

Report
of
The Washington Advisory Group, LLC
on
Research Capability Expansion
for
The University of Texas System

The University of Texas of the Permian Basin

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The Washington Advisory Group, LLC

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**Report of The Washington Advisory Group on
Research Capability Expansion for
The University System of Texas
At Brownsville/Texas Southmost College (UTB/TSC), Pan American (UTPA),
of the Permian Basin (UTPB), and at Tyler (UT-Tyler)**

INTRODUCTION

The Washington Advisory Group (WAG) was engaged by the University of Texas System (UT System) to examine the research capacities and potential for expansion at eight of the UT System institutions. WAG divided the eight institutions into two groups and established teams to work with each of the two groupings. This report is the second of two reports and focuses on the four smaller, developing institutions listed in the report title.

As in its review of the larger institutions, our WAG team was asked to review information provided by the universities as well as information gathered independently before and after each visit. Appendix 1 details the scope of work for this study, including six questions to be addressed for all of the universities and four questions specific to each of the developing institutions reviewed in this report.

We held meetings with administrators, an array of faculty from many disciplines, community and business leaders, and periodically with students. Based on our review, the discussions and materials, and reports developed by each team member around the university he or she visited, we developed the individual reports that examine similar factors at each of these developing institutions.

Appendix 2 contains the biographical sketches of the team of individuals that carried out this project. We selected the members of this team based on criteria tailored to a review of developing institutions, including knowledge about university research and federally funded research; broad experience at and knowledge about community colleges, which are critical to each of the universities we visited; small college backgrounds; strong interests and expertise in minority-related issues and programs; and experience with economic development issues. We also chose at least some team members with specific backgrounds related to Texas. The goal was to provide a review team with the collective judgment, background, experience, and expertise to offer the UT System an authoritative review and assessment. Appendix 3 provides the dates and a broad overview of each of the visits to the four universities covered in this report.

Overview

The developing institutions we studied have varied strengths, but will have to make considerable strides to attain national and international research stature. According to the National Science Foundation's rankings of universities, only one of the four institutions in this report ranks among the top 589 colleges and universities in research expenditures for FY2000. With total research expenditures of \$1.6 million that year, UT-Pan American (UTPA) ranks 378th. By contrast, the four larger Texas universities WAG studied all rank among the top 250 universities. Clearly, the four developing or emerging campuses occupy a different range on the research spectrum. The research expenditures of the smallest of the larger campuses (UT-San Antonio), for example, totaled \$11.3 million in FY2000, while research expenditures at the largest of the emerging campuses (UTPA) totaled approximately \$2 million.

Using FY2002 data, the Texas Higher Education Coordinating Board more recently provided a basis for reviewing several developing universities in Texas (see Table 1 below). In FY2002, UTPA research expenditures totaled \$2.6 million; UT-Brownsville/TSC's (UTB/TSC) reached \$1.3 million, and UT-Permian Basin (UTPB) and UT-Tyler's reached \$980,000 and \$375,000, respectively.

Table 1. Research Effort and Sponsored Programs
(Total Expenditures for Research and Other Research-
Related Sponsored Programs by Source of Funds, FY02)¹

University	Total
Stephen F. Austin	\$5,583,051
UT-Brownsville/TSC	\$1,286,638
UT-Permian Basin	\$ 980,905
UT-Pan American	\$2,605,758
University of Houston Downtown	\$1,270,494
Texas A&M International	\$ 677,346
UT-Tyler	\$ 375,821
Texas A&M Commerce	\$ 629,496

It is also worth considering the status of the four institutions' research strength in terms of the Carnegie Foundation classifications.² UTPA is the farthest along with its doctorate program in business and imminent doctoral program in education. Its next doctoral programs are likely to be in science/engineering, as a new dean is actively focusing on adding to the strength of the research faculty. This focus is worthwhile for its own sake and is relevant to the Carnegie rankings.

Research activity could perhaps be most enhanced via collaboration with co-located Regional Academic Health Center (RAHC) facilities. The new UT System executive vice

¹ Source: Texas Higher Education Coordinating Board, *Research Expenditures (FY02)*, Total Expenditures for Research and Other Research-Related Sponsored Programs by Source of Funds, FY02, Institutional Research and Planning, 09/25/03.

² The Carnegie classifications can be found at: <http://www.carnegiefoundation.org/Classification/>. They are as follows:

Doctorate-granting Institutions

Doctoral/Research Universities-Extensive : These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. During the period studied, they awarded 50 or more doctoral degrees per year across at least 15 disciplines.

Doctoral/Research Universities-Intensive : These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. During the period studied, they awarded at least ten doctoral degrees per year across three or more disciplines, or at least 20 doctoral degrees per year overall.

Master's Colleges and Universities

Master's colleges and Universities I: These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the master's degree. During the period studied, they awarded 40 or more master's degrees per year across three or more disciplines.

Master's Colleges and Universities II: These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the master's degree. During the period studied, they awarded 20 or more master's degrees per year.

chancellor for health affairs should make considering such opportunities a priority. In fact, in their strategic review, the System chancellor and vice chancellors might consider whether the RAHC located at UTPA, the one located on the UTB campus, and the RAHC in nearby Harlingen could jointly collaborate with research programs at both UTPA and UTB. Such an arrangement could significantly boost the research activity of all parties on a mosaic of projects. With a successful outcome, both UTPA and UTB could achieve the Carnegie classification of Doctoral/Research Universities-Intensive within a ten-year planning horizon.

Similarly, a significant opportunity for research collaboration between UT-Tyler and UT Health Center-Tyler (UTHC-Tyler) is under discussion at the highest levels of their administrations. The UT-Tyler report covers the details of this discussion and its robust potential for both institutions. Although the level of externally funded research at UT-Tyler is quite low, the institution has already positioned itself for a quantum leap in active research projects via collaborations with UTHC-Tyler. Our optimism about this potential growth is based in part on UT-Tyler's track record in research collaborations with other more distant research partners, including Texas A&M University, Stephen F. Austin University, and the National Aeronautics and Space Administration. While the metrics for UT-Tyler do not yet show their full impact because these collaborations are credited to the partner institutions, the collaborations provide UT-Tyler with a growing and effective means to bootstrap its research future. UT-Tyler could well achieve Doctoral/Research Universities-Intensive Carnegie classification within a decade. All UT System institutions would benefit if the system began facilitating and rewarding such collaborations in its strategic planning.

In the two Carnegie classifications for Master's Colleges and Universities, all four of the campuses seem positioned to exceed the minimums.³

In general, these emerging institutions recruited their faculty to deal with the crush of entering undergraduate students in several of the most economically challenged regions of the state: East Texas, West Texas, and particularly South Texas. These are largely non-traditional students, meaning students who are employed in part- or full-time jobs, daily commuters to campus, or supporting families, in addition to often being first-generation college students. As a result, the enrollment at these institutions continues to increase rapidly, and students face extreme pressures in meeting the time commitments of college work, whether for instruction or research. Yet, in all four of the emerging institutions, some faculty have dealt with the instructional loads and successfully developed and sustained nationally competitive research projects. These exemplary faculty provide a benchmark for the research future of the four emerging campuses.

It is important for these four developing institutions to pursue research at the same time that they must succeed in educating a population so desperately requiring a college education. An institution that makes its primary contribution to a community by educating its children—children for whom education is the primary hope for a better life—may believe that research activities detract from its mission. This education brings value to the students and their futures, as well as the futures of their families and communities. UTPA and UTB/TSC, for example, provide a vital service to Texas with their work on its southern border, albeit a perhaps different service than more research-intensive institutions in the UT System. So why should the same institutions that provide this crucial educational service also focus on research? We suggest there are several answers:

³ See Carnegie definitions in footnote 2.

- First, these regions of Texas face major issues research can address including health, K-12 education, and indigenous business development. Three of the four campuses, for example, reside near parts of the UT Health Center complex. All three of these health-related centers can multiply their beneficial affects to the state via selected collaborative research projects with neighboring UT campuses, both in public health areas and through the eventual commercialization of intellectual property that the sponsored research will likely generate. To be specific, UT-Tyler is near the UT Health Center-Tyler; UTPA is co-located with RAHC facilities associated with the UTHSC-San Antonio; and the RAHC at UTB/TSC is affiliated with the UTHSC-Houston.
- Second, educational research conducted and applied with the schools of the region—particularly if it focuses on improving the quality and quantity of college-prepared high school graduates—will directly improve the region’s economic strength and vitality. Virtually all of the students entering these institutions have graduated from the region’s high schools or community colleges; most will choose to remain in the area. Students at these campuses have also had many opportunities to pursue higher learning in part because of early outreach programs, including GEARUP⁴, TRIO⁵, and similar national programs designed to improve educational effectiveness with at-risk populations, and these programs often get implemented through cooperative projects between schools or colleges of education and K-12 school systems. Further, virtually all of the teachers in the K-12 schools around these developing institutions received their education and professional training at regional UT campuses.
- Finally, the colleges of business at these emerging campuses can have a disproportionately positive effect on the success of businesses in their regions. For example, these colleges can influence practice through research that speeds the development of new businesses and improves the competitiveness of existing businesses. The College of Business at UTPA is already engaged in such research through its doctoral program. In addition, the UTPB business dean, one of the most published scholars at that University, has set a standard of research and refereed research publication that is a model for her colleagues across the campus.

We should also note that the civic and political leaders of each region expect the local university to play a critical part in their community’s growth and development. This was clear in the personal meetings the WAG team held with the community leaders in each region. It is no wonder they feel so strongly. Each university ranks as one of the largest employers and purchasers of goods and services in its region, and educates or provides professional certification for many if not most of the indigenous workers in the region.

But the mutually beneficial research projects in health, education, and business relate by no means exclusively to the state’s three less-developed regions. As the reports indicate, each campus has a number of other research bright spots. The detailed campus reports describe other

⁴ The GEARUP (Gaining Early Awareness and Readiness for Undergraduate Programs) program is a discretionary grant program funded by the U.S. Department of Education designed to increase the number of low-income students who are prepared to enter and succeed in post-secondary education.

⁵ TRIO refers to a series of programs funded under Title IV of the Higher Education Act of 1965 to help low-income Americans enter college, graduate and move on to participate more fully in America’s economic and social life.

benchmark opportunities in the sciences, engineering, and mathematics—as well as humanities and the arts.

In summary, we would prioritize the ideal objectives of each of the emerging campuses as follows:

1. Educate largely non-traditional students.
2. Continually develop selective, high-quality research programs.
3. Actively participate in the economic development of their communities.
4. Engage in programs of community service for the citizens of their region with special needs.

The campuses must succeed at the first priority to achieve the second. Success in the latter two priorities also requires success in both the first and second. All four campuses are making transitions in dealing with these priorities and would benefit from the UT System's advice and support.

The campuses will probably face their toughest decisions when choosing which areas of research they can develop to a competitive level while maintaining the high quality of their educational programs. They will have to choose carefully to avoid research tracks in which they are unlikely to be competitive. But it is doubtful the educational programs can approach or maintain competitiveness without a critical mass of relevant and respected research programs. Without such a critical mass, neither the best senior faculty nor the best young faculty can be recruited or will stay. The same goes for the best students, a pool of talent these regions should fight to keep.

Some Aggregated Perspectives

The four developing institutions covered in this report and the four larger UT institutions reviewed separately share some similarities. In the report on the larger universities, under “The Path to Tier 1 Status,” we note several issues that will determine how institutions will progress and succeed in reaching the Tier 1 goal. While the institutions covered in this report do not seek that lofty accomplishment, the issues addressed for the larger institutions apply as well to these developing institutions, if to a lesser degree. For example, the point about the need for a strategic plan in the larger institutions also applies to the emerging institutions. Likewise, since the emerging institutions are unlikely to see increases in state appropriations, they also must identify new resources to fund increased research capacity. Similarly, because of state resource constraints, the emerging institutions must also seek increased funds from the same sources as their larger peers, including the federal government, industry, alumni and foundations, and tuition and fees.

All UT institutions also face the same pressures in recruiting faculty and competing with other institutions inside and outside the state for talent. No matter the campus, it is costly to recruit faculty. And the emerging institutions, like their larger peers, must encourage and foster a faculty research culture. In this respect, the System might consider establishing a research professorship program to provide additional supplemental support and statewide recognition to all campuses attempting to hire outstanding research faculty.

As noted with the larger institutions, unproductive competition and historical strife seriously hinder relationships between the institutions, particularly UTPA and UTB/TSC. Their

individual and collective future would improve if collaboration replaced virtual non-communication. New leadership at UTPA offers that possibility. The WAG teams agree that, no matter how large the institution within the UT System, it would benefit from research and educational collaborations. The emerging institutions have fine examples of such activities, including with community colleges, other academic institutions, industry, federal agencies, and state and local governments. We strongly encourage collaborations, not least because they foster intellectual breadth and lead to stronger proposals for support and stronger final projects.

Our team and the individual reports also lead us to conclude that new graduate programs at the emerging institutions, particularly at the Ph.D. level, should develop in a highly selective fashion. Professional master's degree programs should only be instituted where they can be justified. In several instances, the emerging institutions have programs of national stature and distinction, such as gravitational wave physics at UTB/TSC; nursing at UT-Tyler; and the arts facility at UT-Permian Basin to name a few. But issues of national recognition are less paramount with the emerging institutions. These institutions would be more likely to achieve success and add optimum value within their region and Texas by focusing on programs the region needs rather than on the national stage.

Though technology transfer will play a more significant part in the immediate future of the larger and more developed institutions, the developing institutions also may well have opportunities to commercialize intellectual property and potentially stimulate the creation of new companies. If they do so, the developing institutions could have a more significant impact on both the type and scale of economic development in their regions.

The reports on the developing institutions in the UT System that follow discuss each of the four institutions in substantial detail.

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN (UTPB)

Overview and Mission

HISTORY AND MISSION

The University of Texas at the Permian Basin (UTPB) was authorized in 1969 by the 61st Legislature of the State of Texas as an upper-level campus to offer bachelor's and master's degree programs. In 1991, the University was authorized to add both freshman and sophomore classes. In both the undergraduate and graduate catalogues provided to the WAG team, the University is described as "a general academic teaching institution." The UTPB vision calls for "continued and sustained growth in academic programs, student services and the student body while encouraging continued improvement in our academic quality."

In concert with the mission of the University of Texas System, the UTPB mission is:

To provide quality education to all qualified students in a supportive educational environment; to promote excellence in teaching, research and service; and to serve as a resource for the intellectual, social, economic and technological advancement of our diverse constituency in West Texas.

THE WEST TEXAS REGION

UT-Permian Basin is located in one of the richest oil-and natural gas-producing regions in the world, with two relatively large cities nearby: Odessa, the home of the campus, and Midland, which is about thirty miles away. The University serves a large geographic area, designated as West Texas, which includes some twelve counties with a population of approximately 350,800 (2000 U.S. census).

The twelve counties that the university considers its primary service area include Andrews, Brewster, Crane, Ector, Glasscock, Howard, Martin, Midland, Pecos, Reeves, Ward, and Winkler. In 2000, Glasscock County had the smallest population—1,406—while Ector County had the largest, with a population of 121,123. In the 2000 census, Midland County had a population of 116,009.²²

The overall West Texas population is not growing, but is facing major demographic shifts:

- The smaller, rural counties have actually declined in population, according to the 2001 estimates by the U.S. Census Bureau. For example, while Andrews County had a population of 13,004 in 2000, the 2001 estimate was 12,795, a 1.6 percent loss. The census estimates that Pecos County's population experienced a 2.7 percent loss from 16,809 in 2000 to 16,362 in 2001.
- At the same time, estimates show that the two larger counties—Ector and Midland—experienced slight population increases from 2000 to 2001, namely, 0.1 percent and 0.3 percent, respectively, compared to a 2.3 percent increase in Texas as whole.

²² "Texas Quick Facts from the U.S. Census Bureau," <http://quickfacts.census.gov/qfd/states/48000.html>.

- In 2000, the percent of Hispanics in the West Texas area was 37 percent compared to 32 percent for Texas.

Other relevant data on these two West Texas counties and the state of Texas are reflected in the following table:

Table 5. Demographic/Economic Data for Ector and Midland Counties and for Texas²³

Demographic/County	Ector	Midland	Texas
Percent Hispanic	42.4	29.0	32.0
Percent African American	4.6	7.0	11.5
High School Graduates— percent 25 years or older	68.0	79.2	75.7
Bachelor’s or higher degree— percent 25 yrs or older	12.0	24.8	23.2
Per capita Money Income in 1999	\$15,031	\$20,369	\$19,617
Mean Value of Owner Occupied Units	\$47,700	\$73,400	\$82,500

Several key facts about pre-K through 12th-grade enrollment in the public schools in West Texas are also worth noting:

- According to the Texas Education Agency, this student population has actually decreased from 84,365 students in 1997-98 to 76,139 in 2002-2003, a decrease of approximately 10 percent.
- At the same time, the proportion of Hispanic students grew from 49.0 percent in 1997-98 to 54.4 percent in 2002-03. Meanwhile, in 2002-03
 - African Americans represented 5.6 percent of the total enrollment.
 - Native Americans represented 0.4 percent.
 - Asian Americans represented 0.6 percent.
 - White, non-Hispanic students represented 44.6 percent.

Thus, Hispanics are now the largest ethnic group in the region’s public pre-K through 12th grade schools.

The total number of graduates of the high school class of 2002 in the region was 4,735. Of these, 49.6 percent were White, non-Hispanic; 45 percent were Hispanics; African American were 4.5 percent; Asian/Pacific Islanders were 0.5 percent; and Native American graduates were 0.4 percent.

According to data from the Texas Education Agency, in 2002-2003 more than one half of these students (54.4 percent) were economically disadvantaged and 11.1 percent were limited-English Proficient (LEP) students.²⁴

²³ Ibid.

²⁴ Texas Education Agency. *Academic Excellence Indicator System, 2002-03 Region Profile*, provided by UTPB staff in the Education Service Center.

STUDENT DEMOGRAPHICS²⁵

In 2002, UTPB headcount enrollment was 2,705, up from 2,409 in fall 2000. The demographic data for fall 2002 is as follows:

- The White, non-Hispanic students represented 61.9 percent of the total.
- Hispanic students represented 32.3 percent of the total.
- African American students made up 3.8 percent; Asian Americans, 0.8 percent; and Native Americans, 0.6 percent.
- Almost three-fourths (73.9 percent) of students enrolled were undergraduates.
- About one-quarter of the students were graduate students; 14.6 percent were enrolled in master's programs and 11.5 percent were post-baccalaureate students.
- About two-thirds of new students admitted were transfer students.
- About one-third of the new students admitted were freshmen.
- Almost two-third of the total student body were women.
- About 70% of the new students were first-generation college-going students.
- One quarter of the first-year students worked 25 hours or more off-campus.
- Less than 10% lived on campus.

Enrollment at UTPB is projected to increase to 3,413 students by 2010 and to 3,504 students by 2015.²⁶ These projections may need to be reviewed, as UTPB has had one of the largest percentage increases in student populations within the UT System over the past year or two. This proportion was on a small base, however. For example, in 2001, the student headcount was 2,409; by 2003, this headcount had increased to 3,041 students.

Of the four developing institutions in the UT System that this team visited, UTPB's student population most accurately mirrors the ethnic composition of Texas as it is and will be in the near future. The other three institutions have relatively homogenous student populations. Both UTB/TSC and UTPA are heavily Hispanic. UT-Tyler is predominantly White with smaller percentages of Hispanic and African American students.

A UNIVERSITY IN TRANSFORMATION

In our opening session with the President and his senior administration, we heard of an institution undergoing a transformation in every aspect of its operations—a transformation based on growth in enrollment, growth in academic programs, and growth in student services. According to the President, SAT scores for incoming students continue to rise, with scores averaging 950 this year. The majority of students housed on campus (226) live in temporary quarters. Permanent housing for students is being planned. Four new sports have recently been added.

These more traditional activities have allowed UTPB to build a critical mass of students. We were told that the break-even point in university enrollment is 3,500 students. The growing

²⁵ Except as otherwise noted, source of student demographic data is *The University of Texas at the Permian Basin Factsheet – Fall 2002*.

²⁶ Texas Higher Education Coordinating Board, *Participation and Success Forecast 2003-2015: Texas Institutions of Higher Education, 2003-2015*, January 2003.

student population has allowed UTPB to put aside previous concerns about its financial viability and chart its direction.

In spite of these recent changes, the President noted that the UTPB student body remains composed of predominantly non-traditional students, in spite of efforts that have dropped the average age of the student body to 28. (Only a few years ago, the average age was 38.) In general, a substantial portion of UTPB students attend classes on a part-time basis and are working students; in fact, almost all the graduate students work full-time and attend the university part-time.

The institution has been—and, in our view, should remain—true to its mission of providing high-quality education to its students. It lacks the capacity and potential to become a significant player in research. This having been said, however, UTPB has some educational areas that can shine brightly in West Texas, and a small number of pockets with research capacity and potential for improvement. Having all academic activities housed largely in one building presents both opportunities and limitations. The president, David Watts, acknowledged that this arrangement has limitations, particularly for research space, and especially for biology, chemistry, and geology. Accordingly, he suggested that his highest new facility priority is a science/technology building. The timeframe for construction, however, is uncertain and depends on the Texas legislature.

The University has developed a Strategic Plan for 2001-2005, which is on file in the UT System Office and available on the University's website. The plan is cursory and seems to lack substantive components needed for charting future development. It does reflect UTPB's response to the "Closing the Gaps" Plan of the Texas Higher Education Coordinating Board.

During our visit, we received a copy of a draft Strategic Plan for Growth, 2003-2007, dated June 2003. The revised plan projects enrollment to grow to 3,300-3,600 to achieve what the university defines as fiscal breakeven with formula funding by 2008. In our view, this draft plan is also limited in substance, needs to wrestle more effectively with the directions for the institution in the longer term, and should address many of the issues that we will discuss throughout this report.

UNIVERSITY ORGANIZATION

The University is organized into four major areas: student services, academic affairs, institutional advancement, and business affairs. The academic organization includes the College of Arts and Sciences and two professional schools: School of Business and the School of Education. The College of Arts and Sciences is made up of three departments: behavioral sciences; humanities and arts; and sciences and mathematics.

In fall 2003, the University had 103 full-time faculty. More than 85 percent of the full-time faculty had earned the terminal degree, with the School of Education reporting the lowest percentage (71 percent) and the School of Business the highest percentage at 88.9 percent. A total of 49 part-time faculty members augmented the efforts of the full-time faculty.

The College of Arts and Sciences has 66 full-time faculty and offers three Master of Arts degrees (English, history, and psychology) and four Master of Science degrees (biology, criminal justice, geology, and kinesiology). Several of UTPB's largest undergraduate majors are in the College of Arts and Sciences; they include psychology, biology, and humanities.

The School of Business has 18 full-time faculty and offers both the Master of Business Administration (MBA) and the Master of Professional Accountancy (MPA). There are 420 undergraduate students majoring in business, and the MBA/MPA program has about 100 graduate students enrolled, including some taking the degree on-line.

The School of Education has 17 full-time faculty and offers the Master of Arts degree in education with the following options: bilingual/ESL, counseling, early childhood, educational leadership, professional education, reading, and special education. Seven of the university's 17 master's degree programs are in education.²⁷

UNIVERSITY LEADERSHIP TEAM

The WAG team was impressed with President Watts and his efforts to move UTPB forward in difficult economic times. The economic changes in West Texas, exacerbated by the steep decline of the oil industry in the region, have created major challenges. The community looks to the University to assist in its recovery, and the business community leadership sees research as a job-creation activity. As a result, the University is in a key position to assist the Midland-Odessa community in any recovery. With the leadership of Vice President William Fannin in the academic sector, Dr. Watts has a key piece of his vice presidential leadership team in place. (We had less time with the other vice presidents so our comments are focused primarily on Drs. Watts and Fannin.) If UTPB expects to move forward consistent with President Watts' vision, it will need a number of new faculty and new leaders in several academic areas to implement new policies and approaches to teaching, research, and outreach.

Current Research and Educational Strengths and New Opportunities

DEPARTMENT OF CHEMISTRY

One of the University's bright spots is the Department of Chemistry, which has two full-time faculty with doctorates (one tenured, one tenure-track) and two instructors with master's degrees (non tenure-track). The department enrolls approximately 30 majors and graduates eight students per year; we were told that this number of majors has been constant for more than a decade or longer. The majority of chemistry graduates go to medical schools, although at least four have gone on to Ph.D. programs. The department does not have American Chemical Society approval, but its interest in pursuing it soon was apparent.

Much of the department's success can be traced to the efforts of Dr. Michael Robinson, professor of chemistry and department chair. Dr. Robinson joined the UTPB faculty in 1976. He was trained as an organic chemist, but, given the environment in which he found himself, Dr. Robinson shifted from a traditional organic research area to an applied field, "The Synthesis of Fuels from Biomass." While his four proposals submitted in the past year have not been funded, his historical track record in extramural grant support has been an average of one award per five proposals submitted. Most of his successful funding has come from the State of Texas, the Welch Foundation, and the U. S. Department of Energy. Over the years, he has had six post-doctoral students working in his laboratories. He informed us that his current active grants support two post-doctoral students and several undergraduate students in research.

²⁷ *Statistical Information on the University of Texas of the Permian Basin*, OIRP, SFRUNIVcert.xls, F02 Course Summary. Materials provided by UTPB as background for site visit, December 2003.

Dr. Robinson carries a teaching load of 75 percent time in the current semester and expects to teach nine semester hours in the second semester. This has been his historic teaching load because of the pressing need to staff sections of chemistry courses for majors and non-majors, despite the institution's policy on release time for research and his assignment as chair. Yet, during his tenure, he has consistently pursued extramural grant opportunities and conducted research during the academic year as well as in the summer. Indeed, the only laboratory research space identified at the university was for Dr. Robinson. His success with extramural grant funding has made it possible to either renovate or construct several laboratories to provide space for students and support his research. Additionally, the University has purchased several pieces of advanced research instrumentation (250-MHz NMR and a GC/MS) not typically found in a department offering only a bachelor's degree. Such instrumentation requires maintenance and support, which the University should provide but which Dr. Robinson now does.

Dr. Robinson's record of grants and research productivity offers an impressive model of what can be achieved by a faculty member despite a culture that has not historically supported research.

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

In separate sessions, we met with faculty from the Department of Mathematics and Computer Sciences who represent another strong area within the university. Although the two areas have been combined into a single department for some time, there appears to be little structure other than a coordinator for mathematics and computer sciences who is assigned within the total department. The coordinator indicated that instructional assignments are made with relatively little discussion among the entire faculty of the department. In fact, for many years, only one or two faculty, including the department chair, taught computer sciences. In the past two years, the University has hired full-time and adjunct faculty to teach computer science. Currently, five faculty members have primary responsibility for developing instructional and research programs in computer science. About 100 undergraduate students and approximately 17 graduates per semester take classes in computer science/computer information systems.

We met with two junior faculty members who teach computer science. One had spent eight years in a non-tenure-track position and just became tenure-track after having received the doctorate. The other was the male member of a husband/wife team in their second year at the institution. The department has no extramural research grant-supported activities. But one faculty member recently submitted an unsuccessful proposal to NSF, and the husband and wife were focusing on publishing their doctoral theses. The two have published eight papers in their two years at the University, despite teaching loads as high as four courses per semester.

In spite of limitations, some strength exists in the computer science/information technology areas. With four or five additional faculty in these areas, the department might have the critical mass for a master's degree in this area. A number of the undergraduate students—while mostly non-traditional students—could possibly be persuaded to pursue this degree.

In a separate session, we met with a tenured associate professor of mathematics (the coordinator of mathematics and computer science) and two junior professors of mathematics, one in mathematics education who had given up a tenured appointment at another institution to accept a tenure-track appointment at UTPB. In the discussion, we learned that there are approximately 80 undergraduate mathematics majors and about 10 graduates per year. Virtually all graduates go into teaching, and one student per year may go to graduate school. We also learned the department has no significant undergraduate research. It does, however, seem to have an

appreciation for and interest in developing extramural research programs. Yet no proposals are in the pipeline and faculty whom we met seemed defensive about the absence of efforts to secure extramural funding for research.

THE J. CONRAD DUNAGAN LIBRARY

This facility is also a bright spot for a small university and one upon which UTPB can build. It is an attractive, modern, new facility that was occupied in 2001. The director of the library reported an operating budget of approximately \$450,000 per year. She further indicated that with the exception of the UT-Austin, UTPB has the greatest access to databases and journals of any UT campus. The library subscribes to more than 700 of the most widely used academic journals, provides access to more than 5,000 full-text electronic journals, houses more than 200,000 print volumes, has another 700,000 titles on microfilm, and is a member of netLibrary, which provides full-text access to nearly 10,000 books online. It also provides networked library research workstations with access to more than 100 electronic databases, indexes, abstracting services, and full-image electronic journals and books. The current library staff consists of four librarians; another position is vacant.

This library points out to us the uneven utilization of available databases and other library resources among the four institutions we visited. Some of the libraries, such as this one, do an effective job of promoting the availability of available access to databases and other means to retrieve books, journals, and other materials. But other faculties and students appear to utilize the available databases to lesser degrees. As the materials are available to all UT System institutions, improved awareness and then increased faculty and student utilization of these electronic resources is needed.

DIVISION OF STUDENT SERVICES

This is one of the University's best areas of educational effectiveness. We met with nine individuals who make up the division of student services and enrollment management. They have from one to 31 years of service. They shared excellent rapport, evident reinforcement of each other, and tremendous enthusiasm and commitment to students. In addition to the traditional support functions (e.g., student financial aid, registrar, student life and student housing), the University offers a variety of academic support programs, such as the math center, reading center, writing center, Programs Assisting Students Study Office (PASS), and special scholarship support through a Hispanic-Serving Institution grant which supports traditional and non-traditional student populations.

The UTPB President announced that one of the three areas of growth for the University would be in student support programs. The University has an outstanding group of staff around which such expansion should be productive and successful.

UTPB AND ITS CONNECTION TO COMMUNITY COLLEGES

UTPB has developed and nurtures its relationships with the community colleges in its service area, particularly Midland College and Odessa College. However, these community colleges do compete with UTPB for students in West Texas. Still, about 60 percent of all undergraduates at the University are community college transfers. Only in fall 2003 did students

entering for the first time as freshmen exceed the number of community college transfer students.²⁸

Several adjunct faculty at UTPB are full-time faculty members at the community colleges, and UTPB offers courses at Midland College, taught by full-time UTPB faculty. The *UTPB Spring 2004 Course Schedule* includes one page in which lists the “upper-division classes offered for Midland College students and others by UTPB” at the Midland College campus. The “Direct Connect” transfer program allows students from Midland College to transfer easily from the completion of their associate’s degree to study for the bachelor’s degree at UTPB. The two institutions also have an agreement on the use of space.

In December 2003, UTPB filed with the Southern Association of Colleges and Schools its formal notification of intent to offer six baccalaureate degrees, teacher certification, and a master’s degree on the Midland College campus beginning in fall 2004. Currently, the schedule lists two courses each in accounting, child and family studies, and English; one course each in history and psychology; five courses in education; and three night courses—one each in English, history, and education. There are also other collaborative arrangements being discussed, including the possibility of working together with the Globe Theatre of the Southwest (the Shakespeare Theater), which could strengthen both UTPB and the Globe Theatre.

JOHN BEN SHEPPERD PUBLIC LEADERSHIP INSTITUTE

A unique program in many ways, the Institute is an effective educational activity and could pay substantial dividends for the University. Its program of community-based educational forums for high school students, whose participants are expected to develop their own projects for continued leadership training and education, is highly successful and has local community support. The goal is to reach 50 schools and have at least 100 students participating at each site.

We spoke with faculty from a range of disciplines that have added a leadership component to their courses. While the bachelor’s degree offered by the Institute is only two-and-a-half years old, it is the only such program at a public university in Texas and one of only a few such programs in the nation. It has established internships in Texas and Washington, DC; leadership workshops around the state for outreach and constituency building; and the high school leadership curriculum. All are outstanding steps forward for the Institute and UTPB.

The University should re-enforce its support for this outstanding program by hiring a permanent executive director as soon as possible and continuing to urge faculty participation in its interdisciplinary leadership major. The strategic plan identified this Institute and leadership studies as areas for emphasis, so the University should continue to focus and nurture this Institute. A fully integrated program that drew courses from history, political science, business, and other areas could set the stage for a master’s program in the future.

FINE ARTS FACILITY

This state-of-the-art facility, one of the best of its kind at any university in the country, is a showcase of student and faculty work and a boon to the community. The facility might further stimulate interest by regularly inviting the community to special showings/exhibits and creating programs that would provide children with early exposure to the fine arts. Because of the

²⁸ *UTPB Fact Sheet Fall 2002*, Office of Institutional Research and Planning. Provided to WAG team in December 2003.

excellence of this facility and the commitment of those with whom we met here, we are persuaded that such community efforts could serve many positive purposes, including creating extensive new funding opportunities. We believe the community would respond positively to such an initiative.

SCHOOL OF BUSINESS

We were impressed with the energetic leadership of the dean of the School of Business and with her own active engagement in scholarly activity. She demonstrates what faculty must do to assume greater responsibility for scholarship. But the School could enhance its research effectiveness by securing extramural funding and exploring potential research and other collaborative efforts with business faculty at other institutions.

Our team heard about the new effort in industrial technology in the School. Since UTPB lacks an engineering or technology program, and needs closer ties with business and industry already in or relocating to West Texas, we encourage the University to review this effort carefully to ensure that it is housed in the academic unit that will enable it to provide maximum benefit to UTPB, the community, and the students who will become involved in the program. An engineering program would take twenty years to develop, while a broadly based technology program—with courses from computer science, other science departments, the new applied technology activities, and innovative approaches and perspectives added from the business faculty—could make applied or industrial technology vital to West Texas economic development. For guidance, UTPB should review several model university technology programs. Southern Illinois University, Arizona State University, and Purdue University each have a variation of such an effort built around technology that might, with modifications, be feasibly adopted.

In more traditional business fields, UTPB has several strong research efforts, including the research of the dean and of Professor Renee Fontenot in marketing. Professor Fontenot, who focuses on international issues, should explore opportunities to work with the fine international business faculty at UTPA as well as with related faculty at UTB/TSC; the latter, after all, has a new, renovated facility and emerging research interests in international business and trade.

CENTER FOR ENERGY AND ECONOMIC DIVERSIFICATION (CEED)

Through its research and extension programs, CEED seeks to help facilitate regional economic development.²⁹ It houses the Economic Development Administration (EDA) University Center, the Small Business Development Center (SBDC), and the Petroleum Industry Alliance. During our visit, we were briefed and provided information on the activities of the EDA University Center and the SBDC.

The EDA University Center provides management and technical assistance for 30 counties in West Texas through workshops, seminars, training programs and consulting services. Since obtaining its first grant from EDA in 1988, UTPB has been awarded almost \$1.5 million from that organization to support the regional activities of the institution's EDA University Center. University matching requirements for these awards totaled \$900,000.

SBDC focuses on client counseling and training in start-up, expansion, and problem-solving as well as networking opportunities for small businesses in a 16-county area. We were

²⁹ Materials presented to WAG team by Dale Bishop, assistant, EDA University Center, December 17, 2003.

told that SBDC helped 350 businesses to open over a five-year period, of which only 30 have closed. This is impressive, given that, according to the SBDC director, half of all new businesses close during their first year of operation and half of the remaining ones close within five years.

While staff from these two programs presented evidence of their effectiveness, we received fewer details on the activities of the Petroleum Industry Alliance. We learned that CEED houses the two programs and serves as the site of workshops and seminars conducted by the EDA University Center and SBDC, but its other roles were not made clear.

The University, through programs like CEED or others, must consider ways to assist the local community in addressing the difficult declining economic picture in the Midland-Odessa region and its impact on oil-related employment.

One area that might be particularly ripe for collaboration is the UT System's University Land Management Office, located near UTPB, which might be encouraged to provide some demographic assistance to the Center for Energy and Economic Diversification (CEED). Discussions now underway could allow an individual the opportunity to affiliate with institutions in the Midland-Odessa area and at UT-Austin. Such an arrangement might also provide opportunities for research collaborations and provide the potential to lead to additional collaborations with the private sector.

Collaborative efforts with small businesses, the chambers of commerce, and other community leaders must begin with university involvement. President Watts is aware of the issues and knows that the community looks to him for substantial leadership in this arena.

COMMENTS ON SELECTED DEPARTMENTS RELATIVE TO RESEARCH

We visited faculty from most of the departments on campus. Several should be encouraged and provided incentives—with a review of progress—to move more aggressively into research and creative areas. These include

- Biology, where we heard comments about the successes preparing students for medical school. With approximately 200 majors, it has more majors than almost any department in the University. While the faculty is focused on teaching, most have been less than aggressive in pursuing external support for their work.
- Geology, which has a history of conducting research on problems related to the oil industry in West Texas. Since this industry is changing rapidly, so should the department and its research focus. The potential addition of one faculty member or more over the next several years may reinvigorate this important department.
- Kinesiology, which has two tenured faculty and three tenure-tracked members, who together teach approximately 200 undergraduates. About one in ten of its majors continue to graduate school. This area might take a lead in expanding on-line offerings through the TeleCampus, possibly with UT-Tyler.

Actions That Could Strengthen Research and Education Activities

PLAN FOR FILLING FACULTY VACANCIES AND NEW POSITIONS

UTPB should intensify efforts to fill its seven or so faculty vacancies as well as the ten new faculty positions authorized to support expanded degree-program offerings. Filling these positions could relieve some of the teaching load pressure faculty feel in the departments where the vacancies exist, such as psychology and sociology. We should note that the inadequacy of the physical plant requires the institution to reduce the size of existing faculty offices to provide new faculty with office space.

The vice president for academic affairs, along with the deans, should develop a strategic hiring plan for these vacancies. The plan should focus on developing strong research, creative, and educational priority programs for UTPB. It should place emphasis on attracting faculty whose backgrounds demonstrate that research is integral to their academic portfolio. These new faculty hires will assist in making the culture at UTPB more demanding, including by mentoring younger faculty to follow their research interests and by making the pursuit of research and research funding central to the institution's mission.

As elsewhere, we must suggest that retiring faculty at Canadian universities may offer a stopgap measure for faculty recruiting.

FIRST-GENERATION COLLEGE STUDENTS

While this institution provides needed educational opportunities for first-generation college students who constitute almost 70 percent of the student body, these students also need access to a curriculum enriched by research and to faculty who can provide high-quality undergraduate research experiences. This is not the case at this time. Neither are there large numbers of UTPB students who have been interested and pursued research careers through graduate programs at research universities. With the lack of undergraduate research opportunities at UTPB as currently exists, it is also doubtful that UTPB students could be competitive with many other undergraduate students who have been exposed to research and would also be seeking admission to graduate schools within and outside the UT System. Except for isolated, anecdotal comments regarding a few students gaining admission to medical school, we received no quantitative information on students entering and succeeding in competitive graduate research programs.

The institution would like to attract more traditional students by expanding student programs and services and adding on-campus residential facilities. Some progress has been made on housing through trailer homes that can accommodate approximately 200 students. Fewer than 60 students lived on-campus two years ago.³⁰

HB 1839 FUNDING FOR RESEARCH INFRASTRUCTURE DEVELOPMENT

We were interested in a program created by the legislature that in concept was an outstanding model for encouraging research and improving education. Dr. J. Tillapaugh, the assistant vice president for graduate studies and sponsored programs, indicated that he has been with the University for over 30 years and had taken over the Office of Graduate Studies with no support for research and sponsored programs. He described the use of House Bill 1839 Funds

³⁰ Information based on discussions with UTPB student services group, December 18, 2003.

Program, which he administered and which the Texas legislature authorized. This program ran for two years at \$250,000 per year; its purpose was to improve and encourage faculty research. UTPB was one of eight Texas universities deemed eligible for this program. The legislature did not renew it after the 2002 academic year.

At UTPB, the HB 1839 Funds Program had two components: (1) an arbitrary limit of \$2,000 for faculty research development and (2) sponsored project development to support a pilot study or the completion of research needed to apply for external grant funds. Grant support included teaching-load reduction, travel to proposal-writing workshops, and support of graduate students in computer science, biology, and chemistry. The intent of the program was to help develop a research culture at the University. We were told that the program was administered with a review panel composed of experienced faculty with input from the appropriate dean.

To secure sponsored project development funds, faculty had to submit a proposal for extramural funding. Several academic areas were targeted, including biology and kinesiology. For example, four grants were awarded to faculty in the Department of Biology, but no proposals were submitted to external funding agencies. Although the legislative funding ended with the 2002 academic year, we were told that the University provided supplemental funding of \$87,000 and \$49,000 in years one and two, respectively, and funding of \$100,000 in the 2003 academic year to continue the program.

This HB 1839 program was a fine example of how a small amount of state funding can make a difference at an institution like UTPB. The seeding effect of these funds could have jump-started research programs at the University. The manner in which the University implemented the program, however, greatly reduced its effectiveness. The funds were provided, but there was little communication between the Office of Sponsored Programs, deans, and individual faculty who received the awards. In several instances, the awards produced no research proposals (and obviously no external funding).

The University could initiate this kind of program, possibly with matching funds from the System, without legislative assistance. We would support such an effort if procedures for appropriate follow-up and evaluation were in place prior to restarting this effort. Indeed, the UT System might consider this type of small seeding program for several of its developing universities across the state.

RESEARCH SPACE

Several of the faculty cited the lack of research space as a major impediment to conducting research and a sign of the institution's failure to provide an environment that supports its recently stated emphasis on research and creative efforts. In fact, in meetings with more than one faculty group, we found some resistance to preparing research proposals; such efforts were viewed as a waste of time since research space was not available. The institution's claim that it offers "modern research facilities" (Graduate Catalogue, 2002-2004) may be exaggerated.

Deans should play an active role in stimulating research proposals and using successful proposals to drive space discussions. Space is rarely provided prior to funding at most universities, and such decisions at UTPB should not be an exception. Yet the fact that the University offers all of its academic programs, except for fine arts, in one building limits its ability to make room for research. As already noted, we were told that a new science building is the University's highest construction priority in the coming legislative session. We encourage the UTPB leadership to revamp their strategic planning process, strengthen the draft plan being

developed, and ensure that space and facility issues become central to such a plan. This would be the time, before discussions with UT System staff, legislators, or others, to determine faculty and University priorities for using space in such a new building. Planning space and facilities should be a key part of strategic planning. When the deans and the vice president for academic affairs develop a hiring component for a strategic plan, they should also address requirements for offices, classrooms, and research space in coordinated fashion.

INADEQUATE INTERNAL SUPPORT FOR RESEARCHERS

Other reasons offered for the lack of research productivity included the inadequacy of internal assistance in proposal preparation, heavy teaching loads, inadequate administrative support, and a lack of support for graduate students. We note, however, that the nine-hour teaching load of most faculty and the number of part-time faculty (63 in fall 2002 to support the 96 full-time faculty) at UTPB allow for fewer courses and smaller numbers of students than at other developing campuses in the system. Furthermore, we heard that getting the reduced teaching load for research purposes was “almost routine” in a number of areas, and that deans rarely followed up to determine the results of these reduced loads.

Another major concern is the inadequate support the Graduate Studies and Sponsored Research Office provides for preparing proposals and implementing projects. It is not clear who at the University is responsible for encouraging faculty members to submit proposals. Apparently, the process for submitting proposals to external funding agencies does not involve the deans in any significant way. Our team heard from several faculty that it is unclear what support the Office of Sponsored Programs provides. The University should review the functions and activities of the office. Other universities we have visited have installed innovative approaches to assisting faculty, including placing a grant writer/budget assistant into each major academic unit of the university. For UTPB, such a decision may be premature. It should first review the sponsored research office, evaluate its functions, and determine its new requirements. And a staff member with extensive development experience and familiarity with a range of funding sources, particularly the federal government, should be assigned or recruited to lead this unit.

Finally, the University could improve fundraising so it could better support faculty. If it made focused efforts to develop a fund that provided faculty resources to travel, paid for partial sabbaticals for productive faculty, developed proposals with small seed grants in the sciences as well as the social sciences and arts, and paid for some small research costs, the University and the community would reap substantial dividends.

RESEARCH CULTURE

When seeking to get an understanding of the research culture at UTPB, we heard a similar descriptive comment utilized in more than one discussion: “learned helplessness.” It was used to describe some UTPB faculty and their lack of interest in research. Regrettably, this may accurately reflect on those faculty who seek excuses for not becoming more involved in research and creative endeavors. As one of our team noted, UTPB was an upper-division and graduate university before it moved into the full university model and admitted lower-division students. Hence, it is somewhat surprising to find that the faculty view toward research at UTPB is not much different from what might be expected at a community college. Faculty culture is one of the most serious issues the University must address to move upward.

We urge the vice president for academic affairs and deans to devise strategies for expanding and adding new faculty leadership that can change this viewpoint. Similarly, the University should explore whether rotational changes of certain administrative positions would help change the culture. Neither faculty nor staff should see administrative leadership as a lifetime position.

We also urge the vice president for academic affairs and deans to re-examine the institution's extensive use of part-time faculty, especially if it results to some extent from having full-time faculty teaching at area community colleges. Part-time faculty do not relieve faculty of advising and committee assignments.

POLICIES FOR TENURE AND PROMOTION

The University must ensure that it has defined and accepted salary, promotion, and tenure policies (this is a particular problem for the College of Arts and Sciences and the School of Education). It also must make certain that its policies on post-tenure review are broadly disseminated and understood. Without such policies, it will be impossible to change the research culture. Once policies are promulgated, discussions between individual faculty and their deans concerning expectations can take place. Such policies should be applied uniformly, objectively, and consistently. Yet, as always, some flexibility should be employed in administering the policy and the new expectations of faculty regarding their productivity.

CONTINUING TO ENHANCE UNDERGRADUATE TEACHING

The University can and must continue to play a substantial, growing role in educating the college students of West Texas with increasing effectiveness as the number of students surges. UTPB should thus continue to focus on being an undergraduate teaching institution. Providing high-quality education to an atypical student body is vital. Offering enhanced opportunities via such programs as NSF's Research Experiences for Undergraduates would be a positive step. Students would also benefit if UTPB partnered with faculty at other universities who have research grants; faculty could often simply add undergraduate support to existing awards with a letter to their funding agency.

SETTING REALISTIC GOALS FOR RESEARCH FUNDING

Nationally, every university faces constant and continuous pressure to enhance external research support. Achieving that goal has many potential advantages, including making most researchers better teachers, providing opportunities for undergraduates and better preparing them for a competitive graduate education, and attracting additional resources for the faculty and university. It is equally important, however, for systems and institutions to realistically assess potential and develop plans appropriate to that potential. It is clear to our team that UTPB cannot and will not become a major research university. Limiting factors include student populations, which the Texas Higher Education Coordinating Board had estimated to expand to only 3,500 by 2015.³¹ Even if UTPB exceeds this student population, the University, in our judgment, could still lack a sufficiently critical mass of students; would have only a limited number of graduate students; would have sub-critical numbers of faculty in key areas; and would have inadequate physical facilities for handling substantially larger numbers of students.

³¹ Texas Higher Education Coordinating Board, op.cit.

This having been said, however, the University should develop a realistic strategic plan that emphasizes improved undergraduate teaching, better graduation rates for its students, a focus on a few research bright spots, improved and expanded community outreach (including new efforts in the arts), improved teacher-training activities, and service to the local and regional community to assist in economic development.

The University might realistically establish the goal of reaching \$4 million in federal research expenditures annually by 2010. This would be a substantial increase and would require a strategic hiring plan that targeted faculty with research interests and a better research infrastructure and support system to assist faculty in reaching this goal. As it seeks to do so, UT System support, experimental programs with small matching components, and encouragement for this institution and others to pursue higher goals would benefit the state and these developing institutions specifically

Faculty Research Productivity and Culture

The University offers bachelor's degrees in 29 subject areas and master's degrees in 17 fields through its College of Arts and Sciences, School of Business, and School of Education. In 2002, 83.3 percent of the 96 full-time faculty members were tenured or tenure track and 88.5 percent of them held the Ph.D. or equivalent degree.

Table 6 below reveals that in 2002, faculty in the humanities and fine arts were the most productive in research in 2002, while faculty in the School of Education were the least productive. Thirty-nine of the 96 faculty (or 41 percent) listed in the institution's undergraduate catalogue (2003-2005) have received their doctorate since 1990. It seems reasonable to assume that faculty who recently obtained their doctorates would be among the most productive faculty. However, based on this data from the university, only 13 of the 39 faculty considered most productive in 2002 received their doctorates since 1990, while 13 received their doctorates prior to 1990. The remaining faculty included two for whom the master's was the highest degree held and two who held the Master of Fine Arts as the highest degree.

Table 6. Analysis of UTPB Faculty Scholarly Productivity – 2002³²

Dept./ School	Behavioral Sciences	Hum. & Fine Arts	Science & Math.	Busi-ness	Educa-tion	Total
<u>Publications:</u>						
-Refereed	13	9	4	22	6	54
-Non-Ref.	2	4	0	0	0	6
Books	3	2	0	1	0	6
<u>Presentations:</u>						
-Conferences	19	12	14	13	11	69
-Proceedings	1		10	9	0	20
-Productions		14				14
External Grants & Contracts	4 Total: \$97,000	2 Total: \$3,000	4 Total: \$280,000	0 Total: \$0	5 Total: \$2.64M	15 Total: \$3.02M
<u>Other:</u>						
-Submitted	2 Articles	14 Art. & 2 Books	5 Articles 1 SupplBook Materials		0	21 Articles 2 Books 1Bk Supp
-Book Review	3	1		1 Bk Rev	0	5 Bk Rev'w
-Abstracts	1				0	1 Abstract
-Translations	0	1	1 Technical Report	1 Dis-sertation	0	1 Translat.
-Works in Progress	0	1	3	0	0	1 Tech Rpt 1 Dissertat. 4 in Progres
No. Faculty Not Reporting	3	2	4	4	0	13
Total Faculty	16	16	17	17	10	76

The number and percentage of faculty holding grants provides another measure of faculty productivity. The following table shows the number and percentage of tenured/tenure track (T/TT) faculty at UTPB holding extramural grants during the 2000-03 academic years as well as the number of grants held.

Table 7. Grant Productivity of UTPB Faculty, 2000-01 through 2002-03

	2000-01	2001-02	2002-03
# of T/TT Faculty Holding Grants	13	15	11
# of Grants	19	28	15
#FTE T/TT Faculty	67.2	72.25	74.25
percent of T/TT Faculty Holding Grants	19%	21%	15%

³² Source: Information for this chart and other data referenced here on faculty productivity and publications provided by UTPB prior to December 2003 site visit.

Furthermore, more than 74.3 percent (\$2,591,659) of the \$3,490,022 received from various sources during the 2001-02 academic year resulted from the efforts of one faculty member, with the remaining dollars (\$898,363) raised by 17 others (12 faculty, 4 non-faculty, and 1 lecturer). That year, 24 individuals (17 faculty, 6 non-faculty, and 1 lecturer) submitted a total of 43 proposals and of which 27 were successful, representing a proposal success rate of 63 percent and a faculty success rate of 76 percent (13 successful out of 17 submittals). These outcomes are impressive.

Less impressive, however, is that only 18 percent of the faculty (17 out of 96 full-time faculty) submitted proposals. Furthermore, our review of the groups/agencies to which faculty submitted proposals shows they are missing many opportunities for federal support. This fact is particularly unfortunate since the University has recently been designated a Hispanic-Serving Institution (HSI), enabling it to compete for special funding from federal agencies. It also appears that many of the faculty seem not even to be looking for opportunities. An aggressive Office of Sponsored Research, conducting workshops and providing databases on sources of funding, could assist in remedying this problem and strengthening the research infrastructure. We discussed with officials at the various universities the value of conducting workshops with federal agency officials, experienced grant-writing faculty, or outside experts familiar with writing successful proposals. We encourage the sponsored research staff at UTPB to develop and implement a regular series of workshops of this kind to acquaint faculty with opportunities for external funding.

The overriding message from the faculty with whom we met was that the University's core mission when they were hired was to focus on teaching and not research. Many did not appear to see what research could add to their teaching and their students' educational experiences or competitiveness for graduate school. Neither did they see it as related to their own professional development.

To help address this deficiency in the faculty's perception of the importance of research, we recommend that UTPB's search for deans, as we have recommended at other universities, become national and entail UT System pre-decisional review of finalists. We have also recommended that outside hiring be encouraged and we recommend this for UTPB as well. (We have described these ideas more extensively in earlier sections of this report.)

The University must also expeditiously change its policies on tenure, promotion, and retention and develop a strategy for implementing them. The policies should reflect the institution's research expectations for faculty hired well before the new standards were announced. Implementation may need to be done on a case-by-case basis. The policy might allow for extending the time during which they must provide evidence of their scholarly productivity. First, however, the new promotion and tenure policies must be discussed and implemented in every academic unit. Creating and promulgating these policies should be the University leadership's highest priority.

Opportunities for Collaborative Research and Education

The System asked us to assess collaborative research opportunities at or near the various institutions. The Midland-Odessa area has limited opportunities for such work. The overall economy of this region is poor at this point, and few industries are interested in research collaborations with UTPB. Neither are there nearby medical research facilities with which it could collaborate nor are there military facilities with an R&D focus to exploit.

Yet, to their credit, some departments and faculty have explored working together with colleagues at other institutions. For example, kinesiology has examined potential collaborative degrees with other Texas institutions, including UT-San Antonio, UT-Arlington, and UT-El Paso; these efforts, however, did not lead to degree offerings. Still, this model of working with other universities has succeeded at other institutions in the system. In fact, UTPB has a joint master's degree program in criminal justice with Angelo State University and an online master's degree. Such educational programming exemplifies how to collaborate with another university and bootstrap a graduate program with the aid of another university. It should be replicated in other departments.

Two community colleges near UTPB offer the registered nursing program, and UT-Galveston offers a "2+ 2" program in this area. A new joint effort in clinical laboratory sciences with UT-Galveston may provide open the door to collaborating in the medical arena. A new bachelor's degree in applied science that the Regents have approved might provide other opportunities for collaborating with local industries and then evolve to affect such areas as the computer sciences and the new technology program discussed earlier.

Distance-learning capacities at UTPB, particularly under the leadership of Dr. Doug Hale and his REACH program, allow departments to develop collaborative educational programming and degree offerings. With the UT TeleCampus activity allowing easy access to online degree programs and with a number of UTPB courses being offered online, the campus should dramatically expand distance learning. UTPB can benefit greatly from increased use of the TeleCampus and thereby offer students more courses without incurring the added costs of hiring new faculty to teach such courses.

How Might UTPB Look in Five Years?

By 2010, UTPB will hopefully have reached an annual research expenditure level of more than \$4 million. Substantial proportions of these funds will be coming from the U.S. Department of Education and increasingly from the NSF. These agencies will be funding quality proposals from the Departments of Education, Chemistry, Computer Sciences, and, more recently, Biology. A new area of academic strength is the new technology program built around applied science, computer science, business, and industrial technology. The growth in this area has resulted from an increased focus on external support for research, including close ties with a slowly rebounding economy of West Texas, particularly Odessa and Midland. Strong faculty members in the School of Business are also key players in this local and regional economic resurgence, and are leading many of the efforts to attract international businesses to West Texas. Undergraduate programs have grown in stature statewide with strengths in chemistry, biology, computer sciences, technology, and areas within the arts and humanities arousing student interest.

The UTPB campus is changing as well. Planning is continuing for a possible new campus building. It will help satisfy the demand for expanded classes that has resulted from enrollment increases and for new research space that has emerged from the senior and new faculty as the strategic plan has taken hold. UTPB students are excited about the addition of several new faculty in key areas who augment areas highlighted in the strategic plan.

The student population has surged to almost 4,000 students. A small number of new master's degree programs, many of them offered collaboratively with neighboring universities, have provided an important model on how developing institutions can bootstrap limited resources into viable academic programs. Additional joint-degree programs have been added through the UT TeleCampus program for online degrees. The offerings made possible by the TeleCampus

have led to substantial student population growth without comparable increases in new faculty. Thanks to sustained recruiting efforts inside and outside the West Texas region, UTPB welcomes students from across Texas. Closer ties between UTPB and both Odessa and Midland Colleges are increasing enrollment. President Watts continues to meet regularly with Kiwanis and Rotary Clubs to spread the word about UTPB and challenges them to provide scholarships to their best students to attend UTPB. The “Direct Connect” seamless transfer program, including a larger UTPB presence in Midland at the college, has also contributed to UTPB’s growth. The two institutions are discussing even closer ties.

As part of a national economic resurgence, the Texas economy has rebounded as well. Though oil revenues and extraction have not kept pace with growth, the new technology program at UTPB has enabled its graduates to work with new oil-extraction technologies.

APPENDIX 1

SCOPE OF WORK

The Consultant shall perform the following Work in connection with the development of a detailed plan (the “Plan”) to significantly expand the research capabilities of the following eight (8) academic institutions (the “Institutions”) of the University:

Group A

The University of Texas at Arlington
The University of Texas at Dallas
The University of Texas at El Paso
The University of Texas at San Antonio

Group B

The University of Texas at Brownsville
The University of Texas – Pan American
The University of Texas of the Permian Basin
The University of Texas at Tyler

In accordance with Section 4.d. of this Agreement, Consultant shall assemble two teams of individuals to perform the Work:

- One team, composed of seven or eight members, shall conduct and supervise the Work at the Group A Institutions.
- A second team, composed of six members, shall conduct and supervise the Work at the Group B Institutions.
- Team members shall include nationally recognized leaders with demonstrated competence, knowledge and experience in developing research capabilities for scientific, technological or higher education enterprises.

Consultant, through its teams, shall:

- Review background information provided by the Institutions as well as information developed independently, and shall request additional information from Institutions as the Work progresses.
- Visit Institutions during September 2003, October 2003, November 2003, December 2003 and January 2004. Analyze and evaluate the information gathered and formulate strategies to significantly expand the Institutions’ research capabilities.
- During January 2004 and February 2004, both teams shall identify their major findings and conclusions, answer questions in this Exhibit, and provide recommended strategies and tactics for using current resources to greater effect and for future development of the Institution, and for significantly expanding the Institutions’ research capabilities, in light of constraints and opportunities described in this Exhibit.

Consultant shall include the following work product in the Plan:

- 1) A set of strategies and tactics for using current resources to greater effect and for future development of each Institution.
- 2) Highly focused solutions to significantly expand the research capabilities of each Institution that are aligned with national and state research priorities.

Consultant shall address the following questions concerning each Institution in the Plan:

- 1) What are the current research strengths of the Institution?
- 2) What are the possibilities for further expansion of the research profile at the Institution, using its existing strengths?

- 3) What are the next high-opportunity research areas that the Institution could develop? Explicit recommendations concerning numbers of faculty, target departments, and specific disciplines or sub-disciplines shall be addressed.
- 4) What are the additional resources that the Institution needs to pursue its high-opportunity research possibilities? Specifics of support personnel, graduate students, space, and equipment shall be provided.
- 5) In what order should actions be taken to develop research at the Institution? What is the set of priorities, and why are these the priorities? What is a likely time frame for the research enhancement?
- 6) Are there partners (local, state, or national) who could help the Institution increase its research profile?

Consultant shall address the following questions for the group of Institutions as a whole in the Plan:

- 1) To what extent do the strengths of the Institutions overlap?
- 2) Are there obvious opportunities for collaboration among the Institutions that should be pursued?
- 3) Are there shared resources that should be developed for the Institutions?
- 4) What are the high potential possibilities for collaboration with a nearby medical or health science campus?

Consultant shall address the following constraints in the Plan:

- 1) Each Institution's enrollment is expected to grow. Largest growth is anticipated at U.T. Arlington and U.T. San Antonio. With the exception of U.T. Dallas, the Institutions do not currently pursue selective admissions policies. The pressure of enrollment, however, may lead to greater selectivity at all campuses over the next five years.
- 2) The principal basis for state appropriations is formula funding, based on semester credit hours of instruction, with a two-year lag. The formula provides additional funding for graduate and upper-division courses, and the formula also funds engineering and science courses at a higher rate. Because of the lag in formula funding, increased growth will not pay for itself in the short term.
- 3) The State faces a current revenue shortfall of approximately \$9 billion. Part of this shortfall will be met with a budget cut in appropriated funds. Even when the economy improves, it is not realistic to expect substantial increases in state appropriations.
- 4) Although six of the Institutions are entitled to share in the proceeds of the Permanent University Fund ("PUF") endowment, recent losses in the stock market make additional distributions from the PUF unlikely in the short term.
- 5) Current State law does not permit the University to waive tuition for graduate students. Research and teaching assistants who are appointed at least half time have been eligible to pay resident (in-state) tuition, and, were eligible for staff benefits, including health benefits. Recent legislative changes impact this eligibility. Funds available for graduate fellowships are quite modest.

Consultant shall address the following opportunities in the Plan:

- 1) The local communities are very supportive of the Institutions.
- 2) There may be philanthropic support from foundation or individuals for research expansion.

- 3) The Texas Legislature recently deregulated tuition. Authority for setting tuition, for the first time, will be delegated to the Board of Regents, allowing for a more differentiated tuition structure.
- 4) The state legislature recently approved legislation that will allow the Institutions to retain all of their indirect costs reimbursements. Formerly, these Institutions were permitted to retain only 50% of their indirect costs.
- 5) There is a possibility of some special item funding from the Governor's Office.

In addition to the forgoing questions, constraints and opportunities, the Consultant shall identify and respond to any additional issues relevant to the specific challenges of each Institution.

Further, the following questions were posed for each of the developing institutions:

The University of Texas at Brownsville/Texas Southmost College:

- What are the next steps UTB/TSC should take to improve its educational effectiveness with its current student body?
- What are the most promising academic areas for research expansion or for research collaboration with other institutions?
- What are the next academic degree programs that should be developed for UTB/TSC?
- How can UTB/TSC best align itself with opportunities for economic development in South Texas?

The University of Texas – Pan American:

- What academic areas are appropriate for the next doctoral-level program?
- UTPA has identified four areas of regional significance for academic focus. These areas are bilingualism; biomedical sciences and engineering; border life and international relations; and subtropical environment and ecology. Are these appropriate areas? Are other areas equally suitable or more promising?
- What academic or professional areas best align with further economic development in the South Texas area?
- What steps should UTPA take next to improve its effectiveness in educating its distinctive student body?

The University of Texas of the Permian Basin:

- What are the next steps UTPB should take to improve its educational effectiveness with its current student body?
- What are the most promising academic areas for research collaboration with other institutions, such as Odessa College or the other institutions within the UT System?
- What are the next academic degree programs that should be developed for UTPB?
- How can UTPB best align itself with opportunities for economic development in West Texas?

The University of Texas at Tyler:

- What are the next steps UT-Tyler should take to improve its educational effectiveness with its current student body?
- What are the most promising academic areas for collaboration with the University of Texas Health Center-Tyler?
- What are the next graduate and professional degree programs that should be developed for UT-Tyler?
- How can UT-Tyler best align itself with opportunities for economic development in East Texas?

APPENDIX 2

THE WASHINGTON ADVISORY GROUP TEAM

Dr. Raymond Bye has spent his career at the NSF and Florida State University (FSU) in areas related to scientific and engineering research, research administration, U.S. science policy, and legislative and public affairs. Beginning in 1972, he served over two decades at the NSF, with more than a dozen years as director of the Office of Legislative and Public Affairs. Following his service at NSF, he was named associate vice president for research at FSU in 1994. In 1999, he was named interim vice president for research and, after a national search, was named FSU's vice president for research in 2000. In that position, his responsibilities included sponsored research administration, technology transfer activities, the FSU Research Foundation, oversight of research regulatory issues, research communications programs, and several interdisciplinary research programs (such as the National High Magnetic Field Laboratory, the FSU Center for Advanced Power Systems, the Institute for Science and Public Affairs, and the FSU Marine Laboratory). In June 2003, FSU's new president asked that he assume expanded federal relations responsibilities along with leading the university's activities related to economic development. In this capacity, he serves as the lead university official in all federal and Congressional relations activities. Dr. Bye has served on a number of boards and commissions, including as president of the FSU Research Foundation; a member of the Oak Ridge National Laboratory Board of Governors and the Board of Oak Ridge Associated Universities; Chair of the National Association of State University and Land-Grant Colleges' (NASULGC) Council on Governmental Affairs; and as a member of the Board of Directors for the NASULGC. Dr. Bye has received a number of awards, including the NSF Distinguished Service Award and the President's Meritorious Executive Award.

Dr. Raúl Cárdenas served as vice chancellor for student development and community affairs for the Maricopa Community College District in Phoenix, Arizona prior to his recent retirement. He is the immediate interim chancellor of the district, the past president of Paradise Valley Community College and the founding president of South Mountain Community College, both in the Maricopa system. His active retirement assignment with the Maricopa Community College District will have him working at the Mesa and Scottsdale Community Colleges. His professional career spans three decades and all levels of education—as an elementary, junior high and high school teacher, a high school vice principal and community college dean of students in El Paso, and as an assistant vice chancellor for student affairs at the University of California at Berkeley. Dr. Cárdenas' participation in national organizations is quite extensive and includes having served as member of the Board of Directors for the American Association of Community Colleges and the American Council on Education; member of the President's Academy Executive Committee of the American Association of Community Colleges; chair of the Executive Committee of the Hispanic Association of Colleges and Universities; and member of the American Council on Education Commission on International Education. He is currently a member of the Coordinating Council for the Hispanic Border Leadership Institute, Executive Committee of the International Consortium for Education and Economic Development, Fundación Solidaridad Mexicano Americana, and other higher education organizations. Dr. Cardenas received his M.Ed. from the University of Texas-El Paso, and a Ph.D. in educational administration/student personnel from the University of Arizona.

Dr. Carlos Castillo-Chavez, a native of Mexico who immigrated to the U.S. 28 years ago, holds joint appointments in the Departments of Statistics, Biological Statistics and Computational Biology and Theoretical and Applied Mechanics at Cornell University, where he is also a member of the graduate fields of applied mathematics, biometry, epidemiology, ecology and

evolutionary biology, statistics and theoretical and applied mechanics. In 1996 he established the Mathematical and Theoretical Biology Institute (MTBI), which fosters research activities primarily among underrepresented minority undergraduate students who are enrolled at non-selective U.S. universities, but also mentors and supports underrepresented minority undergraduate and graduate students from various universities who are working in the mathematical or statistical sciences. He received a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring in 1997, in part, for the work that he carried out at MTBI. In 1997 he founded the Cornell-Sloan fellowship program in the mathematical and statistical sciences at Cornell University, a program that he has directed ever since. Dr. Castillo-Chavez has received various awards including two White House Awards (1992 and 1997), a QEM Giant in Science Mentoring Award (2000), and SACNAS distinguished senior scientist award (2001). In addition, he was named Profesor Plenario by the Universidad de Belgrano (Argentina, 1996); and held a Catedra Patrimonial by the Institute of Applied Mathematics (IIMAS) at National University in Mexico (UNAM, 1998). He was selected as the 2003 Ulam Scholar by the Center for Nonlinear Dynamics (CNLS) at Los Alamos National Laboratory. He has published over one hundred research articles, edited four volumes, and co-authored a textbook on mathematical biology with Fred Brauer (2001).

Dr. Thomas Winston Cole, Jr. served as the first president of Clark Atlanta University from 1989 until his retirement in 2002, after serving simultaneously as president of both Clark College and Atlanta University prior to their historic consolidation. Previously, he was chancellor of the West Virginia Board of Regents, the second and one of only four African Americans to head a state system of public higher education, and had served as president of West Virginia State College. Prior to these appointments, he taught at Atlanta University where he was chairman of the Department of Chemistry, Fuller E. Callaway Professor of Chemistry, and provost and vice president for academic affairs. He also served as director of the Atlanta Resource Center for Science and Engineering, the first of three centers established in the United States by the National Science Foundation. Nationally recognized for his scholarly contributions to science and his leadership in higher education administration, Dr. Cole has served as chairman of the Council of Presidents of the Member institutions of the College Fund/UNCF; chairman of the Council of Presidents for the College Fund, the Atlanta University Center; and the Black College Fund of the United Methodist Church. He currently serves as the chair of the Board of Directors of the Quality Education for Minorities (QEM) Network, and holds memberships on the Executive Committee for Project Kaleidoscope, and the General Board of Higher Education and Ministry of the United Methodist Church. He is a past member of the Executive Council, Commission on Colleges, Southern Association of Colleges and Schools. A Texas native and graduate of Wiley College, Dr. Cole has been awarded numerous honors in recognitions of his scientific, educational and community contributions.

Dr. Shirley McBay assumed the position of president of the Quality Education for Minorities (QEM) Network in July 1990, following ten years as dean for student affairs at the Massachusetts Institute of Technology (MIT) and three years as director of the QEM Project, an MIT-based initiative supported by the Carnegie Corporation of New York. Previously, she served as a program manager/director in the Science Education Directorate of the NSF, where she directed two national programs designed to increase minority participation in science and engineering. Prior to joining NSF, she spent 15 years at Spelman College, including as professor of mathematics, department head, division chair, and associate academic dean. At QEM, Dr. McBay has served as the director of several science and engineering-focused projects. These include NSF-supported projects focused on states with significant minority populations, the Historically Black Colleges & Universities (HBCU)-Undergraduate Program, the Math and Science Partnership Program, and the Faculty Early CAREER Development Program; faculty

development projects, including the Teagle Foundation-supported Scholarly Productivity Projects for Science and Engineering Faculty at HBCUs and the NASA-supported Scholarly Technical Assistance Project for Principal Investigators of NASA's Faculty Awards for Research Program; the Annenberg/CPB Math and Science Project-supported Minority Mathematics and Science Teacher Leadership Corps; the NSF- and NASA-supported Summer Science Internship Program for undergraduate and graduate students; NASA's residential Summer High School Apprenticeship Research Program (SHARP PLUS); and the GE Fund-QEM Seamless Pathway Project, a pilot initiative in three low-income areas offering a continuum of support for talented mathematics and science students, from middle school to college.

Dr. Alfredo G. de los Santos, Jr. has served as research professor at Arizona State University and as a Senior League Fellow of The League for Innovation in the Community College since his retirement as vice chancellor for student and educational development at the Maricopa Community Colleges. During the 1990s, Dr. de los Santos was principal investigator for a number of grants funded by the NSF, including the Phoenix Urban Systemic Initiative (\$15 million) and the Maricopa Advanced Technology Education Center (\$5 million). He is the founding president of El Paso Community College and served as a dean at Northampton County Community College (PA) and Florida Keys Junior College (FL), and as a librarian at Laredo Junior College (TX). Dr. de los Santos serves on the board of trustees of the Tomas Rivera Policy Institute, Jobs for the Future Inc., National Center for Public Policy and Higher Education, and the Council for Higher Education Accreditation. He is co-principal investigator for two programs funded by the NSF, including the Technical Education Initiative at the Accreditation Board for Engineering and Technology. He has served on the board of the Carnegie Foundation for the Advancement of Teaching, the American Association of Community Colleges, the American Association for Higher Education, the American Council on Education, the United States Open University, and the College Board, among others. He is the recipient of numerous honors and awards, including recognition by the American Council on Education, McGraw-Hill, the Hispanic Association of Colleges and Universities, and the National Science Foundation. Dr. de los Santos earned his associate of arts degree from Laredo Junior College and B.A. (English), M.L.S. and Ph.D. (educational administration) degrees from the University of Texas at Austin.

Joe B. Wyatt is a WAG principal who advises on strategic planning and governance in academia, management and planning of academic R&D organizations, and corporate-academic partnerships. He is chancellor emeritus of Vanderbilt University, having served as chancellor from 1982 to 2000. As chancellor, Mr. Wyatt led Vanderbilt's ascent into the top tier of U.S. teaching and research universities, overseeing the expansion of the university's academic offerings and diversity of the student body and the increase of Vanderbilt's endowment from \$170 million to more than \$2 billion. Previously, Mr. Wyatt was a member of the faculty and administration at Harvard University, serving as vice president for administration from 1976 to 1982. During this period, he led EDUCOM, a consortium of 450 universities that developed computer networks and systems for sharing information and resources. In addition Mr. Wyatt co-authored the book, *Financial Planning Models for Colleges and Universities*, and wrote extensively in the fields of technology, management and education. He has conducted research for the NSF, the Ford Foundation, the Office of Naval Research, and the Eli Lilly Foundation, among others. He is a patentee and consultant in computer system design and computer networking. Mr. Wyatt co-founded the Massachusetts Technology Development Corporation in 1978, a public venture capital group that has financed a large number of successful technology-based companies in Massachusetts. He is currently chairman of the board of the Universities Research Association of Washington, DC and chairman of the Government University Industry Research Roundtable of the National Academy of Sciences. He holds degrees in mathematics from Texas Christian University and the University of Texas at Austin.

APPENDIX 3

CHRONOLOGICAL SITE VISITS

I. University of Texas-Pan American (October 1-3, 2003)

Site visitors from the Washington Advisory Group:

Mr. Joe Wyatt, Team Leader	Dr. Carlos Castillo-Chavez
Dr. Raymond Bye, Jr., Coordinator	Dr. Thomas W. Cole
Dr. Raúl Cárdenas	Dr. Shirley McBay

Visit Overview:

Joe Wyatt, a principal of The Washington Advisory Group, led the site visit to UTPA. The group included a coordinator, Dr. Raymond Bye, and the four additional consultants listed above. The team at times divided into two subgroups (not always including the same individuals at each meeting), which conducted interviews with 14 different groups during the visit. We drew these groups primarily from faculty in a range of academic disciplines. We conducted a special interview with a large group of students involved in research (both graduates and undergraduates). In addition, we had working dinner discussions with deans as well as both initial and final meetings with the university's leadership (the president and several members of his leadership team).

II. University of Texas-Tyler (October 27-29, 2003)

Site visitors from the Washington Advisory Group:

Mr. Joe Wyatt, Team Leader	Dr. Thomas W. Cole
Dr. Raymond Bye, Jr., Coordinator	Dr. Alfredo G. de los Santos, Jr.
Dr. Carlos Castillo-Chavez	Dr. Shirley McBay

Visit Overview:

After a review of the relevant materials provided by UT-Tyler, our team, led by Joe Wyatt, visited the campus October 27-29, 2003. The group included a coordinator, Dr. Raymond Bye, and the four additional consultants listed above. The group met with 16 distinct groups and conducted our meetings and discussions either as an entire team or in two subgroups. We drew the 16 groups primarily from faculty in a broad selection of academic disciplines. We also included undergraduate and graduate students in many of the discussions. In addition, we had working dinner discussions with deans and with the president and his vice presidential team. We also had an opening meeting with the president and several members of his leadership team. Because of a commitment in Austin, President Rodney Mabry was not on-campus on the day of our departure. Mr. Wyatt and Dr. Bye conducted a final telephone de-briefing with the president several days later (November 5). Our conclusions and recommendations are based on this single visit, as well as materials received before and afterward.

III. University of Texas-Brownsville/Texas Southmost College (December 1-3, 2003)

Site visitors from the Washington Advisory Group:

Mr. Joe Wyatt, Team Leader	Dr. Carlos Castillo-Chavez
Dr. Raymond Bye, Jr., Coordinator	Dr. Thomas W. Cole
Dr. Raul Cardenas	Dr. Shirley McBay

Visit Overview:

Mr. Joe Wyatt led our team on this visit. The team was composed of its coordinator, Dr. Raymond Bye, and the four additional consultants listed above. The group met with 14 distinct groups and conducted the meetings and discussions either as an entire team or in one of our two subgroups of three consultants. These UTB/TSC groups consisted primarily of faculty drawn from a broad selection of academic disciplines. In addition, we had a meeting with a community-based group of leaders. We had working dinner discussions with the deans and another with the President Juliet García and Provost José Martín and several of her board of trustee members. In addition, we had an opening meeting with the university leadership, including the president and provost. On the last day of our visit, we held a final debriefing with President García and Provost Martín.

IV. University of Texas at the Permian Basin (December 17-19, 2003)

Site Visitors from the Washington Advisory Group:

Mr. Joe Wyatt, Team Leader	Dr. Thomas W. Cole
Dr. Raymond Bye, Jr., Coordinator	Dr. Alfredo G. de los Santos, Jr.
Dr. Carlos Castillo-Chavez	Dr. Shirley McBay

Visit Overview:

After a review of the relevant materials provided our team, a December 17-19, 2003, The Washington Advisory Group, led by Mr. Joe Wyatt, conducted a site visit to the University of Texas at the Permian Basin. The team included its coordinator, Dr. Raymond Bye, and the four additional consultants listed above. The WAG team met with 15 distinct groups. We conducted the meetings and discussions either as an entire team of six or in one of our two subgroups of three. These UTPB groups consisted primarily of faculty drawn from a broad selection of academic disciplines as well as a group of support staff. In addition, we met with a group of community leaders that included an elected official and leaders of the local Chambers of Commerce in Midland and Odessa, including the Mexican American and Black Chambers. We had working dinner discussions with the deans and another with President David Watts and Vice President for Academic Affairs William Fannin. In addition, we had an opening meeting with the university's leadership, including the president and vice presidents. On the last day of our visit, we held a final debriefing with President Watts, the vice presidents, deans, and assistant vice president for graduate Studies and sponsored research.