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At the Crossroads: The Texas/Mexico Border Economy at Cameron County and Matamoros

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"There is no choice in whether the border region will grow or not. If we closed the border tomorrow -- every bridge in South Texas all the way to El Paso and if we stopped migration from the North -- we would still have 230 percent growth in 30 years. ...we need to do a better job of educating this population. If we don't the Great State of Texas will be in a steady demise -- economically, socially, and politically." -- Juliet Garcia, President UTB/TSC

Cameron County, Texas and Matamoros, Mexico face the Rio Grande River where it meets the Gulf of Mexico; it is a place of natural beauty and agricultural strength. The region has a strong binational economic and cultural heritage, established and growing educational assets, and a rapidly growing young bi-literate

workforce. The region's opportunities are significant, as are its challenges.¹

The border region in general (and Cameron County/Matamoros in particular) is at a crossroads in terms of regional leadership; business and industry development; education and workforce training; and quality of life (see Figure 1). One direction leads toward enhanced regional prosperity; the other direction results in regional decline. In one direction, community leaders compete for limited resources to benefit individual cities and institutions. In the other direction, community leaders work together regionally and binationally to leverage limited resources to build a better future for all: Una Region – Un Futuro (One Region – One Future).

Figure 1

At the Crossroads: A Series of Choices



Source: IC² Institute

...Texas border counties rank lower than inner city counties such as Bronx County, New York, and Los Angeles County, California.

The challenges of the Texas/Mexico border cannot be overstated; the region is not merely “lagging” statewide. According to U.S. Census Bureau national rankings of critical statistics for counties with a population over 250,000, Cameron County and the neighboring Hidalgo County ranked side-by-side to lead the nation in percentages of people in poverty with the least education, evidenced by multiple poverty-related statistics (see Table 1). This means that Texas border counties rank lower than inner city counties such as Bronx County, New York, and Los Angeles County, California. Additionally, these “inner city” counties are surrounded by more prosperous areas in their direct vicinity. Cameron and Hidalgo share their borders with rural counties that are smaller (therefore not ranked in these comparisons) and whose poverty statistics are even more desperate.

In spite of these harsh realities, Cameron County continues to grow. Between 1990 and 2000, the U.S. population increased by 13 percent and Texas increased by 23 percent while Cameron County’s population increased 29 percent and Hidalgo County had an even larger increase of 48 percent.

At the same time, Brownsville’s population is numerically eclipsed by the size of Matamoros with its population of more than 450,000. Brownsville’s total population (currently approaching 140,000) is less than the number of Matamoros children aged 14 and under. While most border counties’ economies are considered bleak by U.S. standards, the northern region of Mexico is the land of maquiladoras (manufacturing plants), which until recently has represented a place of promise, especially for young families. Matamoros has a Median Household Income (MHI) of \$10,570 -- considerably higher than

southern Mexico or Latin America. Yet this is less than half Cameron County’s MHI of \$26,330, and this number is 34 percent lower than the Texas statewide \$39,967 which, in turn, is eight percent lower than the U.S. MHI of \$43,318.

Workforce talent on both sides of the border is young: the median age in Cameron County is 29, versus the U.S. national median of 35. The median age of Matamoros’ population is 23, where early marriage and childbearing are prominent. Quality education opportunities for this young border talent is a key challenge, closely followed by the challenge of retaining the “best and brightest.” For just as Cameron County’s “relative” prosperity lures talent from Mexico, there is greater prosperity further north that attracts talent to San Antonio, Austin, Houston, Dallas/Fort Worth, and beyond.

A high crime rate undermines economic stability on the Mexican side of the border while the influx of illegal immigration to the U.S. supplies an “informal economy” with a steady supply of low-cost labor. These incongruities frustrate the simplest data collection processes such as census-taking. Population statistics, growth statistics, and even wage statistics, are skewed because of the unmeasured portion of the population that lives off of and within this informal economy.

Binational Research

A “Border Development Alliance Survey” developed in 2001 by four border universities, was administered to both Cameron County and Matamoros residents.² The results returned were consistent across most issues, confirming the common nature of assets and challenges on both sides of the Rio Grande.

Table 1
Nationwide Rankings, U.S. Counties (Population 250,000 or more -- 236 total)

Poverty Rankings	Cameron	Hidalgo
Percent of People Below Poverty Level	2	1
Percent under 18 below Poverty Level	2	1
<u>Education Rankings</u>		
Less Than a High School Diploma	2	1
Percent of High School Graduate or Higher	235	236
Percent of People with a Bachelor’s Degree or More	231	229
<u>Economy Rankings</u>		
Median Household Income	235	236
Median Family Income	235	236

Source: U.S. Census Bureau, Census 2004.

"We need to increase education quality and provide our engineers more technical skills. We need to do more than produce products. We need to invest in research and produce the ideas that link that research to industry needs."

Rolando Gonzalez-Bacon
CNM President
Matamoros, Mexico

The region's established industries rated as most important for job creation were *Health Services* and *Education Services*, followed by *Tourism/Entertainment*. In ranking Emerging Technologies, both sides of the border placed the same four industries at the top: *Medical Technologies*, *Advanced Telecommunications*, *Computer/Information Technologies*, and *Environmental Conservation*. Similarities were apparent across the entire survey, revealing nearly identical concerns, values, threats and opportunities.

Economic Development

On both sides of the border, a low-wage workforce once created an environment for the proliferation of manufacturing jobs. But by 2003, Cameron County's top economic cluster (textiles & manufacturing) was surging offshore to China and other Asian regions. Matamoros's maquiladora industry, impacted even more severely, continues to wane as textile and manufacturing jobs chase the lowest global wage.³

The region's manufacturing industry is working to respond with "just-in-time" and "smart" manufacturing, methods that use innovation and technology for higher-value-added jobs. In short, the region is responding to this challenge by investing in industries, specifically targeted by community leaders as important emerging industries. To meet this need for high-tech value-added processes and services, a creative, highly-educated, and skilled workforce is essential -- which brings extremely high focus to the area's education and training facilities.

Education, Training

K-12 education: Quality education is one of the border's greatest challenges. On both sides of the border, many young people enter the workforce full time at an early age to help support their families. In the U.S., 16 percent of the population attains less than a high school education; but in Cameron County, this number soars to 45 percent. Two thirds of these (a total of 30 percent) attain less than a ninth grade education. In short, there is a need for great emphasis on K-12 education that promotes and prepares the students to pursue a high school education and beyond. The three regional magnet schools in the region are excellent, but they serve a limited population.

Texas State Technical College (TSTC) addresses local workforce needs while providing young adults an accessible way to re-enter the education system for targeted retraining. TSTC performs

labor market assessments and designs programs against industry-based career-planning recommendations. In 2000, TSTC's highest enrollment was in the medical field, followed by Business/Computer Information systems, showing direct correlation to binational survey results for job opportunities in established industries.

The University of Texas at Brownsville and Texas Southmost College formed a unique partnership in 1992, pairing the existing TSC junior college with the newly established University of Texas at Brownsville. A major goal at UTB/TSC is to increase faculty and quantity of education programs, while increasing enrollment. Specifically, increasing Cameron County's "college going rate" is a premier concern in the border region where 30 percent of the population attains less than a ninth grade education. UTB/TSC works closely with area high schools in student recruitment to facilitate high enrollment of Hispanic population while providing assistance in financial aid. The fall 2005 enrollment topped 13,000, and UTB/TSC anticipates an enrollment of 20,000 students sometime between 2010 and 2015.

A young university in the University of Texas System, UTB/TSC is growing in state appropriations and federal funds for research and development. In order to increase technology education with an emphasis on entrepreneurship, UTB/TSC purchased an abandoned shopping mall located on the border to house an International Technology Education and Commerce Campus (ITECC). ITECC was awarded development funds from the Greater Brownsville Incentive Program and the U.S. Economic Development Administration, and a HUD grant for the incubator's operation (see boxed text, p.5).

UTB/TSC also oversees the Texas Center for Border Economic & Enterprise Development (CEED), and the Cross Border Institute for Regional Development (UTB-CBIRD). It has opened a School of Public Health in partnership with the Brownsville Regional Campus of The University of Texas Health Science Center at Houston.

Mexico's educational needs are similar, but with fewer assets than Cameron County. Rolando Gonzalez-Bacon, President of *Consejo Nacional de Maquiladoras de Exportation de Mexico (CNM)* states, "We need to invest in our universities and technical schools on both sides of the border, and these institutions need to be better linked to the regional manufacturing clusters. We need to increase education quality and provide our

There would seem to be no better place to locate a research center for transportation and logistics than in Cameron County, with its multi-modal port facilities on the border -- and no better place to research homeland security measures.

engineers more technical skills. We need to do more than produce products -- we need to invest in research and produce the ideas that link that research to industry needs."

Recommendations

Institutional excellence, whether it be academic, business, or government, is NOT sufficient to provide regional prosperity. Visionary public-private leadership and leveraging of cross-border assets are required to overcome the challenges of the region. Collaboration occurs through meaningful knowledge sharing and targeted leveraging of resources (i.e. financial, intellectual and physical); goals need to be action oriented, with metrics for both short- and long-term success.

Regional opportunities are fostered by three types of entrepreneurship: technology, civic, and social (see Figure 2, p. 6). *Technology entrepreneurship* centers on linking talent, technology, capital and business know-how at the regional level for the creation of wealth from new businesses and processes. *Civic entrepreneurship* is most concerned with networking regional academic, government and business leaders to identify and solve community challenges. *Social entrepreneurship* focuses on finding creative and innovative ways to improve society through shared prosperity and social inclusion.

Implementing all three types of entrepreneurship, the following initiatives are targeted to bring academic, business, and government leaders -- and citizens -- together for enhanced regional and cross-border development.

Initiative One: Four industries are recommended for regional and cross-border collaboration development:

- Value-added Manufacturing
- Transportation Services and Logistics & Distribution
- Border Security
- Health Services and Life Sciences

Initiative Two: To promote quality education, training, and research, it is recommended that "Partnerships for Excellence" be established between regional and binational business and academia to accelerate the growth of these targeted industry clusters as well as building binational centers of education and research. Such partnerships create a viable strategy for a university to:

- Contribute to regional economic development
- Brand a region as a national and

international "hub" for technology and entrepreneurship

Specifically, it is recommended that a Binational Transportation and Logistic Research Center be established. There would seem to be no better place to locate a research center for transportation and logistics than in Cameron County, with its multi-modal port facilities on the border -- and no better place to research homeland security measures. The fact that this would also drop a needed economic keystone into a struggling region would seem to add further weight to this choice.

Initiative Three: In order to increase entrepreneurial efforts within the region and to counter the talent drain, it is recommended to foster grassroots development of entrepreneurial initiatives and to celebrate homegrown entrepreneurial successes to:

- Bring university and college graduates home to help build "smart infrastructure"
- Leverage the talent and networks of university and college alumni, *where they are currently located*, for enhanced national and global exposure and access
- Develop cross-border entrepreneurial competitions focusing on technology, civic, and social entrepreneurship
- Establish binational business plan competitions to feature Brownsville and Matamoros-based students and technologies.

In conclusion, the key for knowledge-base economic development to "take off" and "leap-frog" national and global competition is *creative and innovative partnerships* that are regionally based and that span academic/business/government sectors. In the 21st Century, geographic regions are the most appropriate units to analyze economic and social development, changes, and opportunities. Defining an economically meaningful region is not so much a matter of national borders or geographic size, but rather of finding areas where educational, economic, cultural and other linkages are strong. The lower Rio Grande Valley-Northern Mexico Border Region is a distinctive binational, bicultural, bilingual region. It is "One Region" with "One Future."

References

1. This article is an updated summary of the 2003 report compiled by UTB/TSC's CBIRD program, with IC² Institute, *At the Crossroads: Cameron County and Matamoros*. View the full report at <http://www.ic2.org/publications/At%20the%20Crossroads,%202003.pdf>

2. UTB/TSC, The University of Texas-Pan American, The University of Texas-El Paso, and Texas A&M Int'l in Laredo, jointly formed a Border Development Alliance to facilitate cooperation and research on border issues.

3. For a more complete discussion of the recent manufacturing shift to China, refer to April 2006 issue of *Texas Business Review*, "Global Trends & Market Shifts: Texas, China, and Mexico." ♦

The University of Texas at Brownsville/Texas Southmost College: UPDATE

In addition to bringing new academic programs to the region, UTB/TSC continues to play a major role in regional economic development. In 2002, the institution acquired a shopping mall built in the 1970's that was headed for extinction. The mall has 650,000 square feet, and sits on 48 acres of prime downtown land and with 3,200 parking spaces. The institution's transformation of this property, which is on-going, has been nothing short of phenomenal.

Approximately \$12 million has been invested in the facility in the last three years -- a capital investment that has funded retrofitting the outdated retail space to a consolidated state-of-the-art facility. This International Technology, Education and Commerce Center (ITECC) currently houses:

- a Technical Training Center
- all of UTB/TSC's Workforce Training Continuing Education activities
- the International Innovation Center (the IIC -- a small business incubator modeled after the Austin Technology Incubator)
- the Mexican Consulate
- the Small Business Administration
- the Department of Commerce Import Assistance Center
- EXIM Bank
- the local workforce board, Cameron Works, Inc.

The close proximity of these entities promotes ease of communication from one to another, while it also provides entrepreneurs with a "one-stop-shopping" business development hub.

Workforce Training and Continuing Education activities are essential to the mix, and since their new facility opened at the ITECC in 2002, 4,635 participants have completed new job skills training and 1,827 existing employees of area companies have completed job skill upgrade training.

The IIC, or business incubator, is focused on new business start-up and technology transfer. In just two years, the UTB/TSC incubator assisted in the opening of 17 businesses and is responsible for the creation of 450 new jobs. To date these synergies have created over 1,000 new jobs for the area.

This success is fractional compared to the potential, as current investments have developed only about 20 percent of the center's usable space. UTB/TSC hopes to create regional "critical mass" by utilizing bio-medical and physics facilities to attract entrepreneurs interested in the commercialization of ideas in emerging technology.

But plans to expand incubator operations are not limited to local office space. In 2006, IIC will open a second incubator in Raymondville in Willacy County to develop a network of associate business members.

UTB/TSC also continues to provide econometric research in the region that undergirds decision-making through the efforts of the Texas Border Center for Economic and Entrepreneurial Development (CEED) and the Cross-Border Institute for Regional Development (CBIRD).

The community recognizes the regional return on investing in the ITECC, and in November 2004, the voters of the Texas Southmost College District approved support of a \$68 million bond issue for capital expansion at UTB/TSC. Of these funds, \$17 million will be invested in the ITECC. The completed facility is expected to attract new business-focused tenants to the community and to serve as an economic engine well into the future.

The long-term development and sustainability of economic development programs will depend upon UTB/TSC's ability to plan and build-out the physical infrastructure at ITECC and to develop and fund the appropriate academic, training, and continuing education programs at ITECC.

In a separate positive measure, the Texas legislature has recently approved a \$33.8 million tuition revenue bond for UTB/TSC in order to construct a science and technology learning center -- a "smart" classroom equipped with leading-edge technologies. This integrated facility will contribute additional critical mass as it produces qualified college graduates to serve in the region's knowledge-base economy.

Antonio Zavaleta
VP for External Affairs, UTB/TSC
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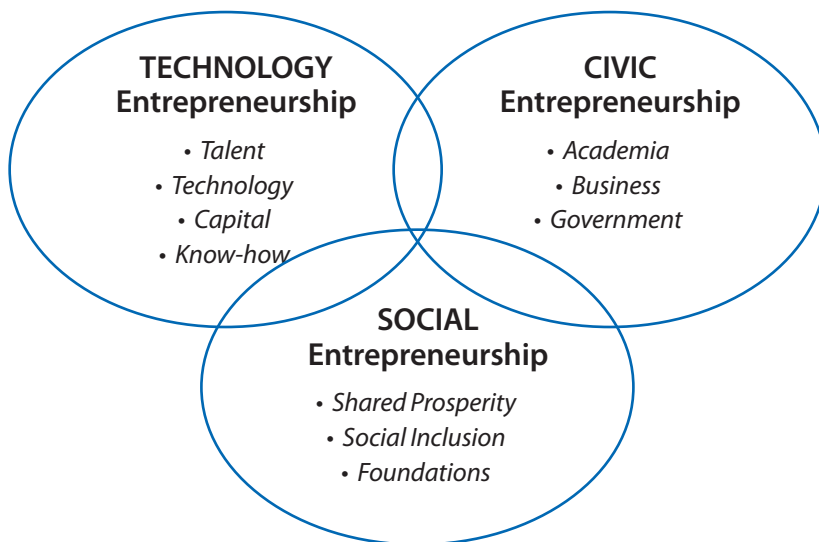
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Figure 2
Three Types of Entrepreneurship
Needed on the Texas/Mexico Border



Source: IC² Institute

Announcement

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