepresented in the lowest-paying clusters.

UTPB Assessment:

- 1** UTPB's student enrollment is representative of the region.
- 2** Uncharacteristic declines in Hispanic and female student degree completions should be addressed.
- 3** UTPB is trailing its peers in healthcare degrees conferred.

Stakeholder Engagement

Our community, industry, and institutional assessments yielded a great depth of knowledge, along with four key observations that set the stage for our community engagements.

1 There are region-specific opportunities to leverage.

This finding is supported by the rapid population and employment growth in the region, which are predicted to rise to 11.3% and 12.6%, respectively, in 2025, as well as the relatively low levels of educational attainment and already high labor participation rate of just over 70%. UTPB has an opportunity to capitalize on the upcoming needs of the region and ensure that its students, who the data demonstrate are representative of regional demographics, are driving the upcoming growth in the workforce. The relative lack of regional demographic representation in high-paying industry clusters points to a gap that UTPB can fill as it works to increase degree completion rates in the underrepresented populations that make up its student body.

2 UTPB appears to be somewhat disconnected from the regional economy.

This finding is supported by concerning trends in degree completion rate, student enrollment, and the types of degrees conferred by UTPB. Despite the fact that Hispanics and women made up 53% of the region between 2015 and 2020, Hispanic degree completion rates fell from 37.9% to 24.6%, and female degree completion rates fell from 63.8% to 59.8%. Furthermore, despite the region's population growth, UTPB has seen a worrisome decline in student enrollment. Finally, the university both significantly outpaces its peers in business degrees conferred and underperforms its peers in healthcare degrees, the latter being particularly concerning given the region's needs.

3 The Permian Basin's growing healthcare needs are not being met.

UTPB confers fewer healthcare degrees than its regional peers and as such has an opportunity to bridge the gap and support regional healthcare needs. With only 1,787 healthcare practitioners per 100,000 residents, Midland-Odessa ranks lowest among benchmark, state, and national levels, pointing to an unmet need in the community and highlighting a sector that has received little attention compared to the strong energy sector in the region. The Local Health Services sector has a relatively low location quotient at 0.80, meaning that it does not represent a high level of regional specialization compared to the rest of the country.

4 The Oil and Gas industry drives the success of the Permian Basin and, therefore, the University.

Oil and Gas employs the most workers, boasts the highest-paying jobs, and experiences the most growth in the Permian Basin. Its dominance supports the region's higher-than-benchmark-average population and employment growth, its low poverty rate, and its high housing prices. Oil prices are central to the health of not only the region but also the university, which sees significant declines in student enrollment when oil prices are high.



Building from these observations, we explored five areas suggested by our research:

Emerging Industries

These judgments, and the underlying data that support them, shaped our areas of investigation throughout our community engagement. Our goal was to qualitatively understand the UTPB community and identify opportunities and challenges in Local Healthcare, newly emerging industries, and university-led innovation. To that end, we engaged with a range of stakeholders and experts, including UTPB students, faculty, and administrators, as well as industry leaders, economic development groups, and leaders in innovation and commercialization.

Key takeaways:

→ **UTPB as a connector/hub**

UTPB can help improve the relationship between Midland and Odessa by hosting community events and acting as a joint gathering space.

→ **Connecting human capital between the region and the university through students**

UTPB has the ability to connect students with emerging opportunities in the region, helping to make the local economy stronger and more diverse.

→ **UTPB as an inclusion player**

UTPB can facilitate more equitable representation in key regional industries as it grows into a more prominent role as a hub.

Innovation, Research, and Commercialization

To understand UTPB's current capabilities, potential, and benchmark best practices, semi-structured interviews were conducted with a variety of experts. Insights on the inner workings of UTPB were obtained by speaking with Brian Shedd, newly appointed executive director for UTPB's Office of Innovation and Commercialization, and Scott McKay, dean of the College of Arts and Sciences. To understand best practices in university IRC, interviews were held with Gregory Pogue of the IC² Institute and Sarah Goforth, executive director of the Office of Entrepreneurship and Innovation at the University of Arkansas. With the University of Arkansas being previously identified as an attainable peer, the strategies implemented there would appropriately apply to UTPB. Finally, to understand the relationship between the university and the local economy, information was obtained from interviewing Sara Harris, executive director at the Midland Development Corporation.

Key takeaways:

→ **Concentration of strengths is necessary to efficiently use research dollars.**

Universities with limited budgets should focus on a few existing strengths to reap the largest possible benefit. By coordinating and collaborating, as opposed to operating in a dispersed framework, research and technology transfer can be maximized.

→ **External factors play a key role in attracting investment**

An institution's ecosystem — its relationships, cost of living, and geography — is the most relevant factor to attracting entrepreneurs and investment. At the same time, research and technology investments that center on and benefit the local community should be prioritized.

→ **The university and region should maintain connections and communication.**

Successful anchor institutions must keep their finger on the pulse of the local economy by establishing relationships with the entrepreneurial business community and creating crosstalk between institutional sources of research and funding. A university can better tailor its offerings and graduates by maintaining an ongoing dialogue to understand the needs of the local economy.

→ **Internal communication is required to facilitate collaboration.**

Widespread overt systems for the regular exchange of knowledge on research priorities, research progress, and opportunities are necessary to support the above factors. Appointing a committee or office to catalyze discussion and collaboration within an institution can better help strengths to coalesce into action.

Healthcare

To better understand the importance of this cross-sectoral ecosystem, semi-structured interviews were conducted with a variety of stakeholders. Donna Beuk, dean of the College of Health Sciences and Human Performance at UTPB, provided insight into workforce preparation and the unique role of UTPB in the Basin. Jose Huerta spoke on UTPB's Healthcare Management program through the College of Business and the role of graduate education in workforce development. Susan Spratlen, director of healthcare strategy at the Permian Strategic Partnership, provided insight into the strengths of the Healthcare sector in the Basin and identified funding needs and opportunities for collaboration between private- and public-sector stakeholders.

Key takeaways:

→ **Opportunity exists for regional collaboration in Healthcare.**

While Healthcare is an essential industry for all communities within the Permian Basin, the Midland and Odessa healthcare systems do not appear to be connected or collaborating. Increasing collaboration between the multiple healthcare systems in the region can improve the coordination of care throughout the Basin and more effectively address overarching systemic challenges.

→ **Local education pipeline could better source workforce needs.**

Many students who enter the region to gain workforce experience or earn a degree leave the region shortly after graduation. This lack of continued reinvestment from graduated students back into the community drains the region's resources. However, students who hail from the Permian Basin are more likely to stay in the region upon graduating. A local education pipeline that strategically invests in local students would benefit the region's overall workforce stability moving forward.

UTPB Campus Experience

To better understand the UTPB campus experience, we held semi-structured interviews with Dean of Students Corey Benson, Vice President of Student Affairs and Leadership Becky Spurlock, Administrative Services Assistant Jennifer Chavarria, and a group of student leaders. For insight into best practices for student engagement, we interviewed the former president of Campus Philly, Deborah Diamond. Campus Philly is an organization that is fueling growth in Philadelphia by improving student engagement with the region and improving the city's educational attainment.

Key takeaways:

→ **UTPB is a commuter school.**

UTPB's status as a commuter school shapes its efforts to engage students and implies different approaches to understanding and improving the campus experience.

→ **Summer internships are key to successful engagement.**

Well-designed summer internship programs improve student retention and build ties between students and the region. The university's Career Services office should work to improve the quality of its student's local internship experiences.

→ **COVID has complicated UTPB's community-building efforts.**

The effects of COVID are unavoidable when considering efforts to improve the UTPB campus experience.

Faculty Recruitment and Retention

For this portion of the engagement, we surveyed faculty members within UTPB's five colleges: Arts and Sciences, Business, Education, Engineering, and Health Sciences and Human Performance. The survey was intended to gauge faculty satisfaction on a range of issues, including sense of community, amenities, affordable housing, K-12 education, healthcare accessibility/quality, research interests, and transportation.

Key takeaways:

→ **Cost of living and inadequate compensation are concerning.**

Housing affordability concerns among faculty is partially tied to stagnant salaries and broader economic trends.

→ **Quality of K-12 education quality is in question.**

Faculty indicate mixed feelings about the region's educational opportunities.

→ **Integrating faculty into the business community is important.**

Collaboration between faculty and business organizations can spur regional research opportunities.

Strategy Recommendations

Using the guidance of our vision statement for UTPB, we developed a three-goal, multi-pronged strategy to get UTPB on a path toward a future of success. These recommendations were made based on UTPB's current resources and capabilities. Should UTPB act on the priorities we have identified, the university and the region should expect greater stability regarding oil boom-and-bust cycles and a more fulfilling sense of place that will attract future students, residents, and investment. Beyond the immediate implementation of these recommendations, this guidance also serves as a model for how UTPB can adapt to a changing region for the future. Modeled on our focus on UTPB's existing unique strengths, combined with the traditional functions of an anchor institution, these recommendations can serve as a framework for how to think about what next steps can be achieved.

Vision Statement: The University of Texas Permian Basin will be a hub and connector for the region's engagement, enrichment, and innovation.

From our vision statement, three goals were developed:

- 1 Position UTPB as a community hub and connector.**
- 2 Accelerate the Permian Basin's innovation and entrepreneurial ecosystem.**
- 3 Facilitate a regional "Grow Your Own" educational pipeline.**

Goal 1 — Position UTPB as a community hub and connector

In their current differentiated roles, the rich variety of engaged stakeholders in the Permian Basin interact only within set structures like the Permian Strategic Partnership for industry. This presents an opportunity for UTPB, as a community hub and connector for the region, to step in to facilitate greater collaboration, both in areas of academia and industry and in broader community engagement. The actionable steps outlined in this section of the report will help position UTPB to accomplish these goals.

Evidence:

- UTPB has faculty already engaged in exciting research on campus.
- The Midland-Odessa community has had little opportunity to engage with the physical UTPB campus thus far.
- Student engagement with the community during their time at UTPB promotes greater “stickiness” with the region.

Priority 1.1 — Address externality challenges in the region by turning UTPB into a community hub for placemaking

UTPB has an opportunity to serve as a connector and bring together the various stakeholders working individually to support the Permian Basin community. Education, industry, and individuals all serve important roles in the region and currently have limited opportunities for collaboration to address common challenges. By drawing together regional stakeholders, these challenges can be addressed in a way that is amenable to all parts of the community without duplication of effort, and relationships can be strengthened between stakeholders in Midland and Odessa as these goals are pursued collectively.

Action Step 1.1.1 — Host an annual state of the Permian Basin

The Permian Basin is home to many different business leaders, educators, and other actors working to diagnose challenges and meet the needs of the community. UTPB has an opportunity to bring these resources together on campus by convening leaders across sectors in Midland and Odessa to discuss industry needs, educational needs, and opportunities for growth in the region. Regionalism is important here because the ability of the entire community to work collaboratively supports both stronger working relationships between Midland and Odessa and better outcomes for all stakeholders. By communicating needs and abilities between both communities rather than

just within them individually, industries have a greater opportunity to grow. UTPB can serve as the hub to provide this opportunity, supporting greater alignment of business and education to meet the needs of the broader community.

Action Step 1.1.2 — Capitalize on UTPB resources by hosting workshops and offering meeting spaces

UTPB has an opportunity to utilize its campus resources to benefit both the student population and the broader Permian Basin community by bringing in diverse speakers to attract community members to campus. By establishing the physical campus as a site for connection and engagement, UTPB can further solidify its reputation as a hub for a diverse set of community members who may otherwise not be aware of all that UTPB has to offer. This can also be accomplished through opening meeting spaces and making them available for businesses, volunteer organizations, and K-12 educators.

Action Step 1.1.3 — Develop a Sprout Fund

To further the connections between UTPB and the region, we recommend that the university establish a Sprout Fund for local engagement. A Sprout Fund, modeled after a nonprofit funding mechanism in Philadelphia, operates by connecting local philanthropy to regional voices in order to effectively manage the distribution of the fund in ways that increase civic engagement. Regional philanthropic organizations may donate to the Sprout Fund, and the fund is then directed to give awards for community events and regionally useful projects aimed at facilitating local connections.

Priority 1.2 — Increase student involvement with the region

Central to any university's efforts to function as a leader in its community are the relationships that its students build with it. Building connections with other people in the region will encourage students to work for the betterment of the region, both during their college years and after graduation. By investing in initiatives that engage its students with the Permian Basin, UTPB can strengthen its position in the community and foster the growth necessary for the Permian Basin's long-term health.

Action Step 1.2.1 — Develop the Campus Permian Basin Initiative

The Campus Permian Basin Initiative would be a student-centric enterprise that partners with local employers, colleges, and city governments to increase student involvement with the region using methods inspired by Campus Philly's engagement practices. Campus Philly is a 501(c)(3) organization dedicated to fueling economic growth in Philadelphia by improving its student retention and overall college degree levels. Since the early 2000s, it has accomplished these goals by facilitating high-quality summer internship programs, hosting a "summer experience" program through the local Chambers of Commerce, and facilitating on- and off-campus events for students to meet with local employers and build connections in the region.

Action Step 1.2.2 — Leverage Falcons Serve and launch a volunteer festival to encourage students to give back to their community

UTPB already recognizes the benefits that volunteer opportunities provide to both the volunteer, through the sense of fulfillment that comes from helping others, and the community, through the connections it builds. Falcons Serve is an initiative of the Office of Student Life that offers service opportunities throughout the academic year, shares community volunteer opportunities, and assists students in finding places to serve. Leveraging these existing resources to launch a volunteer festival would be an effective way to further invest in efforts to engage students with the community.

Action Step 1.2.3 — Host a TEDxUTPB

We recommend that UTPB work to host a TEDxUTPB to further its efforts to increase student involvement in the region. TEDx is a grassroots initiative of TED, best known for TED Talks, which aims to bring TED's mission to research and discover "ideas worth spreading" to local communities through TEDx events. These events are organized independently under a free license by TED and follow its format. Organizing a TEDxUTPB event would serve to engage students with these innovations and ideas and provide an opportunity for them to better understand the Permian Basin and to network with other members of the community.

Priority 1.3 — Support faculty-engaged, community-focused research

UTPB is working to position itself as a leader in the region, and there are few better ways to demonstrate the value of the university to the local community than by focusing research efforts and resources on solving local problems. Research that incorporates community goals in an inclusive and meaningful way can serve to connect UTPB more effectively to the region by creating local investment in the work being done on campus and creating positive outcomes for the region through the work. Faculty also benefit from this connected relationship, as cultivating positive relationships with regional stakeholders can support more meaningful research with easy local engagement. By actively supporting research efforts with a local focus, UTPB can further cement its critical role in the Permian Basin.

Action Step 1.3.1 — Create a grant program to facilitate community problem-solving research

Faculty at UTPB are already engaged in rewarding, challenging research. By focusing those research efforts on projects with local significance, UTPB can leverage its own talent to serve the needs of the community. This supports the goal of positioning UTPB as a hub and connector for the region—giving back to the community by channeling research efforts locally, which can be facilitated by a grant program targeted at those research projects with significant connections to local challenges.

Action Step 1.3.2 — Incentivize community-driven research through recognition

Building on the grant program for community-driven research, UTPB has an opportunity to publicly recognize members of the campus community who engage in that type of research, furthering the connection between the university and the region. By making the research efforts known to the public, UTPB can create feedback loops where the community feels empowered to engage with the university on local problem-solving efforts.

Success Metrics

To determine the impact and success of our three priorities for Goal 1, we propose three key sets of metrics for the university to monitor.

Our first set of metrics centers on the Sprout Funds distributed in the community. To gauge the effectiveness of UTPB's use of Sprout Funds, we suggest monitoring how much money was raised and invested back into the community on an annual basis and tracking the types of events and initiatives supported by these funds. These metrics enable the university to monitor its progress in building connections with the community and determine if relevant interests are being left out. In doing so, UTPB can get a better sense of its progress in addressing regional externality challenges and becoming a community hub for placemaking.

To gauge the effectiveness of UTPB's efforts to support faculty-engaged, community-focused research, we suggest monitoring the types of research published and assessing whether and how the research benefits the community. By monitoring these metrics, the university can better understand if its grant program and efforts to recognize community research reflect the diverse skills and needs of the community and adjust its approach if need be.

Finally, to gauge the effectiveness of UTPB's community events at facilitating student involvement in the region, we suggest monitoring the types of community events supported by the university, the popularity of each type of event, and attendance at the least and most popular events. Tracking these metrics will help the university better understand how effective existing events are at engaging students with the region and how it can improve future events and support those events that reflect its students' interests.

Goal 2 — Accelerate the Permian Basin's innovation and entrepreneurial ecosystem

UTPB is in the position of being able to serve as an accelerator for innovation and entrepreneurial activities by connecting resources, facilitating conversations, and providing the resources necessary to jumpstart collaboration. Our research suggests that the factors necessary for shifting toward an export-based economy, such as academic collaboration and industrial innovation, are present or nearing completion. Looking to our three-point framework, diversifying the Permian Basin's economy to be more reliant on its unique innovation and entrepreneurial strengths will provide regional stability. Leveraging these points of differentiation will attract outside investment, encourage student and resident retention, and ultimately create a more robust ecosystem. The time is right for UTPB to begin supporting the existing momentum of the Permian Basin toward a technological and innovation-based economy.

Evidence:

- UTPB has an ongoing relationship with Blackstone Launchpad and is nearing completion of its CEED Incubator building.
- University departments have established future-focused research priorities.
- Newly established Office of Innovation, Research, and Technology provides the foundation for future collaboration.
- Interviews with regional economic stakeholders have identified the future demand for a technology and engineering workforce.

Priority 2.1 — Leverage existing communications to share information both on and off-campus

To efficiently use limited research funding, collaboration around a narrow set of identified objectives is key. That collaboration, however, cannot occur without communication both within UTPB as well as between UTPB and the region as a whole. Therefore, UTPB should use its existing channels of communication and data to provide as much transparency and inclusion as possible when planning for its research needs and priorities. By regularly sharing information around its activities and progress, UTPB can create a greater sense of trust and purpose with its innovation, entrepreneurship, and technology-transfer initiatives.

Action Step 2.1.1 — Utilize UTPB’s newly formed Office of Innovation to share information on and off-campus

UTPB has taken a great step forward by establishing an office dedicated to exploring and advancing research and innovation. One of the most efficient uses of this office would be to serve as a regional and internal “ambassador” for UTPB in order to connect disparate areas with opportunities for innovation. From relaying the future workforce needs of the region to providing information to university departments on the potential for licensable research, the Office of Innovation is in a prime position to serve as a hub for information transfer.

Action Step 2.1.2 — Leverage UTPB resources to merge data on local communities to better understand the region as a whole

To unite the region and understand its overarching needs, it is necessary to include local community data in the analysis. Using the university's capabilities to combine and collect data on local communities will enable the region's growth to be better understood holistically. Further, including data on both local communities as well as larger metropolitan areas, like Midland, will demonstrate the commitment that UTPB has to the entire region.

Action Step 1.1.3 — Issue periodic research priority progress and updates between the Office of Innovation and College Deans

The first step to facilitating collaboration is making sure that research progress and initiatives are widely and openly communicated. Collecting and issuing regular updates will both decentralize this information as well as make it easier for college deans to get the support they need to execute programs for their departments. Intentionally designing the Office of Innovation's role, in its early stages, to include research reporting will create a culture of accountability and transparency for innovation to thrive.

Priority 2.2 — Nurture a student and faculty-led startup ecosystem

UTPB has made great strides in establishing successful programming around entrepreneurship. Our evidence on best practices suggests that, moving forward, UTPB can offer the greatest benefit to students, faculty, and the community by building in as much inclusion as possible from university stakeholders. Additionally, focusing research incentives on regional needs will make regional opportunities more visible. Putting students and faculty at the center of these programs, while also establishing new programs led by UTPB, is necessary to generate long-term support of the region by its stakeholders.

Action Step 2.2.1 — Leverage Blackstone LaunchPad to work with faculty and students

UTPB is already participating in Blackstone LaunchPad, a key resource that connects students and recent alumni to a global network of mentors, events, funding, talent, and job opportunities. Aggressively promoting the use of this important resource among faculty and students will maximize the university's investment by driving regional entrepreneurship and innovation.

Action Step 2.2.2 — Create an entrepreneur competition and award students with donations from local businesses

Establishing an entrepreneur competition would serve two primary purposes: First, it would encourage and offer tangible rewards for students to engage in entrepreneurial thinking and let them receive feedback on their efforts in a no-cost setting. Second, it would engage local businesses with promising students and enable them to establish relationships with the future leaders of economic activity in the Basin.

Action Step 2.2.3 — Establish UTPB student and faculty-owned entrepreneurship initiatives

Entrepreneurship initiatives that unite the expertise and connections of faculty members with the creativity and passion of students is a key step in growing innovation in the region. Establishing a formalized structure that allows students to engage with faculty to this end is vital to promoting this growth. Such initiatives and structure ought to center around existing university and regional strengths.



Priority 2.3 — Align student and faculty engagement with identified key emerging industries

It is essential that UTPB enhance post-graduate regional retention, while also providing faculty with applied research opportunities. Additionally, emerging industry stakeholders have a demand for local talent. Fostering greater collaboration among these three groups cultivates a strong commitment to tackling regional challenges and opportunities. It leverages the university's human capital as a catalyst for broader regional growth. A range of internship programs, research promotional events, and retraining programs can channel this regional dynamism in a manner that maximizes opportunities for all relevant stakeholders.



Action Step 2.3.1 — Create a “Falcon’s Nest” initiative that enables students to shadow those working in emerging industries

This initiative will draw from rich alumni networks to facilitate internships in identified emerging industries. It will leverage these connections and resources via partnerships with local businesses and industries that can connect students with tech and entrepreneurial internship opportunities. Students will have an opportunity to experience the daily tasks and responsibilities involved in their field of interest. This opportunity provides them with applied experience prior to the commencement of their preferred internship. Emphasis will be placed on future-focused fields like energy, aerospace, and technology.

Action Step 2.3.2 — Hold poster contests for research efforts in key emerging industries

This action provides an opportunity for faculty and students to showcase their research interests, while outlining their applicability to the surrounding region. Additionally, it highlights the university’s strengths and provides a pathway for its adaptation into emerging industries.

Action Step 2.3.3 — Encourage student participation through promotion of retraining programs

Retraining programs can include former, current, and prospective students. These programs will provide enrollees with requisite skills that enable them to be successful in identified emerging industries. Additionally, broad-based participation in these programs will foster stronger ties between alumni and current students, while also leveraging these connections to serve the interests of the region.

Success Metrics

To measure UTPB's progress toward nurturing a student and faculty-led startup ecosystem, we suggest a combination of surveying faculty and evaluating program utilization.

To gauge the efficacy of the Office of Innovation, we suggest using end-of-semester questionnaires to identify what is needed and being worked on within departments. It is important that faculty, students, local businesses, and other relevant community stakeholders are able to engage in collaborative endeavors with appropriate resources and external support. Examining survey completion rates routinely will ensure that recommendations are applied to projects in a timely manner.

To measure its progress on facilitating entrepreneurship, UTPB can evaluate the number of initiatives that fall under the university umbrella. With the continued establishment of entrepreneurship initiatives, UTPB can shift its measurement for success toward student and faculty participation in these programs.

While UTPB is successfully placing students in internships, we suggest measuring success by considering the following metrics:

- **Number of students being placed in internships through UTPB initiatives**
- **Variety of industry categories students are being placed into**

Progress under this metric will be best measured by tracking the total number of students being placed in internships through newly established UTPB programs, such as the Falcon's Nest. As these programs start to grow, UTPB can begin to focus on the diversity of these placement industries. By beginning with total count and slowly adjusting its attention toward diversity of industry, UTPB can help create a sustainable university-to-employment pipeline that can withstand future regional change.

Goal 3 — Facilitate a Regional “Grow Your Own” Educational Pipeline

UTPB possesses a litany of resources that enable it to act as a regional incubator for diverse talent. It is imperative that the university accommodate the curriculum of non-traditional students into its broader academic experience. Collaboration with peer academic institutions — and integration of successful initiatives across colleges and departments — fosters an environment where non-traditional students can achieve their full academic and professional potential. Moreover, encouraging cooperation between current undergraduates alongside K-12 students and institutions cultivates long-term regional ties that will solidify the university’s recruitment and retention benchmarks. Additionally, these relationships will spur the necessary talent for the region’s emerging STEM industries.

Evidence:

- Reduced female and Hispanic student degree completion implies a greater need for scheduling flexibility.
- Interview data suggests that new students and transferring students do not yet possess the necessary skills to continue their education with UTPB.
- Research on best practices shows that collaborating across institutions can encourage overall enrollment and degree completions.

Priority 3.1 — Nurture cross-institutional educational collaboration

UTPB can leverage and expand existing programs to enable greater cooperation between the university and regional community colleges. Taking this collaborative approach also enables students with an associate degree to incorporate their previous coursework into their current degree plans. The university can enhance its appeal to non-traditional students by offering and integrating a bevy of certificate programs into its broader curriculum. The same cooperative framework can be extended to K-12 educational institutions. The College of Business already houses the necessary infrastructure to make this priority work.

Action Step 3.1.1 — Bridge degrees from BAAS (Bachelor of Applied Arts and Sciences) to master's degrees

The College of Business offers a Bachelor of Applied Arts and Sciences (BAAS), which helps students seamlessly bridge their previously earned associate degree to a bachelor's degree at UTPB. Most students who complete an associate degree at a local community college intend to stay in the Permian Basin region for much of their career. The BAAS program's success can be used as a model to drive engagement and interest in graduate education. UTPB can specifically target students in the BAAS degree program and encourage them to continue with a master's degree after graduation. In this way, professors can provide mentorship and address barriers to accessing graduate education. This would be a wise investment,

since the majority of BAAS students are likely to stay in the region post-graduation, thus contributing to the regional economy and local community.

Action Step 3.1.2 — Use College of Business's BAAS program as a template for other colleges on campus

Other colleges throughout the university could utilize the College of Business's Bachelor of Applied Arts and Sciences (BAAS) as a model to provide degree offerings that seamlessly bridge previously earned associate degrees with bachelor's degrees at UTPB. This is a real need in the community, as many students enter UTPB having previously earned an associate degree at a local community college. In order to further collaboration with these educational institutions in the region, UTPB can help students build on their associate degree without having to duplicate or retake courses for credit toward a bachelor's degree.

Action Step 3.1.3 — Offer technical training certificates, such as cybersecurity and data science

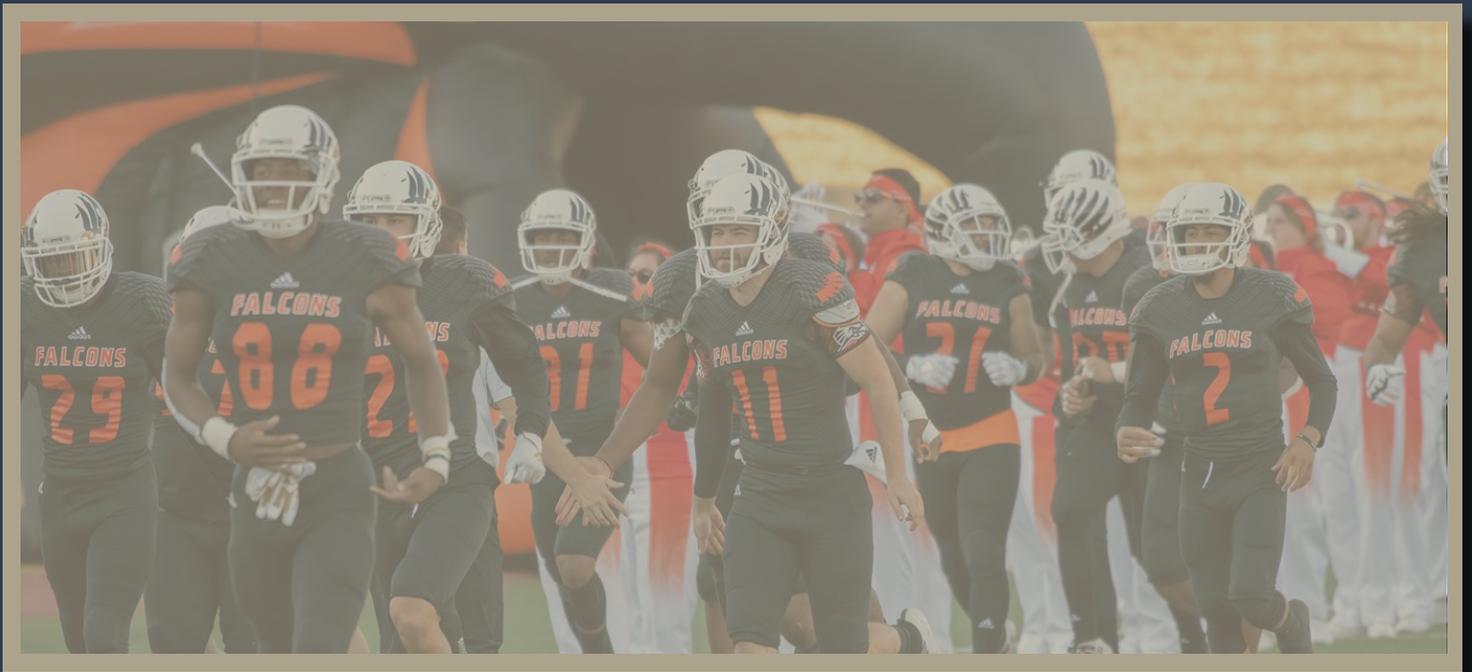
To better prepare students to be competitive post-graduation, UTPB can increase its technical training certificate offerings. Strategic investment in emerging industries, such as data science and cybersecurity, could position UTPB students as competitive candidates in the search for job opportunities.

Priority 3.2 — Foster stronger relationships with high school and training education programs

Since a significant portion of UTPB's students are from the Permian Basin, it is essential that the university cultivate stronger ties with regional K-12 students and institutions. As students advance through their scholastic careers, they are more likely to view UTPB as a resource for furthering their career and educational ambitions. The university can provide guidance that enhances the college readiness of students before they arrive on campus. Additionally, there are various initiatives the university can enact to acclimate students to a more rigorous learning environment.

Action Step 3.2.1 — Convene education leaders to talk about the curriculum

A strength of the Permian Basin region is the multitude of educational institutions serving the region. It would be advantageous for UT Permian Basin to convene educators from Midland College, Odessa College, and surrounding high schools to address educational challenges in the region. As a leader in this space, UTPB can set the tone for collaboration instead of competition. Each player in the educational landscape has a unique niche that can be cultivated and can enhance educational opportunities throughout the region. A convening of this type could help educators discuss student readiness for each level of higher education and brainstorm curriculum reform to better serve students in the Basin.



Action Step 3.2.2 — Create “Falcon Fit”

Two key elements in fostering a sense of place are to generate early interest from existing residents and to encourage longevity in terms of encouraging students to reside in the region. Additionally, one of the concerns mentioned in our stakeholder interviews was the college readiness of incoming students. To address this, UTPB should create an early adoption program to acclimate students to the lifestyle and amenities of UTPB. This program, which we suggest calling “Falcon Fit,” would be run by UTPB the week before fall classes begin. Incoming students would move into their residence halls early and attend mini classes to give them a sense of what to expect. The classes would simulate midterm weeks to help students experience what it is like during a somewhat stressful and busy time in the semester. Juniors and seniors could serve as mentors and help provide students with study skills and self-care tips to help prepare them for undergraduate life. By involving as many levels as possible of UTPB students and faculty, this action step can generate a sense of belonging and responsibility in the community.

Priority 3.3 — Scale up non-traditional approaches to education

To maximize the opportunities available to commuter students, the university must provide flexible course and internship options. Since UTPB already makes significant accommodations for commuter students, it possesses the necessary infrastructure to expand these programs. Additionally, it is important when developing internship opportunities to also account for students who do not have access to reliable transportation. These steps help ensure that regional talent is not constrained by logistical factors. They also help foster an inclusive environment for the unique needs of all students.

Action Step 3.3.1—Expand online courses, flipped classrooms, asynchronous learning, and classes during non-traditional hours

UTPB is already offering a robust array of online classes, evening classes, and asynchronous options. The university could expand these offerings in order to best support non-traditional and commuting students, who make up a large percentage of the UTPB student body. Investment in these offerings could help improve accessibility for students who may not be able to access UTPB courses due to full-time work commitments and other obligations.

Action Step 3.3.2 — Develop “flipped internship” — dedicated internship time to work on in classroom

Flipped internship opportunities would enable students who do not have transportation to attend internship opportunities. This also would increase accessibility to companies within the energy sector, who may not be able to host an intern on-site due to safety concerns.

Priority 3.4 — Run summer camps and enrichment initiatives for K-12 students led by UTPB students

To maximize the opportunities available to commuter students, the university must provide flexible course and internship options. Since UTPB already makes significant accommodations for commuter students, it possesses the necessary infrastructure to expand these programs. Additionally, it is important when developing internship opportunities to also account for students who do not have access to reliable transportation. These steps help ensure that regional talent is not constrained by logistical factors. They also help foster an inclusive environment for the unique needs of all students.

Action Step 3.4.1 — Leverage current resources and students to create STEM summer camps for 6th-12th graders

By hosting summer STEM enrichment programming for local 6th-12th grade students in the Basin, UTPB could add significant opportunities for growth to the educational landscape. Additionally, these middle and high school students would benefit from STEM enrichment and access to the university system over the summer. They would further benefit from the mentorship of undergraduate students who lead the summer programming.

Action Step 3.4.2—Offer college credit to incentivize student involvement

UTPB could offer college credit in leadership or mentorship courses to undergraduates who help lead the 6th-12th grade STEM summer programs. This could incentivize student involvement, support leadership development, and provide formal training prior to the summer programming.

Action Step 3.4.3 — Run summer camps for football and basketball, recommending student athletes to participate in them

Hosting summer athletic programming for local student athletes could help position UTPB as a community hub for local families. It also could provide opportunities for K-12 schools in the area to build relationships with UTPB and to help students see UTPB as a viable and exciting option for higher education in the future.

Success Metrics

To determine the impact and success of the four priorities in accomplishing Goal 3, we propose three key areas of inquiry for the university to survey.

The first set of metrics we suggest centers around university enrollment, with an emphasis on serving the unique needs of UTPB's student body. To wit, we suggest an examination of the following:

- **Total decrease, increase, or stagnancy of enrollment**
- **Total increase in Hispanic and female student degree completion**
- **Number of classes held during non-traditional hours**

The measures provide vital information as to the overall impact of the four priorities in bolstering and continuing to scale a regional "Grow Your Own" educational pipeline and tap into the vast number of female, Hispanic, and part-time students who make up a large portion of UTPB's demographic base.

Our next area of inquiry centers around the expansion of BAAS degrees and certificate programs, evaluating the following:

- **Number of colleges that implement this type of degree offering**
- **Number of students enrolled in these programs**

These measures succinctly address the success and scale of priority 3.1 and will give university decision makers key information for determining which programs show promise for continued investment.

Finally, we set forth metrics that address community enrichment and investment in the burgeoning educational pipeline:

- **Number of K-12 schools in the region with a relationship or established line of communication with UTPB**
- **Number and variety of programs in which community partners have expressed interest**

This data will help the university determine where there are areas for continued growth and community-building efforts in scaling their educational investments.

Implications for Other Anchors

Anchor institutions are often disconnected from regional priorities and challenges. This dearth of regional integration is especially concerning for anchors located outside large urban centers. UT Permian Basin provides a blueprint for similar anchor institutions to follow if they are to fully leverage their resources in a manner that is mutually beneficial to the community and the anchor.

Strategic deployment of available resources can increase stability, equity, and resilience.

Unlike many other public institutions, anchors face sharp resource constraints in their efforts to serve their communities. UT Permian Basin is not distinct in this regard. Deploying the university's resources to secure maximum return relies directly upon ascertaining specific community needs and how those needs overlap with the strengths and capabilities of UTPB. This is a feature of all successful anchor institutions; determining a handful of key areas for growth and aggressively investing in those areas is the best way to promote a stable, equitable, and reliable community.

Community building is not a singular outcome; community ties must be strengthened and maintained by identifying areas for continued shared growth.

Rather than being supported by a fixed structure, communities function more as a living organism, shifting and growing over time and in response to specific events. Community building, therefore, is a constant and iterative process that demands specific attention to potential sources of growth and conflict. Joint initiatives with other

anchor institutions, local governments, and key industry representatives all serve to maintain healthy community ties.

Improving communication, both internally between departments and externally with local educational partners and local industry, is foundational to every initiative.

It is impossible for an anchor's decision makers to effectively lead and support regional initiatives without a clear picture of community and economic activity. Thus, clear and established lines of communication are crucial to these actors. In a multi-departmental anchor like a university, these lines of communication must link not only community members and industry leaders but also the various faculty members and department leaders. Only through a complete understanding of the anchor's internal resources and external conditions can the institution effectively lead regional improvement.

In remote regions, anchor institutions are especially important in catalyzing collaboration/cluster effect.

Large urban centers can draw upon multiple anchor institutions, robust infrastructure networks, and reputational advantages to attract continued investment and population growth. Conversely, remote regions may serve as a home for only a handful of anchors and face a tougher time attracting outside investment. In these settings, the impact that anchors can have is magnified; the moves they make have profound and lasting implications for their local community.

Meet our Team

Timothy Anderson

Timothy Anderson is earning a master's degree in public affairs from the LBJ School of Public Affairs. Timothy's emphasis at the LBJ School includes LGBTQ+ rights and welfare reform. Timothy earned a Bachelor of Science in political science and minors in history and economics from Texas A&M University.

Joseph Denney

Joseph Denney is a Master of Public Affairs student from the LBJ School of Public Affairs. His concentrations at the LBJ School include political communication and public opinion. Joseph earned a Bachelor of Arts in media studies and a JD from Indiana University.

Ashlin Gray

Ashlin Gray is a dual degree master's student in public affairs and social work from the LBJ School of Public Affairs and Steve Hicks School of Social Work. Her emphasis includes affordable housing and educational equity. Ashlin earned a Bachelor of Arts from Baylor University.

Austin Oliver

Austin Oliver is a Master of Public Affairs student from the LBJ School of Public Affairs. Austin's emphasis at the LBJ School includes local governance and public management. Austin earned a Bachelor of Arts in political science from New York University.

Mary Rudolph

Mary Rudolph is a dual degree master's student in public affairs and energy and earth resources from the LBJ School of Public Affairs and Jackson School of Geosciences. Her emphasis includes energy, sustainability, and resource recovery and reclamation. Mary earned a Bachelor of Arts in economics and a Bachelor of Science in geology from the University of Nevada, Reno.

Ardian Shaholli

Ardian Shaholli is a Master of Public Affairs student from the LBJ School of Public Affairs. His emphasis at the LBJ School includes state and local finance and campaign finance reform. Ardian earned a Bachelor of Arts in political science and a Bachelor of Arts in sociology from the University of Texas at Austin.

Maddie Venn

Maddie Venn is a Master of Public Affairs student from the LBJ School of Public Affairs. Maddie's emphasis at the LBJ School includes energy and climate policy, environmental justice, and public finance. Maddie earned a Bachelor of Arts in political science from the University of California, Berkeley.

Faculty Advisor: Steven Pedigo

Steven Pedigo is a professor of practice at the Lyndon B. Johnson School of Public Affairs at The University of Texas at Austin and the director of the LBJ Urban Lab. As an expert in urban economic development, regional cooperation and placemaking, Pedigo has developed strategies for more than 50 cities and regions in the United States and across the world.

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University of Texas Permian Basin, President

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Leadership starts at the Lyndon B. Johnson School of Public Affairs at The University of Texas at Austin, ranked top 10 in the nation among graduate public affairs schools. We make a difference, not only within the walls of academia, but also in the public and social dialogue of the world. Contributing viable solutions to society is the LBJ School's legacy and its benchmark. Its effectiveness in channeling the purpose and passion of students into professional careers is evident in the success of more than 4,500 graduates who are the living legacy of President Johnson's bold and fearless action. Learn more: lbj.utexas.edu.



APPENDIX A

COMMUNITY AND ANCHOR ASSESSMENT



Funded by IC² Institute

2021-2022

Introduction

The Permian Basin has long served as a culturally and economically unique foundation for Texas. Established in 1973, The University of Texas Permian Basin now boasts more than 5,800 students in its undergraduate and graduate programs.¹ With an alumni network of over 18,000, UT Permian Basin has firmly established itself as a cornerstone of the Odessa and Midland metropolitan area. However, without change and adaptation, the ability of this region to withstand future social and economic headwinds is precarious.

In a 2019 profile of the Permian Basin, the Wall Street Journal wrote, “construction there was soaring, hotels were charging rates rivaling those of New York City, barbers were earning up to \$180,000 a year, and schools were scrambling to cope with housing costs that were surging along with oil output.”² When oil demand and production fell during the 2020 coronavirus pandemic, the region “all but shut down” as unemployment rose to 13.4%, just above the U.S. national average.³ While academic research around community planning and resilience has typically centered on urban institutions, there is a clear chasm when it comes to approaches for how smaller, regional institutions can prepare to withstand such hardships. UTPB is key to helping address these resiliency challenges. By leveraging its resources to benefit the area, UTPB can receive its investment back and more in the form of greater knowledge, talent, and community.

In partnership with IC² and the LBJ School of Public Affairs, this project aims to research and implement a plan for vitality by utilizing the resources of UTPB. The framework for this approach is based on the idea that UTPB can serve as an anchor for the Permian Basin through its scale and resources as a developer of community, workforce, and real estate. We plan to use our recommendations for UTPB to build upon a field that has long been focused primarily on urban institutions. By leveraging UTPB as an anchoring institution, we expect internal changes and external investments to generate resilience for the University and growth for the Permian Basin as a whole.

Our approach in determining action steps is to answer questions involving three core areas: stability, investing for life, and differentiation. We believe UTPB, with its power as a provider of education, labor, and resources, can play a role in developing and facilitating a resilient, sustainable ecosystem independent of the region’s current energy industry mix. By examining overlooked and underfunded community gaps in Odessa and the surrounding Permian Basin, UTPB can identify strategic investment opportunities that will lead to a higher quality of life. Determining those gaps will, in turn, attract and retain top talent and knowledge in the form of students, faculty, and future residents. Finally, UTPB’s unique relationship with the UT System can help elevate its educational offerings through a network of opportunities for advancement.

¹ University of Texas Permian Basin. “Quick Facts about UT Permian Basin.” UTPB. Accessed October 20, 2021. <https://www.utpb.edu/about-us/quick-facts>.

² Elliott, Rebecca, and Christopher M. Matthews. “This Is What It Looks Like When a Texas Oil Boom Busts.” The Wall Street Journal. Dow Jones & Company, July 11, 2020. <https://www.wsj.com/articles/this-is-what-it-looks-like-when-a-texas-oil-boom-busts-11594440031>.

³ Ibid.

We have conducted industry, community, and anchor institution assessments using cluster, demographic, and survey analyses to identify social and economic opportunities where UTPB can leverage its anchoring power. From these assessments, we have developed key findings and questions for further research that will guide the next phase of this project, which is community engagement.

Key Questions and Methodology

Our assessment was guided by three questions:

- Stability: What impact does the oil-based boom-and-bust cycle have on the Permian Basin?
- Investing for Life: What talent and investments are needed to spur and sustain growth?
- Differentiation: What is UTPB's unique role in the Permian Basin?

To answer these questions, we gathered data from Emsi Burning Glass Market Analytics, 1-Year Estimates from the 2019 American Community Survey (ACS), and the Integrated Postsecondary Education Data System (IPEDS) on various indicators of stability, growth, talent, and specialization. This data was pulled for three separate analyses: first, a community assessment centered on comparing the Permian Basin to similar communities across the U.S.; second, an industry-cluster assessment focused on nine key clusters in the Permian Basin; and finally, an anchor assessment comparing UTPB to other educational institutions.

Our community assessment compared the Permian Basin to peer communities on various indicators of economic health and diversity. The bulk of our data for this analysis was gathered using Emsi. Emsi compiles data from four different types of sources: government data, job postings, resumes, and online profiles. This data is used to create accurate reports on various economic and demographic characteristics of regions in the U.S.⁴ Our current year analyses use data from 2020 due to the lack of consistently available data from 2021, while our trend analyses compare data from 2015, 2020, and projections for 2025. Emsi's Community Indicators Map and Occupation Snapshot Report were used to pull data pertaining to economic characteristics, while education and diversity measures were pulled directly from the 2019 ACS 1-Year Estimates.

The industry assessment focused on nine key industry clusters selected for their prevalence in the local economy and growth potential. We assessed the relative economic importance and potential of each cluster by comparing data from 2010, 2015, and 2020 and using Emsi projections to 2026. Trends were projected to 2026 to provide a clearer picture of the relative strength of each cluster five years from now.⁵ Emsi's Industry Table, Regional Comparison Report, Gross Regional Product, and Staffing Table were used to find economic measures such as the location quotient (LQ); firm count LQ; total employment; GRP; GRP per worker; earnings per worker; demographic measures such as the share of female, Black, Hispanic, and White employees; and the typical entry-level education for each industry cluster.

⁴ <https://www.economicmodeling.com/data/>

⁵ This was not followed in the community assessment due to a lack of available data projections.

Our institutional assessment relied on data from Emsi and IPEDS to compare fall enrollment and yearly completion trends between 2010, 2015, and 2020. Completion data was pulled from Emsi, while enrollment data was pulled from IPEDS.

In the following section, our team describes its findings from the community assessment of the Permian Basin alongside self-identified and team-identified peers. Next, we present our findings on the strengths and weaknesses of the Permian Basin from economic and future growth perspectives. We conclude our assessment by connecting trends in the regional community and industry to educational trends of UTPB and its benchmark institutions. Finally, this report provides key takeaways from our research and next steps for our team to implement in partnership with UTPB.

Findings

Community Assessment

Our team selected 15 peer communities to serve as regional benchmarks in order to draw comparisons and contextualize trends in the Midland-Odessa MSA. Some of these communities are wholly representative of the Permian Basin, while others are representative with respect to a few key factors. The benchmarks we selected are as follows:

- Abilene, Texas
- Amarillo, Texas
- Beaumont-Port Arthur, Texas
- Fargo, N.D.
- Fayetteville-Springdale-Rogers, Ark.
- Fort Collins, Colo.
- Fort Smith MSA
- Lafayette, La.
- Lake Charles, La.
- Las Cruces, N.M.
- Lubbock, Texas
- McAllen-Edinburg-Mission, Texas
- Reno, Nev.
- San Angelo, Texas
- Texarkana MSA

We used these peers as benchmarks to better understand population size and growth, regional diversity, educational attainment, income and employment metrics, and healthcare trends in the Midland-Odessa MSA, all with the goal of identifying strengths, weaknesses, and opportunities to better connect the institution of UTPB to the region.

Our team based the selection of benchmark regions on similarities across a few different metrics, including size, proximity to a comparable institution to UTPB, natural resource economic base, employment, and

growth trends. While not every metric aligned perfectly with the Midland-Odessa MSA for every benchmark region, the benchmarks taken as a whole provide a strong point of comparison that allows us to differentiate the Midland-Odessa MSA and highlight the unique characteristics of the region.



Our community assessment revealed a number of critical insights into the region. With population demographics that place in the middle of our benchmark range and a 2020 growth rate in the top quarter of the range, the Midland-Odessa MSA is projected to outpace all of the selected benchmarks in growth rate by 2025 at a rate of 11.30%.⁶ This is important to our understanding of the region and its relationship to UTPB because the high level of projected growth, along with the 7.20% growth rate from 2020,⁷ signals pull factors to the region on which UTPB should capitalize. Additionally, it suggests an upcoming need for corresponding growth within the institution to adequately serve the region.

It will remain vital to prioritize the demographics of the Permian Basin as UTPB works to serve the region. The Midland-Odessa MSA has a high percentage of Hispanic residents, 53% compared to the benchmark average of 25%.⁸ White residents make up the next-highest percentage at 36%, and Black residents and others make up 5% and 6%, respectively.⁹ The region also boasts a comparatively high rate (14%) of foreign-born residents, exceeding the national average and falling just below the Texas average.¹⁰ These metrics taken together indicate that a significant portion of the region is occupied by immigrants from

⁶ Emsi Burning Glass – economicmodeling.com

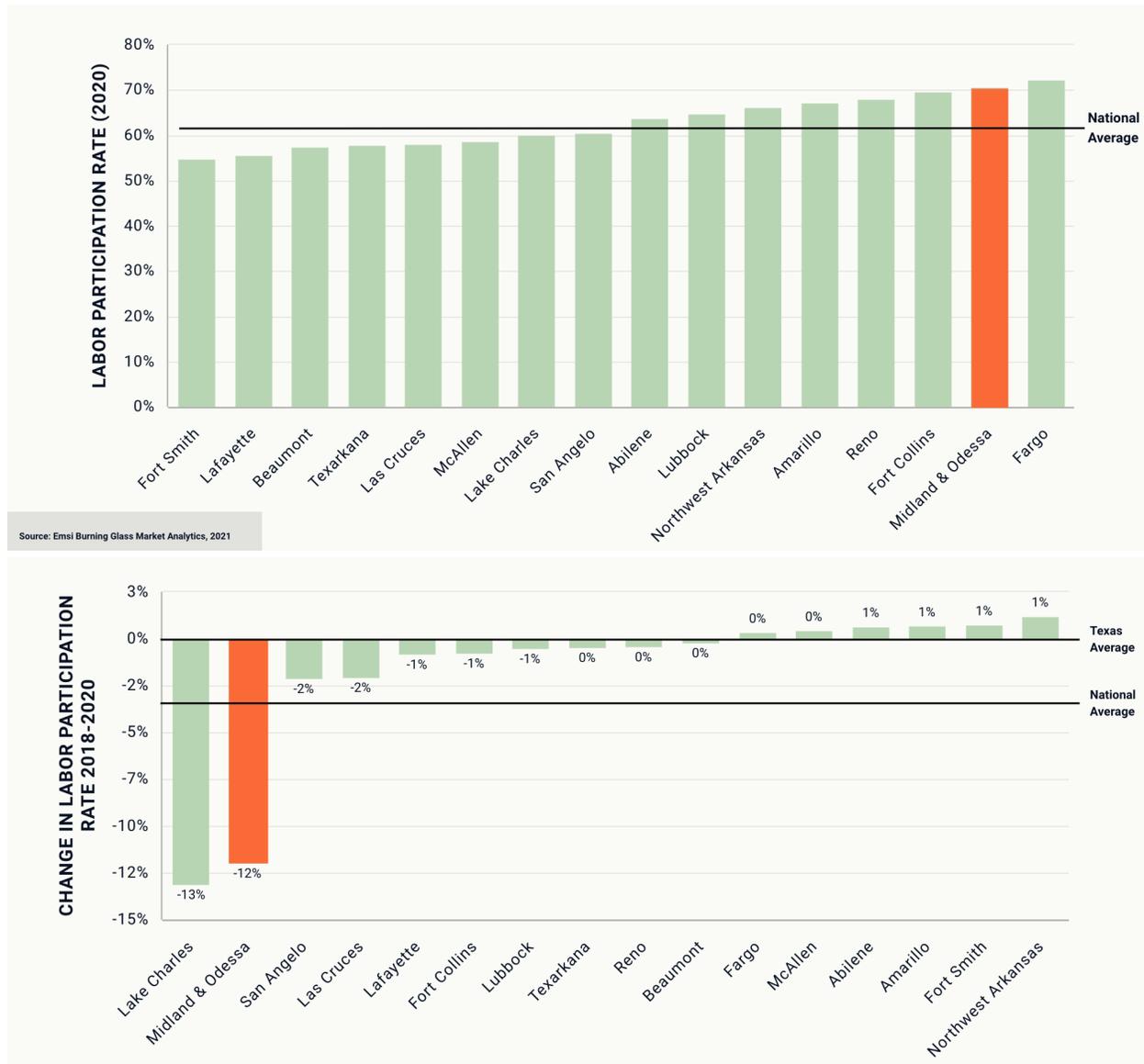
⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

nearby Mexico and other Central and South American countries,¹¹ an important consideration for UTPB if it hopes to meet the needs of the regional population and represent the Midland-Odessa MSA.



Labor participation rates, median household income, and poverty rates suggest a relatively strong economy in the region. The Midland-Odessa MSA has the second-highest labor participation rate among its benchmarks and exceeds the national average with a rate of 70.4%, and it boasts a similarly high median household income. Its poverty rate ranks in the bottom four among benchmarks and below the national average.¹² When growth patterns are included, however, the labor force participation rate in the region has

¹¹ American Immigration Council. "Immigrants in Texas." American Immigration Council, August 7, 2020. <https://www.americanimmigrationcouncil.org/research/immigrants-in-texas>.

¹² Ibid.

decreased in the last few years. More positively, the poverty rate has also decreased over the same period.¹³ Median home value is another indicator of regional economic success. That metric is relatively high compared to the benchmarks, ranking in the top four with an increase of 32% since 2018.¹⁴

Regional educational attainment is another important metric to consider in the context of the Permian Basin’s labor force. The Midland-Odessa MSA’s rates of educational attainment—categorized by no high school diploma, high school graduate or equivalent, some college, and bachelor’s degree and beyond (BA+)—are similar to benchmark averages. However, they fall below Texas and national averages for BA+ and above Texas and national averages for residents with no high school diploma.¹⁵ While these margins are slim, it is important to consider that lower general levels of educational attainment in the region have not likewise resulted in lower median household incomes or labor participation. This suggests other employment considerations for the region that will be detailed in the industry assessment.



A final consideration for the region is the number of healthcare practitioners per 100,000 residents. This indicator points to an unmet need in the region, as the Midland-Odessa MSA ranks the lowest among national, state, and benchmark peer averages.¹⁶ Our team will go into further detail about what this means for UTPB in the anchor assessment portion of this report.

Our assessment as detailed above revealed a few key findings about the Midland-Odessa region. Midland-Odessa has grown rapidly in the last few years, and both population and employment growth are projected to continue at an increasing rate. This will be important to bear in mind throughout the remainder of this report, as there are critical implications of a rapidly growing population and workforce for UTPB as an

¹³ Emsi Burning Glass – economicmodeling.com

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

anchor institution, including a greater demand for workforce development and training and a larger pool of potential students from which to pull. Another consideration from this assessment that has significant implications for UTPB moving forward is the low level of educational attainment in Midland-Odessa relative to state, national, and benchmark averages. As the population and workforce continue to grow, disparities in educational attainment will remain a challenge but offer an opportunity for UTPB to support potential students by increasing their level of education in order to find greater success in the workforce. Finally, this assessment revealed that throughout the oil boom-and-bust cycle, Midland-Odessa has remained relatively stable and strong by a number of economic indicators. This finding highlights the need for further research, as it speaks to a level of potential inequality among those impacted by the oil industry cycle and those who are able to stay afloat—a distinction that is not readily apparent through the data alone. Taken together, these findings lay the groundwork and provide context for our industry and anchor assessments.

Industry Assessment

Our team analyzed nine industry clusters to assess the trends in the region's economic inputs and outputs: Oil and Gas Production/Transportation, Distribution and Electronic Commerce, Professional Services, Construction Products and Services, Manufacturing Technology and Heavy Machinery, Hospitality and Tourism, Local Health Services, Transportation and Logistics, and Local Education. We examined these clusters based on three criteria: stability, investing for life, and regional differentiation.

Stability consists of metrics such as “Gross Revenue (GRP) Per Worker” and “Total Employment.” These categories gauge whether the pertinent clusters are both resilient and dynamic components of the region. “Business Density” and the “Number of Industries per Cluster” are used as measures of future scalability and potential for future investment. By examining the width and depth of the foundation upon which the current industry stands, we can better evaluate what dependencies exist, the economic impact of any future plan implementation, and factors for steady, predictable, and sustainable growth. **Investing for Life** comprises a variety of indicators, such as “5-Year Job Growth” and “Share of Employees with at Least a Bachelor's Degree,” measuring whether the Permian Basin's economic base is adapting to an increasingly specialized and technical modern economy. In general, the greater the metrics in this category, the more attractive an area may be for the purposes of attracting and retaining talent. Finally, **Regional Differentiation** metrics include “Location Quotient (LQ)” and “Share of Hispanic Employees,” which

highlight the skill and demographic features the region can leverage to cultivate a unique labor ecosystem.

Stability	Investing for Life	Regional Differentiation
Total Employment	Earnings Per Worker	Location Quotient (LQ)
Business Density	5-Year Job Growth	5-Year Job Growth Compared to Texas
Number of Industries per Cluster	Share of Employees Highest Level of Education (HS/GED)	Share of Female Employees
Total GRP	Share of Employees with Highest Level of Education (Associates)	Share of Hispanic Employees
GRP Per Worker	Share of Employees with B.A.+	Share of Black Employees

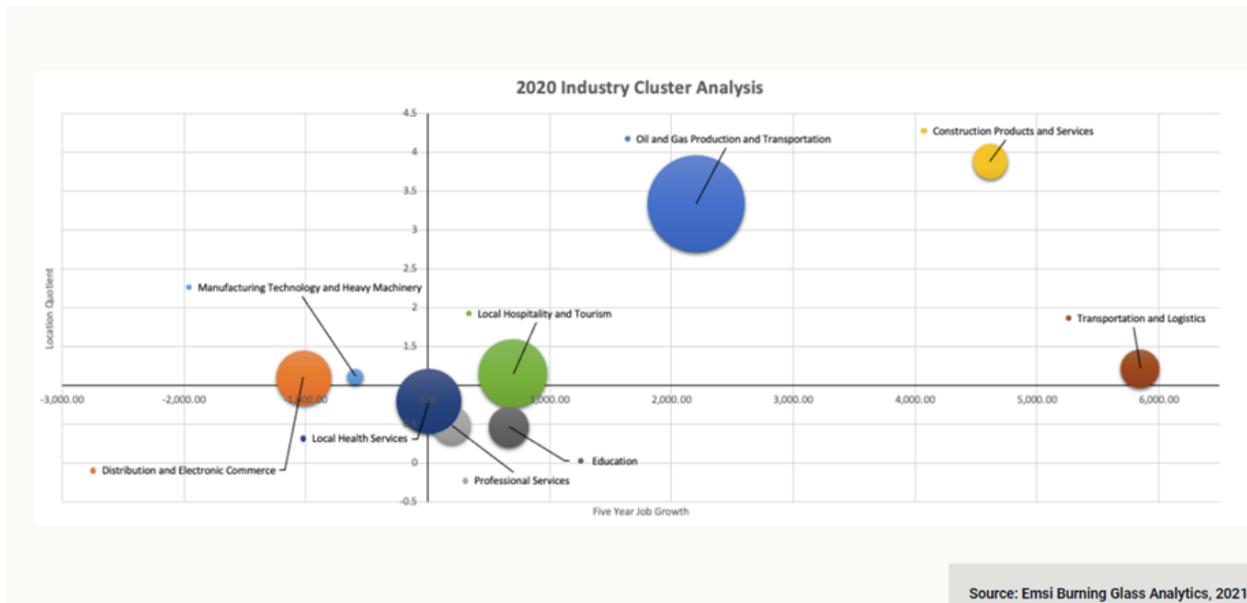
The Location Quotient (LQ) measures a region’s specialization level in a given industry relative to the rest of the nation. An LQ above 1 signifies that the concentration of jobs in the region is higher than the national average, while an LQ below 1 indicates the opposite phenomenon. Building on the prior two categories, the metrics under Regional Differentiation aim to determine what unique regional capabilities and strengths may be used to increase Stability and support Investing for Life.



Except for Hospitality and Tourism, the clusters with a competitive advantage are all oil-adjacent.¹⁷ As of 2020, 5-year job growth estimates reveal overwhelmingly positive trends for the Oil and Gas, Construction,

¹⁷ Emsi Burning Glass – economicmodeling.com

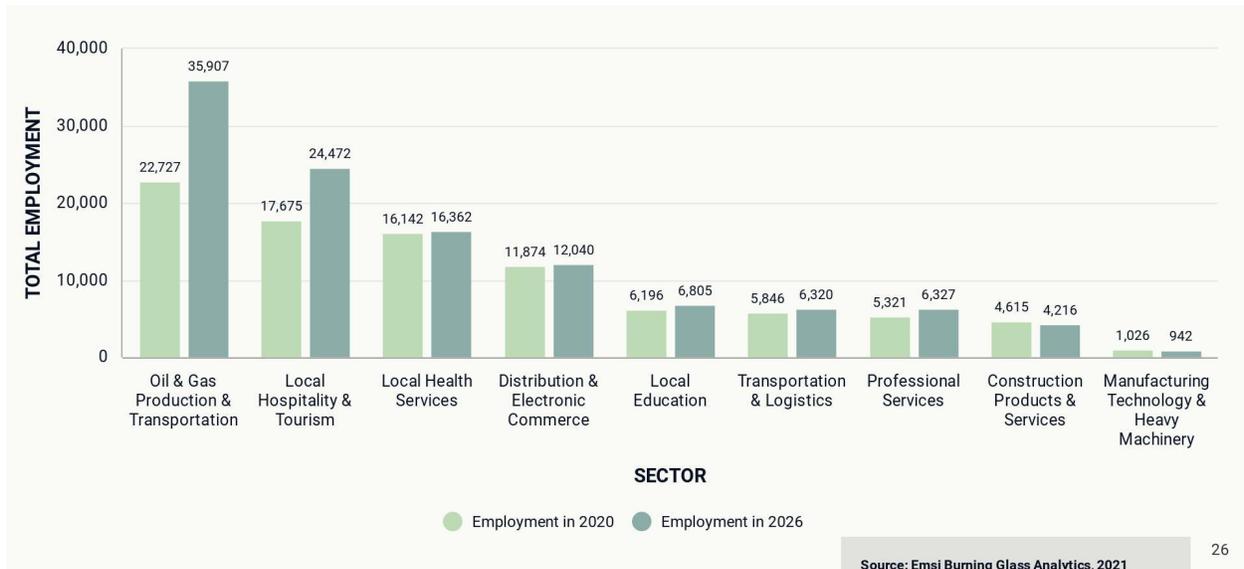
and Transportation/Logistics industry clusters.¹⁸ This exemplifies an economy that still has room for improvement in terms of diversification and resiliency.



The Oil and Gas, Hospitality and Tourism, and Local Health Services clusters employ the largest share of workers, with the highest firm count in Oil and Gas. While the first two clusters are expected to grow exponentially in terms of total employment by 2026—with Oil and Gas experiencing a nearly 13,000 increase in job total from its 2020 figure, and Hospitality and Tourism nearing a peak of 7,000—Local Health Services are expected to stagnate.¹⁹ This is reflective of an increasingly bifurcated economy that includes high-paying fossil fuel industry jobs on one end and lower-paying service-sector work on the other, raising questions and concerns about potential economic inequality and mobility in the region.

¹⁸ Ibid.

¹⁹ Ibid.



Comparing employment LQ to firm LQ reveals significant trends concerning industry resiliency and scalability. Generally, if employment LQ exceeds firm LQ, it suggests a large concentration of employees within a small number of firms. In other words, a few companies will have cornered the market, limiting flexibility for new competitors to service and scale that industry. Alternatively, a firm LQ greater than an employment LQ indicates that workers within an industry are scattered throughout a variety of smaller firms, providing opportunities for these businesses to adequately scale.

The Oil and Gas cluster shows the most significant discrepancy between LQ measurements—with firms exceeding employment by a colossal 43.82 points.²⁰ Thus, there are many opportunities to tap into scale to maximize economic earning potential for businesses and workers in this particular sector. In general, firm

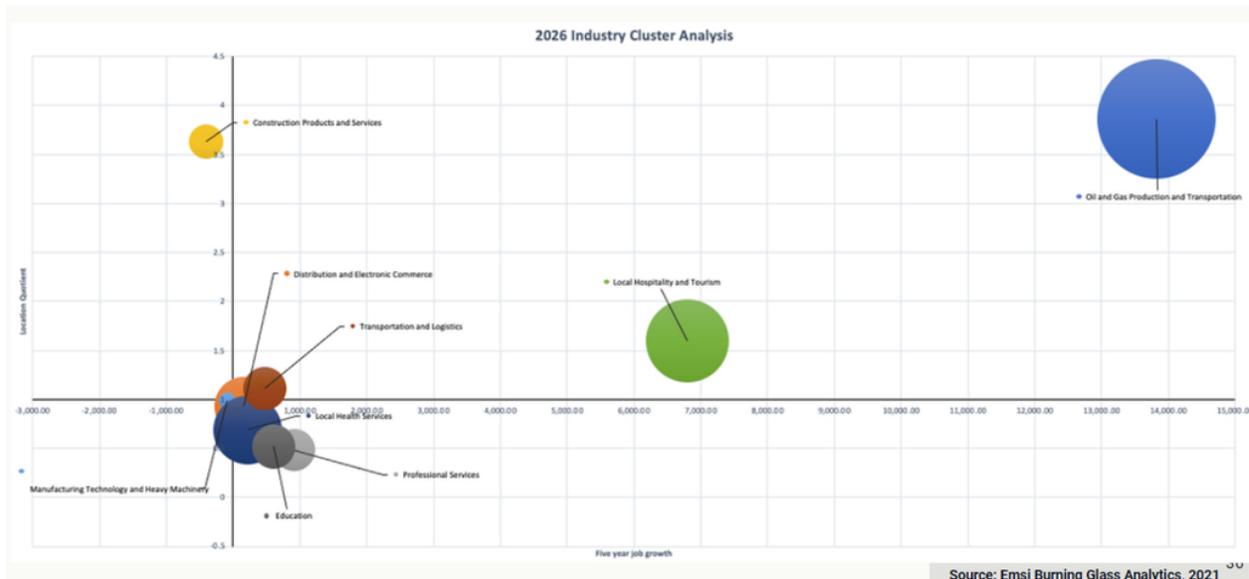
²⁰ Ibid.

LQ is greater than its employment counterpart for all dominant industry clusters except Hospitality and Tourism and Education. These two industry clusters are more likely to consist of larger employers, whereas other clusters consist of businesses with high growth ceilings.

	Oil & Gas Production & Transportation	Manufacturing Technology & Heavy Machinery	Transportation & Logistics	Construction Products and Services	Distribution & Electronic Commerce	Professional Services	Local Health Services	Local Education	Local Hospitality & Tourism
Firm Location Quotient	47.16	2.58	2.31	4.36	1.52	0.66	0.81	0.30	0.92
Cluster Location Quotient	3.34	1.11	1.22	3.88	1.10	0.49	0.80	0.47	1.16
Difference	43.82	1.47	1.09	0.48	0.42	0.17	0.01	-0.17	-0.24

Source: Emsi Burning Glass Analytics, 2021

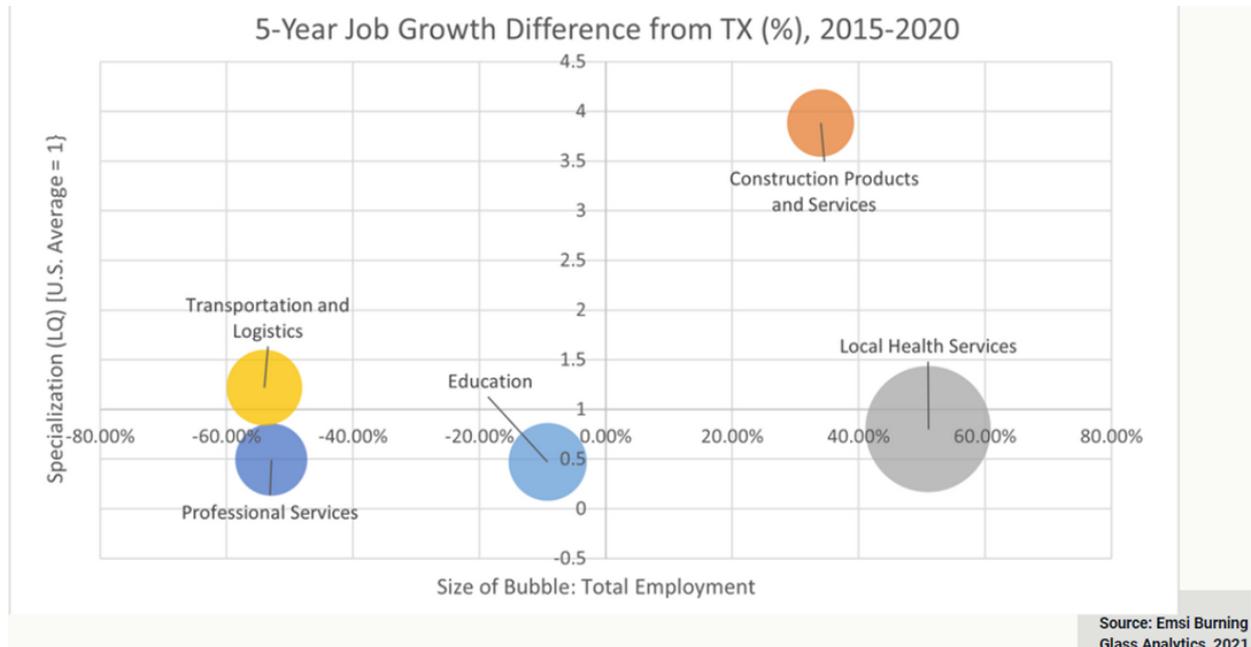
However, 2026 reveals a disconcerting projection. Substantial 5-year job growth is confined to Oil and Gas, alongside Hospitality and Tourism.²¹ The rest of the industry clusters are expected to be largely stagnant. This is reflective of the Permian Basin’s continued reliance on volatile occupations with significant wage discrepancies and a dearth of college-educated workers.



Source: Emsi Burning Glass Analytics, 2021

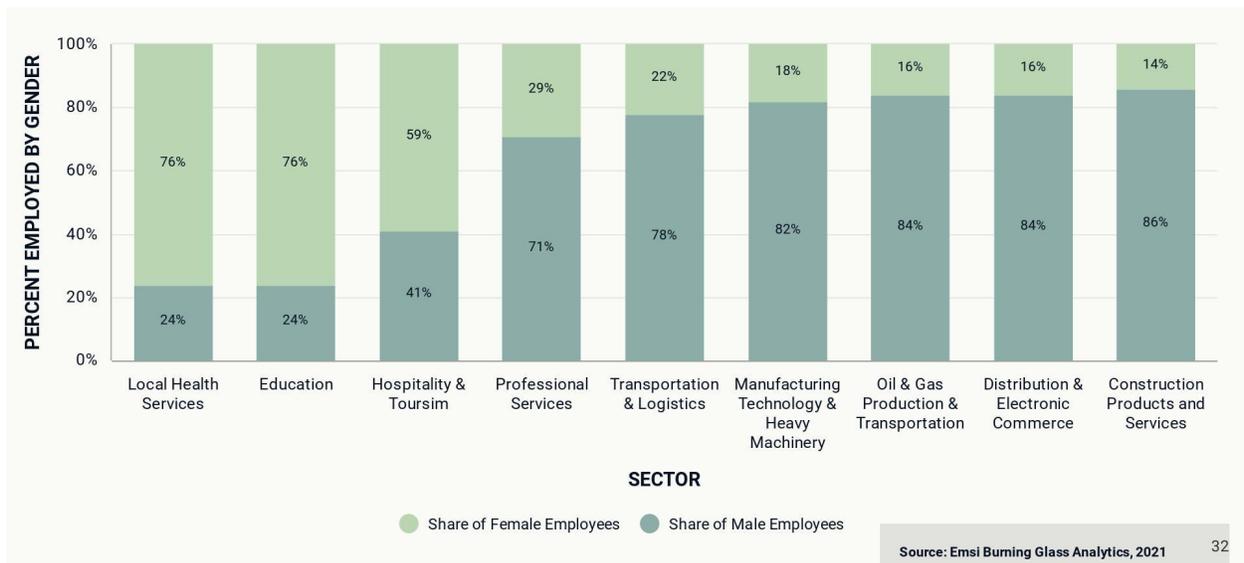
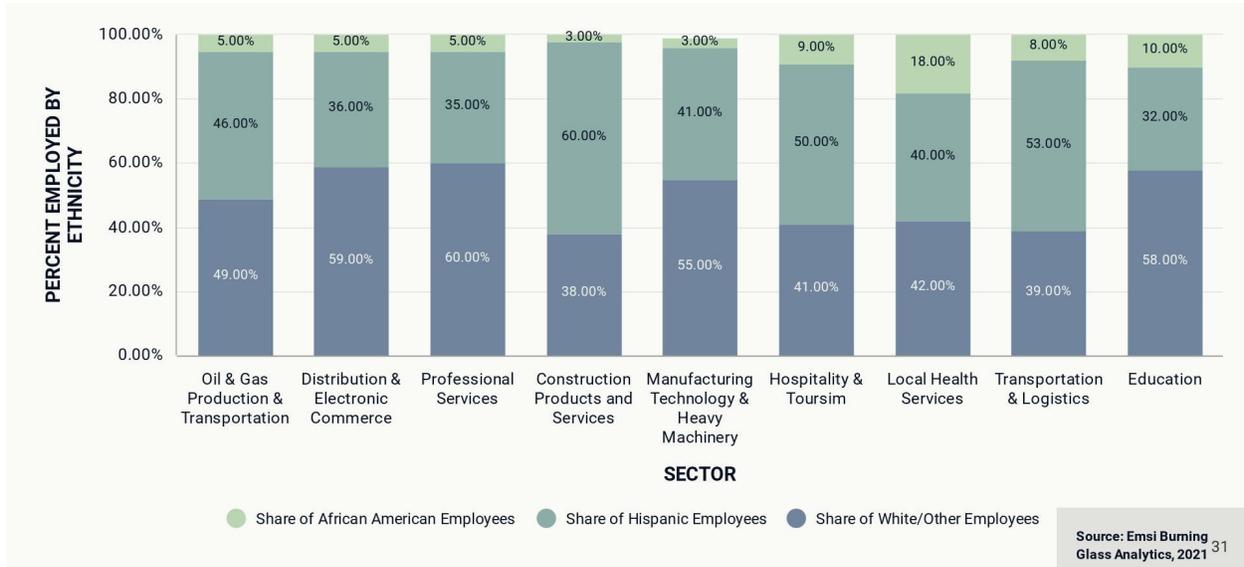
²¹ Ibid.

These trends can be extrapolated to the statewide level. The Permian Basin exceeded statewide relative job growth only in Construction Products and Services and Local Health Services. Thus, even in sectors where the region enjoys a competitive advantage (e.g., Transportation and Logistics), job growth projections pale in comparison to statewide numbers.²²



Minority employees are underrepresented in the highest-paying industry clusters (Oil and Gas, Professional Services), while female employees are overrepresented in the lowest-paying clusters (Local Health Services, Education, Hospitality and Tourism). Local Health Services, along with Oil and Gas, however, require the greatest share of college graduates. In these regions, average salaries range from approximately \$25,000 to \$75,000.

²² Ibid.



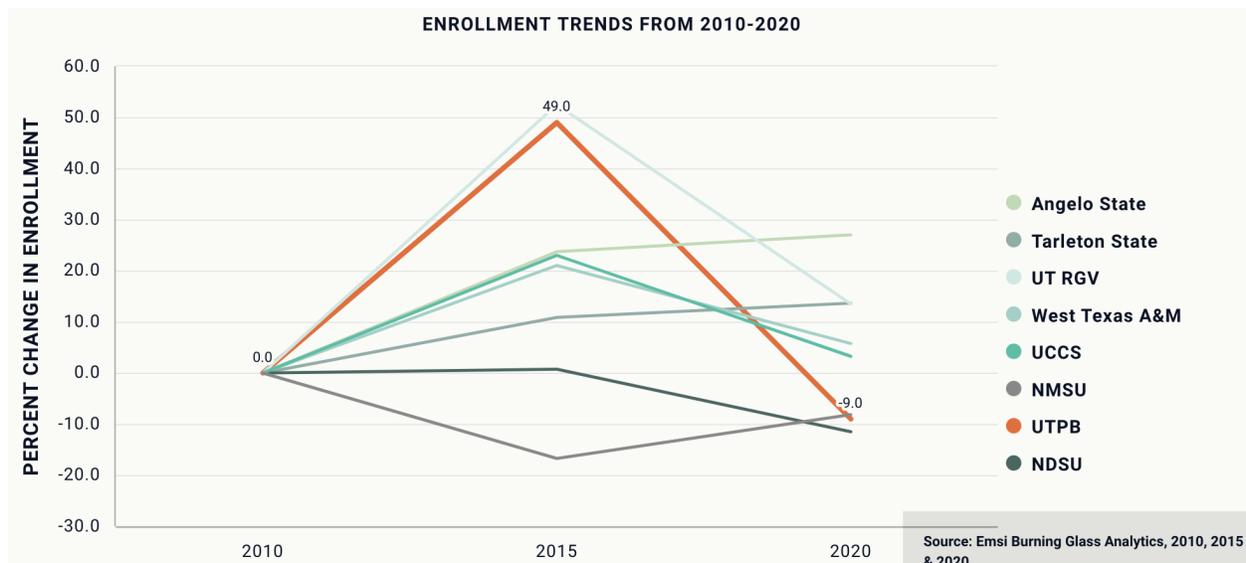
In sum, our analysis of the Permian Basin’s industry clusters confirmed some traditional assumptions about the region and also revealed areas with potential for growth and improvement. As expected, the data clearly demonstrates the dominance of the Oil and Gas sector in the local economy: It employs a larger number of workers than any other cluster and does so with the highest average earnings per worker. While the sector offers many opportunities for high school graduates, Oil and Gas employs the second-highest proportion of college graduates among the industries we examined. Our analysis also revealed a growing healthcare need in the Permian Basin. The Local Health Services sector employs the highest proportion of college graduates, yet the number of firms in the region is lower than the national average, and employees have lower earnings than most other sectors. This indicates a growing need for supply in health services. The final key takeaway from our industry analysis is a cause for concern: Women and minorities seem to be left behind by the highest-opportunity industries in the Basin. Female employees are overrepresented in the lowest-paying sectors (Education, Hospitality and Tourism, Local Health Services), while minority employees are underrepresented in some of the highest-paying sectors (Oil and Gas, Professional Services).

Institutional Assessment

In order to conduct a thorough institutional assessment, our team identified five peer institutions to serve as benchmarks to better understand UTPB’s trends in enrollment, degree completions, and student body makeup within the larger higher education landscape. These five peers included The University of Texas Rio Grande Valley (UTRGV), Tarleton State University, Angelo State University, West Texas A&M University, and North Dakota State University (NDSU). We also identified two aspirational institutions—New Mexico State University (NMSU) and University of Colorado Colorado Springs (UCCS)—that served as benchmarks for where UTPB may see itself over the next 10 to 20 years.

Our aim in selecting benchmarks was to choose universities with reasonable similarities to UTPB. We prioritized public universities, preferably state universities of comparable size and prestige to UTPB, situated in cities with a size and rate of growth similar to that of the Midland-Odessa MSA, while allowing for some differentiation between benchmarks.

Through our institutional and benchmark analysis, we found that UTPB saw the most drastic changes in enrollment from 2010 to 2020.²³ While most of its benchmark and aspirational peers have managed to see steady enrollment, UTPB’s enrollment exhibited wide fluctuations. These fluctuations appear to be potentially related to shifts in the average price per barrel of crude oil, where decreases in the price of oil may be associated with increases in enrollment.²⁴

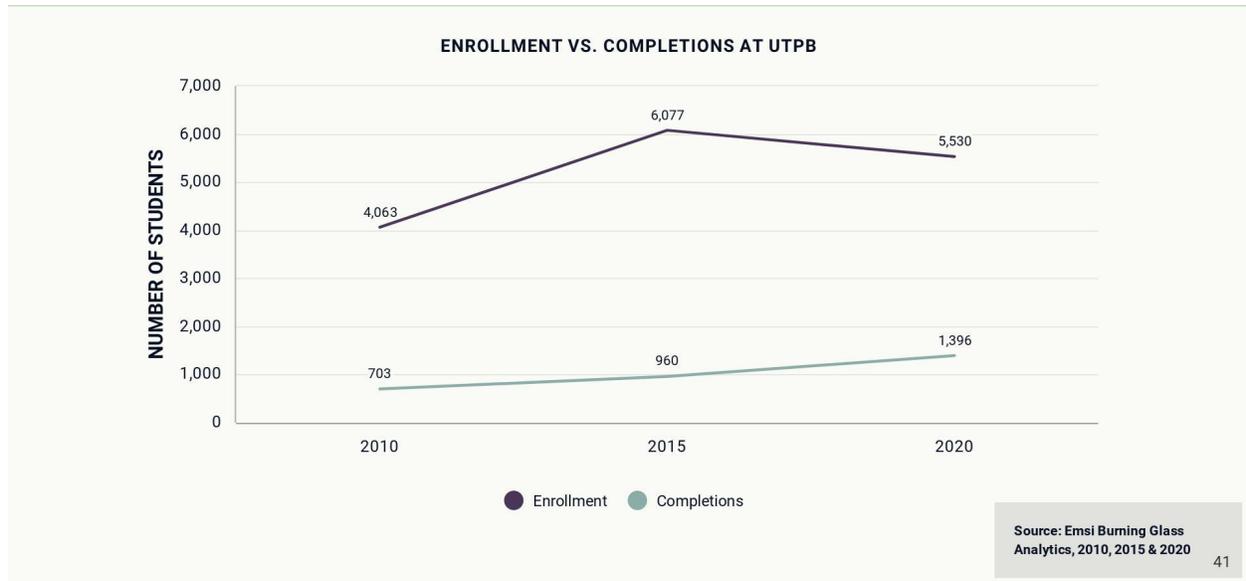


This supports the hypothesis from UTPB that regional economic circumstances have a direct effect on UTPB’s enrollment. These findings relate directly to our guiding principle of stability. As we continue with

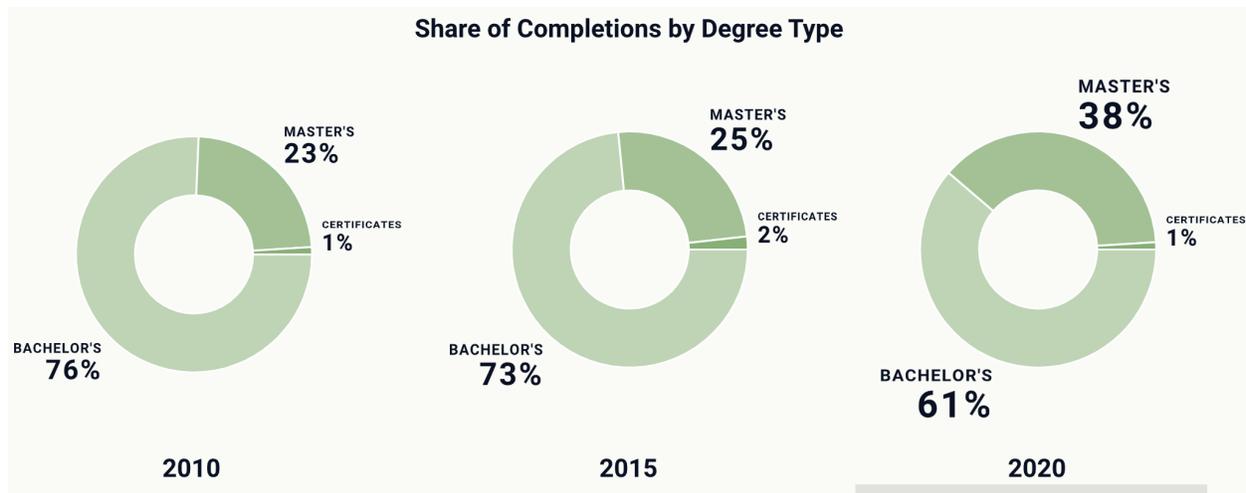
²³ National Center for Education Statistics. “Enrollment trends by race/ethnicity and gender.” *Integrated Postsecondary Education Data System*. Accessed December 10, 2021. <https://nces.ed.gov/ipeds/SummaryTables/report/270>.

²⁴ Ibid.

our community engagement in the next phase, it will be important to better understand the university's capacity to provide greater stability for the regional economy.

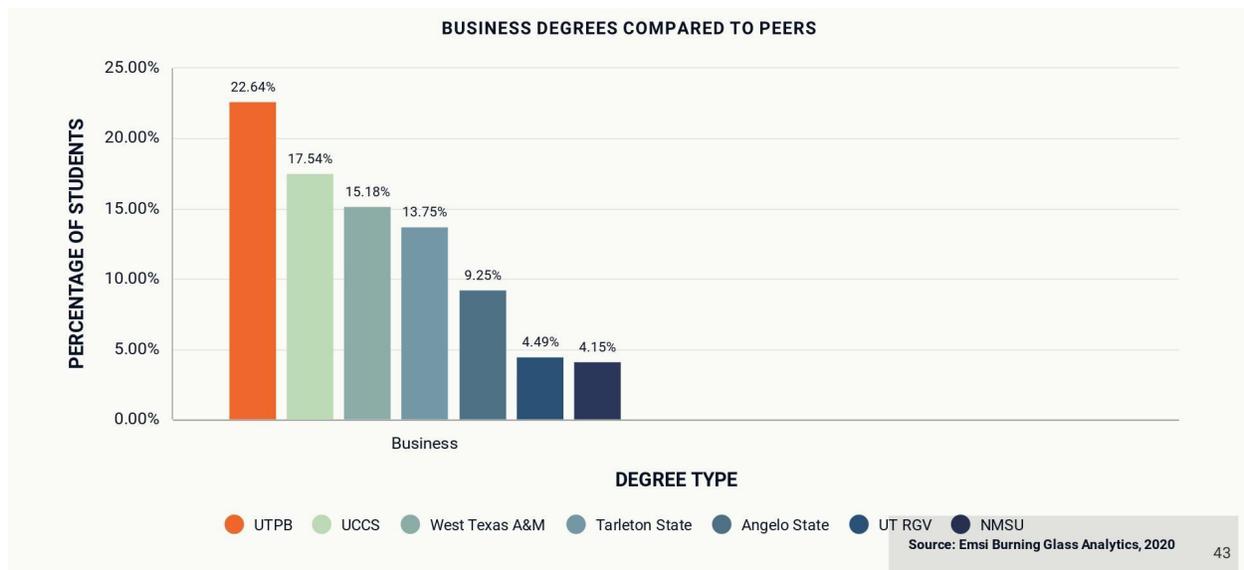


Although total enrollment has declined, degree completions have continued to increase.²⁵ This is good news for UTPB, as it demonstrates the value of the experience that UTPB is providing for its students. Taken with the changes in enrollment, we can see that while short-term economic forces affect enrollment, students are relatively satisfied with their experience once they enroll with UTPB. As the university continues to grow in the near future, high degree completion rates will reinforce a culture of support and success that is integral to the UTPB brand.



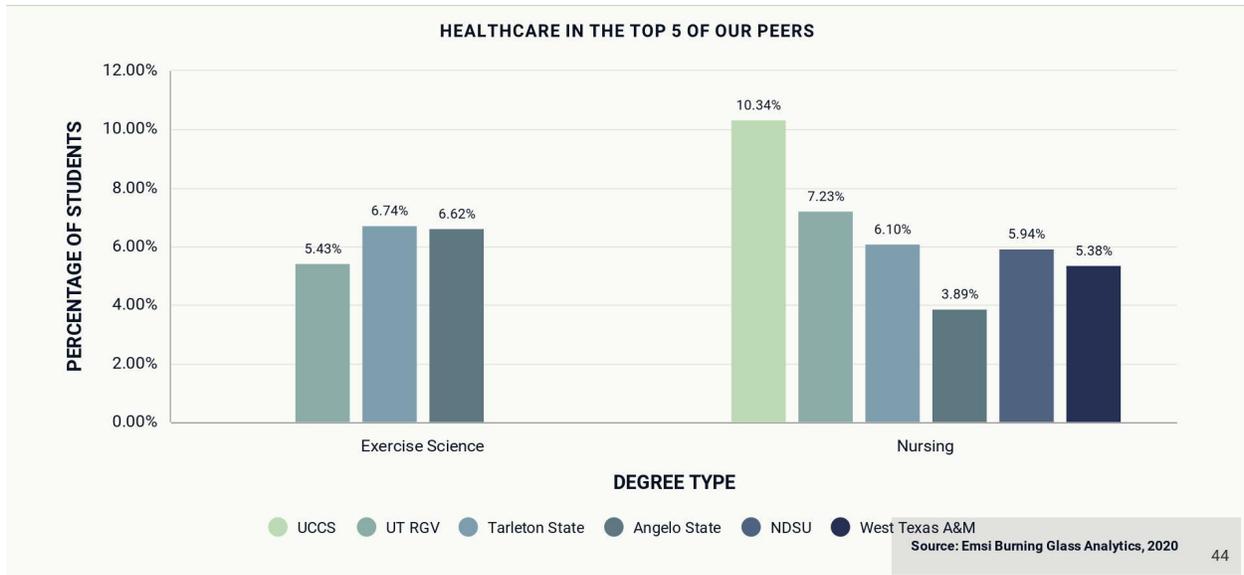
²⁵ Emsi Burning Glass – economicmodeling.com

The share of graduate degree completions at UTPB has grown by 15% over the last 10 years.²⁶ Relative to its peers, UTPB is the leader in master’s degrees conferred, which are predominantly business degrees.²⁷

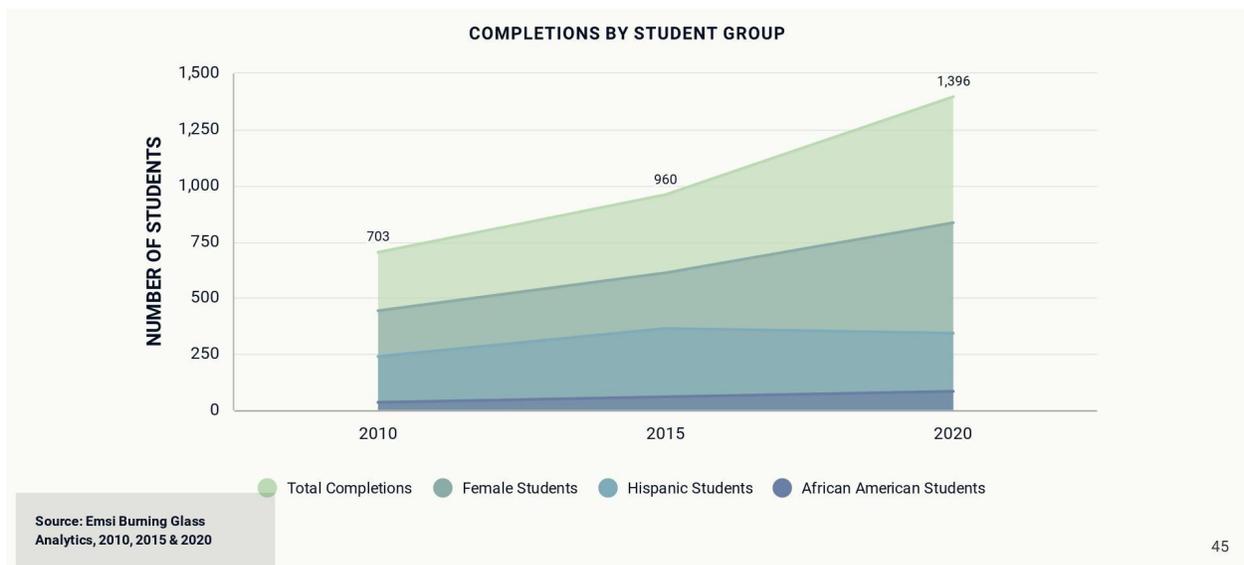


There is both good and challenging news to observe from these trends. First, UTPB has been able to successfully identify a point of differentiation relative to its peers. By recognizing a need and capacity for master’s degrees, UTPB is serving students seeking higher education for business. The caveat is that UTPB may have been too focused on this effort. UTPB’s share of master’s-level business degrees is twice that of its second-most popular program,²⁸ and this represents a disproportionate share of degrees relative to its peers, community, and region. This disparity becomes clearer when examining which programs UTPB’s institutional peers are investing their resources in. Healthcare degrees are consistently among the top programs for degrees conferred among UTPB’s peers, yet UTPB is not keeping pace.²⁹ While nursing represents anywhere from 4% to 10% of total completions for its peers, UTPB’s share of all nursing degrees completed for 2020 is just 3.15%.³⁰

²⁶ Ibid.
²⁷ Ibid.
²⁸ Emsi Burning Glass – economicmodeling.com
²⁹ Ibid.
³⁰ Ibid.



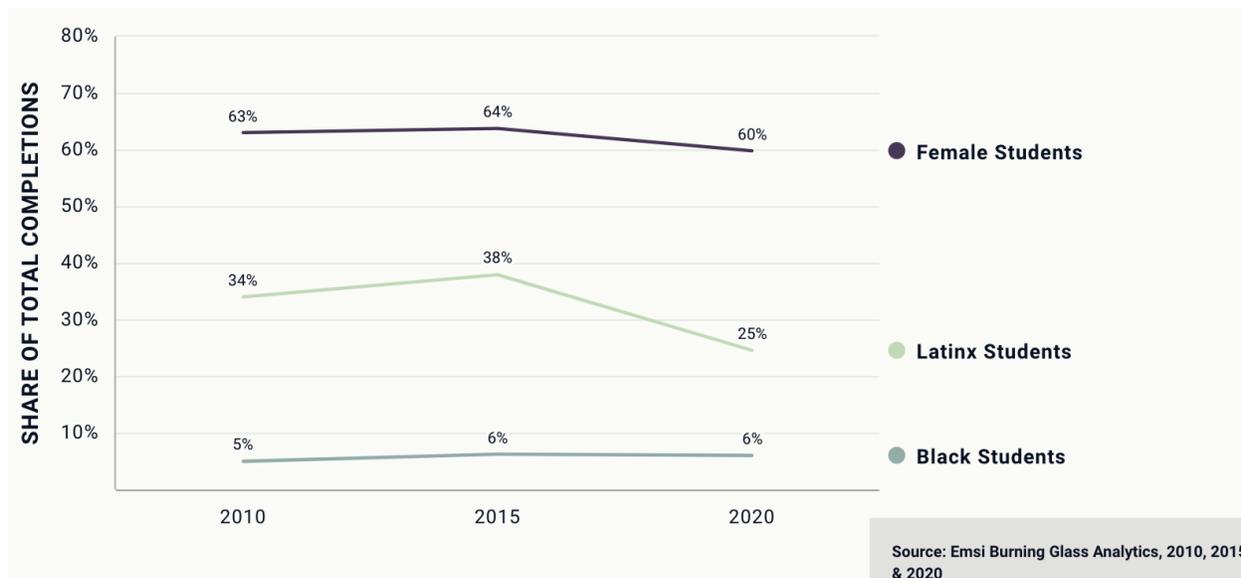
Another incongruity relative to UTPB’s peers is in its degree completions for female students and students of color. With female students and Hispanic students making up two of its largest demographics, there is cause for concern that UTPB has not consistently fostered these groups’ completions. Further, even as total completions have improved, the shares of Hispanic, Black, and female student degree completions have declined.³¹ And while UTPB’s female and Hispanic graduates have both declined, degrees conferred for these groups at benchmark institutions have either remained stable or increased.³²



³¹ Ibid.

³² Ibid.

UTPB’s decline in female student degree completions is uncharacteristic of higher education trends. Among UTPB’s peers, five institutions saw an increase in female student degree completions from 2015 to 2020.³³ Two institutions, West Texas A&M and University of Colorado Colorado Springs (UCCS), saw a slight decrease in female student degree completions.³⁴ However, UTPB’s decline in completions was three times greater than that of West Texas A&M and UCCS.³⁵ This is a concern for the university, as about 60% of the student body is female.³⁶ UTPB has an opportunity to target degree completion rates for female students in the near future.



The university’s decline in Hispanic student degree completions is also uncharacteristic of higher education trends. Compared to our seven benchmark institutions, UTPB is the only institution that saw a decrease in degree completions for Hispanic students from 2015 to 2020.³⁷ This finding is surprising, as total degree completion rates at the university have increased during the same period. As we continue with the community engagement phase, we plan to investigate this trend and identify ways that the university can retain and support Hispanic students.

In sum, our analysis of UTPB and its peer and aspirational institutions found some strengths and some areas with potential for improvement. The growing need for healthcare in the Permian Basin identified in our industry cluster analysis creates an opportunity for UTPB to scale up its healthcare degree programs to meet the region’s workforce needs. The second key takeaway from our institutional analysis is a cause for concern: While UTPB’s student enrollment reflects the diversity of the Permian Basin, Hispanic and female

³³ Ibid.
³⁴ Ibid.
³⁵ Ibid.
³⁶ Ibid.
³⁷ Ibid.

degree completion rates are declining. This decline is particularly concerning among Hispanic students, as they sharply diverged from enrollment rates in 2020.

In the upcoming Community Engagement phase, our team will investigate why UTPB's Hispanic student degree completion rate has declined, considering that the university is an identified Hispanic-Serving Institution (HSI) and Minority-Serving Institution (MSI).³⁸ We believe these findings will help the university develop a coordinated strategy to better support Hispanic students and other students of color, all of whom are essential to the UTPB identity.

Key Takeaways

Our key takeaways from the community, industry, and institutional assessments are grouped into four broad categories, within which are more detailed insights for UTPB in relation to the region.

Region-specific opportunities can be leveraged.

Our assessment of regional needs and university achievements revealed a number of regional opportunities for UTPB to leverage. First, it is clear that UTPB has strong internal alignment between strategy and implementation. Here, we refer specifically to the stated goals for growing postgraduate business degrees, which are performing well within the university and compared to our benchmark peer institutions. This is a strong indicator of success for future university efforts and can help bridge some of the educational attainment gaps in the region. Along those lines, UTPB has an opportunity to encourage degree completion. By focusing on retaining students within the specific categories that we see leaving these programs, as detailed in the following section, we can better align enrollment and degrees conferred and ensure that UTPB is meeting the needs of its students and local industry. Finally, the region has an hourglass-shaped economy, with women and minorities overrepresented in low-income jobs. By focusing on aligning enrollment and degrees conferred, the university has an opportunity to improve the equity of these distributions.

UTPB appears to be disconnected from the regional economy.

With the above opportunities in mind, it is important to examine some of the ways UTPB and the Permian Basin are out of alignment. First, the representation of the regional demographics of the region at UTPB, specifically in terms of degrees conferred, is less than adequate. Hispanic and female degree completion rates fall short of national and regional trends, pointing to a specific retention gap. Additionally, decreasing enrollment rates signal a need to focus on attracting students. Finally, there is a disparity between the regional industry needs and degrees conferred, particularly in healthcare. Compared to peer institutions, UTPB is not graduating healthcare professionals at a rate sufficient to meet regional workforce needs, indicating an important area for growth.

³⁸ "New Data Ranks UTPB among Top Universities for Diversity." The University of Texas Permian Basin | UTPB. Accessed December 14, 2021. <https://www.utpb.edu/blogs/2018/07/diverse-grad>.

Growing healthcare needs are not being met.

According to our assessment, regional demand for healthcare professionals has been and will remain high. That said, the Midland-Odessa MSA holds the lowest proportion of healthcare workers of all peer communities, and healthcare—including nursing—is not in UTPB's top five majors. This is a multi-faceted area with clear room for growth to meet regional needs. By aligning program completions with this underserved regional need, UTPB can lead the development of healthcare professionals while also differentiating itself as an attentive and future-facing institution.

The Oil and Gas industry drives the success of the Permian Basin and, therefore, the university.

The boom-and-bust cycle of the fossil fuel industry plays a central role in the success of the region. It follows then that the health of UTPB depends on these cycles, as seen in the correlating oil price and student enrollment trends. Taken together, these findings indicate that UTPB will need to strategize in order to weather boom-and-bust periods that have opposing impacts on the region and the university. Keeping an eye on the future, a transitioning energy economy will undoubtedly impact the region and the university, further highlighting the need to strategize and diversify in an effort to equalize the peaks and valleys of the resource-based economy.

Next Steps

Our regional assessment has established a strong baseline for moving forward with the community engagement phase of our work with UTPB. Based on the findings from this assessment, we have identified key future questions that will best be answered through community engagement. Some of these questions were touched upon in the previous section, but here we will detail the means by which we plan to approach these next steps.

Community is critical to our understanding of the interaction between the region and UTPB as an institution. With that in mind, our community engagement work will answer some of the questions that the initial community assessment raised, such as understanding the path of students in the region who do not complete their degrees and what caused them to leave the university. This will be addressed with the support of our UTPB steering committee. Other remaining questions about areas of disconnect between the institution and the region, including the decline in degrees conferred to Hispanic students, will be addressed with the support of the steering committee as well. Finally, we will examine faculty recruitment and retention to better understand what quality of life indicators and research opportunities attract faculty to UTPB.

We will aim to understand the community beyond statistics, with a particular focus on healthcare; emerging industries; and innovation, research, and commercialization. To fill in the gaps between the data and unexplained events, we will rely on interviews and roundtable discussions with individuals in the region. Through this engagement phase, we hope to identify factors to support the three following goals: (1) Assess workforce preparation in the Permian Basin and its alignment with healthcare needs. (2) Identify trends and further regional goals. (3) Determine what viable research is taking place and how to further region-aligned

commercialization. With a better understanding of the surrounding industry, UTPB will be able to work with the region to generate better opportunities for the community.

Conclusion

UTPB is situated in a region that is going to be at the forefront of the energy transition conversation. While this trend spurs questions of resiliency, it also provides an opportunity for UTPB to fully leverage its robust trove of resources to lead and prepare the Permian Basin for an increasingly diversified and technical economy. We as a team are excited to collaborate with key stakeholders in helping UTPB make the necessary adjustments, gain key community insights, and maximize its institutional potential in ensuring that it serves as a durable foundation for the broader Permian Basin region.

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APPENDIX B

STAKEHOLDER ENGAGEMENT



Funded by IC² Institute

2021-2022

Introduction

Our community, industry, and institutional assessments yielded a great depth of knowledge, as well as four key judgments that set the stage for our community engagements:

1. *Region-specific opportunities can be leveraged.*
2. *UTPB appears to be disconnected from the regional economy.*
3. *Growing healthcare needs are not being met.*
4. *Oil and Gas industry drives the success of the Permian Basin and, therefore, the university.*

These judgments, and the underlying data that support them, shaped the areas of investigation throughout our community engagement. Our goal was to qualitatively understand The University of Texas Permian Basin community, as well as identify opportunities and challenges in local healthcare, newly emerging industries, and university-led innovation. To that end, we engaged with a range of stakeholders and experts, including UT Permian Basin students, faculty, and administrators, as well as industry leaders, economic development groups, and leaders in innovation and commercialization. We emerged with key insights that will form the basis of our recommendations to enhance the university's role as a community anchor. We organize insights around our areas of exploration, give an account of our stakeholders and methods of engagement, and end each section with a description of the insights and their implications.

Emerging Industries

Our community and anchor assessment revealed that the Oil and Gas industry shapes the regional economy, employing the highest number of workers and yielding the highest earnings per worker. To gain a better understanding of other economic drivers surrounding UTPB, semi-structured interviews were held with Gregory Pogue, deputy executive director of the IC² Institute and an expert with research experience in the region; Sara Harris, executive director at the Midland Development Corporation; Wesley Burnett, former economic development director at the Odessa Chamber of Commerce (OCC); and Tom Manskey, current economic development director at OCC. These interviews gave us insight into key emerging industries, namely, Aerospace, Advanced Manufacturing, and Distribution and Warehousing. Identification of these emerging industries led us to three central ideas that will enable the development of stronger economic ties between UTPB and the region.

Key Takeaways

- The university as a connector/hub
 - UTPB can help improve the relationship between Midland and Odessa by hosting community events and acting as a joint gathering space.
- Connecting human capital between the region and the university through students
 - UTPB has the ability to connect students with emerging opportunities in the region, helping to make the local economy stronger and more diverse.
- The university as an inclusion player
 - UTPB can facilitate more-equitable representation in key regional industries as it grows into a more prominent role as a hub.

The university as a connector/hub

UTPB is in a unique geographical position, situated between the two cities of Midland and Odessa. Separated by only 23 miles of open road, these two communities host vastly different economies: Midland is home to primarily knowledge-based jobs, and Odessa relies heavily on production-focused employment. In 1973, UTPB was founded and chose Odessa as its home, which upset the residents of Midland. From that point forward, Midland and Odessa's relationship has been rocky, and each of our four interviewees remarked on the difficult relationship between Midland and Odessa. Despite this consistent perception of conflict between the cities, each interviewee had a different perspective, which leads us to believe that UTPB has the ability to mend this fractured relationship. Universities are renowned for uniting diverse communities, mainly due to the large number of activities and events they host. To help strengthen the relationship between Midland and Odessa, UTPB can serve as a connector by engaging the community with concerts, movies, speakers, and more. UTPB is not only a place for students but also a place for two communities to come together as one.

Connecting human capital between the region and the university through students

Currently, the region and university are out of sync, struggling to connect students with open jobs in the local economy. The community and anchor assessments revealed that females and minorities are underrepresented in high-paying industries. UTPB has a difficult task in navigating the power of the Oil and Gas industry as it develops human capital in the region. When conditions permit, the Oil and Gas industry will offer large salaries and bonuses to entice individuals to work instead of pursuing other jobs. This leaves the region's economy susceptible to an unsustainable cyclical pattern and creates a challenging living environment. Even though the industry employs college-educated workers, interns are typically chosen from state universities outside the community, leaving behind students in the region. One of the goals of a university is to bolster the economic conditions of its community through the matriculation of students who enter the workforce. Presently, UTPB's students and local economy are not achieving this objective. UTPB has the ability to repair this linkage by working with businesses in the region to promote employment after graduation. To continue to connect students with regional employers, the university must stay abreast of emerging industries and the skills that future employers are looking for. UTPB can also serve an important role as an evaluator of this skills pipeline, communicating on behalf of students and faculty to ensure that the skills cultivated on campus are understood and valued by regional industry. As a connector in this pipeline, the university can drive faculty research in areas of regional importance while working to support the development of skills that will enable students to meet regional needs. This may mean featuring retraining programs in growing areas, like aerospace, or advocating for the university in regional business coalitions as they discuss strategy and planning.

The university as an inclusion player

As an anchor, UTPB is an inclusion player in the region. Both quantitative research and stakeholder engagement highlighted the importance of examining residents who are sidelined by the oil boom-and-bust cycle. UTPB can serve a supportive role for these students, particularly those who have left school to work in oil fields but have not been able to weather the boom-and-bust cycle. Many of these students miss out on the opportunity to return to school, and stronger collaborations with local junior colleges can help to bring them back up to speed before they return to UTPB full time. This effort aligns with the broader goal of UTPB as a community hub and the natural community-building that can arise from collective pursuits

of knowledge and creativity within the region. The university can leverage its own diversity and inclusion efforts in support of similar efforts in the business community in order to better align regional industry with both the student body and local demographics. UTPB is a recognized Hispanic-Serving Institution and Minority-Serving Institution, and highlighting these strengths as it builds up internship programs and relationships with local industry will allow the university to support and evaluate diversity and inclusion efforts in the region.

Our next area of exploration focused on understanding university-led innovation, research, and commercialization, as well as UTPB's unique opportunities and challenges.

Innovation, Research, and Commercialization

Understanding the factors for university innovation, research, and commercialization (IRC) can help unite a university with its community and synchronously support regional economic development. In order to understand UTPB's current capabilities and potential and benchmark best practices, semi-structured interviews were conducted with a variety of experts. Insights on the inner workings of UTPB were obtained by speaking with Brian Shedd, newly appointed executive director for UTPB's Office of Innovation and Commercialization, and Scott McKay, dean of the College of Arts and Sciences. To understand best practices in university IRC, interviews were held with Gregory Pogue of the aforementioned IC² Institute, and Sarah Goforth, executive director of the Office of Entrepreneurship and Innovation at the University of Arkansas. The University of Arkansas was previously identified as an attainable peer, and the strategies implemented there would appropriately apply to UTPB. Finally, in order to understand the relationship between the university and the local economy, information was obtained from interviewing Sara Harris, executive director at the Midland Development Corporation.

Key Takeaways

- Concentration of strengths is necessary to efficiently use research dollars
 - Universities with limited budgets should focus on a few existing strengths in order to reap the largest possible benefit. By coordinating and collaborating, as opposed to operating in a dispersed framework, research and technology transfer can be maximized.
- External factors play a key role in attracting investment
 - An institution's ecosystem—its relationships, cost of living, and geography—is the most relevant factor in attracting entrepreneurs and investors. At the same time, research and technology investments that center and benefit the local community should be prioritized.
- The university and region should maintain connections and communication
 - Successful anchor institutions must have their finger on the pulse of the local economy by establishing relationships with the entrepreneurial business community and creating cross-talk between institutional sources of research and funding. A university can better tailor its offerings and graduates by maintaining an ongoing dialogue regarding the needs of the local economy.
- Internal communication is required to facilitate collaboration
 - Widespread, overt systems for the regular exchange of knowledge on research priorities, research progress, and opportunities are necessary to support the above factors. Appointing a committee or office to catalyze discussion and collaboration within an institution can better help strengths coalesce into action.

Concentration of strengths is necessary to efficiently use research dollars

UTPB offers more than 50 degrees and employs more than 250 faculty members across five colleges. Clearly, there is a diverse set of options for research and commercialization. However, as a developing anchor in a vulnerable region, the university faces budget constraints that tier-one research institutions often do not. Our dive into best practices reinforced the importance of efficiently utilizing a small budget by forming a solid research base for commercialization. In order to effectively deploy resources, UTPB must identify its unique strengths among faculty researchers and aggressively fund those avenues of investigation that show promise. For example, our interviews revealed existing strengths and priorities in the fields of biotechnology, cybersecurity, and future-focused energy generation. Communicating these priorities throughout the region and within the university under a unified vision will help translate funding into outcomes with full fidelity. These unique and valuable strengths differentiate the university, and that differentiation produces commercializable innovation.

External factors play a key role in attracting investment

Attracting investment is a crucial component of a vibrant innovative environment. To this end, our interviews revealed that external factors, not faculty, are the drivers in attracting investment. Such factors include, but are not limited to, the presence of powerful local institutions, a low cost of living, and a particularly desirable geographic area. Rather than solely focusing on the quality of university research, entrepreneurs and investors look to these aspects of a community when deciding where to locate. UTPB needs to identify or create and then promote the aspects of Midland-Odessa—its above-average incomes, its newly constructed spaceport—that will appeal to sources of funding and innovation. Additionally, these efforts ought to draw upon existing human capital and resources. Community involvement is a precondition for long-term success, and connecting current UTPB capital to emerging regional opportunities will yield an attractive environment for investment.

The university and region should maintain connections and communication

An anchor must have its finger on the pulse of the local economic region in order to serve its needs. By knowing the needs of local business leaders, community developers, and investors, the university can tailor not just its guidance of students but also research and commercialization priorities. At the same time, a common understanding of success can benefit the university by promoting opportunities for private-sector research and collaboration for faculty participation and ongoing workforce development for students. Establishing relationships with the entrepreneurial business community, creating cross-talk between nonprofits, and keeping investors informed can all drive institutional sources of research and funding. In the absence of these meetings, the university and the economic development organizations of the region each expend additional efforts toward the same goal of prosperity. As applied to UTPB, maintaining formal, regular, and ongoing communications between the Midland Economic Development Council and the Office of Innovation and Commercialization would go far in creating synergistic outcomes.

Internal communication is required to facilitate collaboration

Creating widespread and overt internal systems for communication on research priorities, progress, and opportunities is necessary to facilitate collaboration. As previously explained, concentration of research resources will allow for the most efficient use of research funding. A component of facilitating that concentration is ensuring that faculty, department heads, and deans can all be made aware of internal

research activities and opportunities. The university has made great strides in establishing an office dedicated to innovation, research, and technology and appointing Dr. Shedd. The next step is to capitalize on these assets by facilitating the transfer of ideas and information. While individual subject areas and deans may be personally familiar with these activities, accessing that information can be difficult without an easy or open point of access. A system of communication that is distributed and decentralized, such as weekly or monthly reports, can better elucidate research needs and opportunities for willing participants and those charged with promoting university research and technology transfer.

Following our investigation of innovation, research, and commercialization best practices and opportunities, we turn to an exploration of regional workforce needs in the Healthcare sector, as well as UTPB's role in facilitating that development.

Healthcare

Healthcare is an essential industry in the Permian Basin region. Given the tremendous impact of the COVID-19 pandemic, the importance of a thriving Healthcare industry has come to the forefront of public attention. In addition, due to the Permian Basin's rapid growth as a region, we anticipate a steadily growing demand for healthcare. In order to better understand the importance of this cross-sectoral ecosystem, semi-structured interviews were conducted with a variety of stakeholders. Donna Beuk, dean of the College of Health Sciences and Human Performance at UTPB, provided insight into workforce preparation and the unique role of UTPB in the Basin. Jose Huerta spoke on UTPB's Healthcare Management program in the College of Business and the role of graduate education in workforce development. Susan Spratlen, the director of healthcare strategy at the Permian Strategic Partnership, highlighted the strengths of the Healthcare sector in the Basin along with funding needs and opportunities for collaboration between private- and public-sector stakeholders. From these discussions, came two key takeaways regarding Healthcare in the Permian Basin.

Key Takeaways

- Opportunity exists for regional collaboration in Healthcare
 - While Healthcare is an essential industry for all communities within the Permian Basin, Midland and Odessa have healthcare systems that do not appear to be connected or collaborating. Increasing collaboration between the multiple healthcare systems in the region can improve the coordination of care throughout the Basin and more effectively address overarching systemic challenges.
- Local education pipeline could better source workforce needs
 - Many students who enter the region to gain workforce experience or earn a degree leave shortly after graduation. The lack of continued reinvestment from graduated students back into the community is a trend that drains the region's resources. However, students who originate from the Permian Basin are more likely to stay in the region following graduation. A local education pipeline that strategically invests in local students would benefit the region's overall workforce stability moving forward.

Opportunity exists for regional collaboration in Healthcare

Local K-12 public schools, community colleges, universities, medical schools, and the private sector all intersect within the Healthcare ecosystem. The Permian Strategic Partnership, a regional coalition of 17

energy companies dedicated to addressing the region’s current and future challenges, has developed a relationship with UTPB in order to better fund Healthcare workforce development and provide opportunities for local students to pursue a degree in healthcare. The Permian Strategic Partnership has developed a \$10.6 million scholarship fund to cover tuition and fees for multiple undergraduate students in healthcare programs at UTPB who are permanent residents of the Permian Basin. This scholarship program is a four-year, renewable award. The region can look to this partnership as a model to formalize other relationships between stakeholders in the ecosystem in order to train and support local Permian Basin students who are interested in continuing to invest in the region. These relationships benefit all regional stakeholders through the shared value in healthcare investments. When all sectors invest in Healthcare, there are greater job opportunities for graduating students, increased options for community-engaged faculty research, a more secure flow of workers into the Healthcare industry, and innovation resulting from greater collaboration between academia and the community. Increasing collaboration across sectors can increase the return on investment for all stakeholders.

Local education pipeline could better source workforce needs

Retaining students who originate from outside the region is a key challenge for the Permian Basin because these students tend to stay in the region only to complete a degree or gain work experience before leaving for other cities around Texas. As a result, the region invests more in recruited individuals but is unable to benefit from their skills and contributions long-term. In the Healthcare field especially, it is essential that students who gain workforce experience and training in the Basin will continue to serve the region in years to come. Throughout the community engagement phase, community leaders suggested the development of a “grow our own” pipeline, in which individuals who are from the Basin can become equipped to lead their own community. This pipeline would focus on collaboration among K-12 public schools, including Big Spring Independent School District (ISD), Ector County ISD, Midland County ISD, and Pecos-Barstow-Toyah ISD; Midland College and Odessa College; and UT Permian Basin to support students and help them continue to grow their education and leadership opportunities. Providing more opportunities for dual credits to count toward certifications and associate degrees at local community colleges and then developing degree opportunities that seamlessly integrate community college credits into UTPB coursework would be a powerful first step in better connecting educational opportunities within the Permian Basin. According to research conducted in this community engagement phase, most community college graduates do not leave the region. Therefore, it is wise to invest in a locally sourced education pipeline to raise up the next generation of regional leaders.

Having established the importance of collaborative investment in a Healthcare workforce pipeline, we next investigate the experiences of UTPB students on campus as they form communities and look to enter their careers.

UTPB Campus Experience

Understanding a university’s campus experience can provide insight into how its students relate to its community and can forecast the long-term health of this relationship. To better understand the UTPB campus experience, we held semi-structured interviews with Dean of Students Corey Benson, Vice President of Student Affairs and Leadership Becky Spurlock, Administrative Services Assistant Jennifer Chavarria, and a group of student leaders. For insight into best practices for student engagement, we interviewed the former president of Campus Philly, Deborah Diamond. Campus Philly is an organization

whose goals include fueling growth in Philadelphia by improving student engagement with the region and improving the city's educational attainment. We emerged from these interviews with three key takeaways related to the current state of student engagement:

Key Takeaways

- UTPB is a commuter school
 - UTPB's status as a commuter school shapes its efforts to engage its students and implies different approaches to understanding and improving its campus experience.
- Summer internships are key to successful engagement
 - Well-designed summer internship programs improve student retention and build ties between students and the region. The university's Career Services office should work to improve the quality of its students' local internship experiences.
- COVID has complicated community-building efforts
 - The effects of COVID are unavoidable when considering efforts to improve the UTPB campus experience.

UTPB is a commuter school

Our engagement with student services faculty and student leadership reiterated the foundational importance of the university's status as a commuter school. Student leadership reported commutes ranging from 10 to 45 minutes, while faculty indicated that hour-long commutes were not unusual. As most students come from the region, many find it practical to stay at home: High housing prices often mean the most affordable locations are either in on-campus housing, farther out into Odessa, or even into Midland. Lengthy commutes contribute to disengagement among students and make it more difficult to arrange amenities around them. Despite these challenges, the university has made strides to improve the student experience on campus in recent years. Both faculty and students pointed to the university's ongoing campus transformation plan as a positive development. Discussions with former Campus Philly president Deborah Diamond highlighted another potential approach to this engagement challenge: By holding both on- and off-campus events in Philadelphia, with the goal of getting students to engage with the region and build connections with other students, Campus Philly found that it could improve the student experience and increase student retention in the region. The most successful schools in the program viewed their welfare as interconnected with that of their region and were led by administrators who viewed community engagement as a key part of the student educational experience.

Summer internships are key to successful engagement

Strong summer internship programs were another consistent theme throughout our engagement. Discussions with student services faculty pointed to ongoing efforts to bulk up the university's internship programs, with an eye on creating community linkages and working with local businesses. These investments in UTPB's summer internship program were further acknowledged by student leadership, who pointed to the career center's growth in recent years, its use of Handshake, and on-campus internships as key characteristics of ongoing efforts. Discussions with Dr. Diamond revealed that summer internships were central to Campus Philly's success in increasing student retention and engagement with the region. Successful internships were paid and treated like entry-level jobs, and they included students in higher-level meetings and strategic tasks beyond the rote duties of their daily work experiences. A "summer experience" program operated through the city's Chamber of Commerce, which promoted city employment

to graduates and new college students, was another feature of Campus Philly's engagement work. This summer-internship focus complemented efforts to engage students with Philadelphia during the school year.

COVID has complicated community-building efforts

COVID has undermined established forms of community engagement, hindered the development of new engagement strategies, and complicated efforts to improve health and psychiatric services at UTPB. Student leadership reported a decline in student involvement in extracurricular activities and student life events since the beginning of the pandemic. Despite this, the increase in hybrid events has been noted by some as a positive. Faculty leadership highlighted the difficulty in building engagement with the university's football team during a pandemic, on top of other challenges. Both students and faculty noted the strains the pandemic placed on the university's health services. In sum, the impacts of the pandemic are unavoidable when addressing the campus experience.

Having investigated the student experience, we turn to the other major component of UTPB as an institution: examining the key factors that shape the university's ability to attract and retain top academic talent.

Faculty Recruitment and Retention

UTPB possesses a community-oriented faculty that is committed to leveraging their skills in addressing regional challenges and improving quality of place. Tailoring research opportunities to regional needs while assisting faculty in accessing robust services and amenities can help achieve these outcomes.

Key Takeaways

- Cost of living and inadequate compensation
 - Housing affordability concerns among faculty is partially tied to stagnant salaries and broader economic trends.
- K-12 education quality concerns
 - Faculty indicate mixed feelings about the region's educational opportunities.
- Faculty integration into the business community
 - Collaboration between faculty and business organizations can spur regional research opportunities.

Survey Overview

For this portion of the engagement, we distributed a survey to faculty members within UTPB's five colleges: Arts and Sciences, Business, Education, Engineering, and Health Sciences and Human Performance. The survey aimed to gauge faculty satisfaction on a range of issues, including sense of community, amenities, affordable housing, K-12 education, healthcare accessibility/quality, research interests, and transportation.

Respondent Demographics

We prioritized demographic, occupational, and family diversity to ensure that our engagement aligns with representative community interests. Of the seven respondents, five are faculty with less than 2 years' experience teaching at other higher education institutions. Of the remaining respondents, one possesses 2-

5 years of external higher education experience, while the other has more than 20 years of occupational expertise. Of the respondents who identified their job title, one is professional-track faculty, two are tenure-track assistant professors, two are tenured/tenure-track associate professors, and one is a tenured professor. Racially and ethnically, four respondents identify as White, one as Black, and two preferred not to answer. Regarding gender identity, three identify as male, three as female, and one preferred not to answer. As for family structure, three describe their household as single, one as married/significant other, and one as married/significant other with kids, while two preferred not to answer.

Cost of living and inadequate compensation

When presented with the statement “Housing in my community is affordable,” four participants selected “agree,” two selected “disagree,” and one selected “strongly disagree.” None selected the “strongly agree” option. When respondents were asked to rate the survey categories on a scale of 1-5 (with 1 being “not important” and 5 being “extremely important”), housing affordability emerged as the top priority. Three respondents rated it as a 5, while another three participants rated it a 4. Thus, housing affordability is a highly significant priority for six out of seven respondents. This trend is unsurprising given that the region’s volatile housing market dovetails with oil price fluctuations.

Recruitment and retention challenges are also linked to faculty compensation. Associate Dean Wayne Counts, who is also a professor of accounting, vocalized this concern during our team’s stakeholder engagement meeting. Dr. Counts noted that faculty have received only a single 3% raise during his 18-year tenure. In his view, this limited compensation is particularly concerning in the face of an unstable housing market and broader inflationary pressures.

K-12 education quality concerns

The survey data revealed a mix of dissatisfaction and indifference among faculty with regards to regional K-12 education and affordable housing options. For example, only two respondents are satisfied with the Permian Basin’s K-12 options. Three respondents indicate mixed feelings, while two express overall dissatisfaction. Quality of schooling ranked as a similarly significant priority for only four of the seven respondents. Yet, unlike other factors such as healthcare quality or commute timeliness, it received comparatively unfavorable results.

Faculty integration into the business community

The survey reveals durable faculty cohesion and community ties. For example, six out of seven respondents express satisfaction with the degree of support UTPB offers their research pursuits. The same proportion feels a strong degree of connection with their students, coworkers, and community. This level of emotional investment can be leveraged into research opportunities that are tailored to the region’s specific needs. Notably, five of the respondents expressed a desire to participate in these types of research projects.

Ms. Spratlen expressed concerns over the lack of faculty representation within regional and local business associations. Integrating faculty into organizations like the Permian Strategic Partnership or the Midland Odessa Business and Estate Council could spur faculty research projects that align with strategic regional interests. Dr. Counts noted that the semesterly changes to class schedules make faculty involvement in these organizations a challenge.