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Workforce Solutions is the workforce development board serving the Texas Rio Grande Valley counties of Hidalgo, Starr and Willacy. The agency delivers publicly funded employment and training services through a network of partners located throughout the region. Workforce Solution’s goal is to provide businesses, employers, job seekers and employees with the resources needed to succeed in an ever-changing world.

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TIP STRATEGIES, INC. is a privately held Austin-based economic development consulting firm committed to providing quality solutions for public and private-sector clients. Established in 1995, the firm's primary focus is economic development strategic planning.

1: Executive Summary

The Lower Rio Grande Valley (LRGV) has fared better than much of the country during the recent recession. However, that does not mean the region has been immune to the downturn. The peak of the job recession came in 2009 as the four-county region added 18,000 unemployed workers on top of the thousands it already had. Construction, manufacturing, transportation, and farming jobs were among the hardest hit. The number of unemployed workers continued to rise in 2010 in all four counties, but the pace has slowed significantly.

In 2009, leaders in the four-county LRGV region (Cameron, Hidalgo, Starr, and Willacy) came together to pursue a Regional Cooperation Capacity Building for Targeted Industries Program grant from the Texas Workforce Commission. The purpose of the grant was to bring regional partners together to produce a regional plan that identifies available resources, including those available through the federal stimulus program, and a coordinated action plan to access these funds. TIP Strategies (TIP), an economic strategy firm based in Austin, was engaged in the spring of 2010 to assist in this process.

About this work

The planning process was guided by an advisory group, led by Workforce Solutions Lower Rio Grande Valley. Throughout the course of this work TIP met with representatives of the regional partner organizations, both individually and as a group, to obtain relevant background information and review project expectations. In addition, we conducted focus groups with local economic development organizations and businesses, and created an on-line survey to gather input from area employers. The results of the survey are presented as **Appendix A** of this report.

To understand current conditions, we conducted a demographic and economic assessment of the Lower Rio Grande Valley. This market-based assessment, presented as **Section 2** of this report, documents the region's economic and labor market conditions. The assessment formed the foundation for our analysis of expected changes in the industries and occupations that are driving the regional economy. The results of this cluster analysis are shown in **Section 3**, with an additional analysis of the region's workforce relative to the State of Texas industry clusters presented as **Appendix E**. Based on this analysis and input obtained from the Regional Partners and other stakeholders we identified target industries and occupations that should be considered for training (**Section 4**). Using data compiled on the curricula offered by regional training providers, we compared the occupational demands of the target sectors with the available training programs to identify any potential gaps. This analysis was performed using a curricula inventory tool which was specifically designed for this work. The results of this analysis are outlined in **Section 5**. **Section 6** provides our recommendations on joint activities that could be undertaken to meet the needs of the region's target industries, including suggested sources for funding.

Regional Cooperation Grant Partners

- Workforce Solutions (LRGV)
- Workforce Solutions Cameron
- Rio South Texas Economic Council
- South Texas College
- Texas State Technical College
- University of Texas Brownsville/Texas Southmost College
- SOL Technologies, Inc.
- Baryonyx Corporation

Key Findings

Workers are not constrained by political jurisdictions, as one look at commuting patterns for any community in the country will attest. Employers pull in workers from throughout the Lower Rio Grande Valley, as do area training institutions. As a result, taking a regional approach to workforce development and training makes sense. The economic ties between the two workforce board areas – Workforce Solutions Lower Rio Grande Valley (encompassing Hidalgo, Starr, and Willacy Counties) and Workforce Solutions Cameron (serving Cameron County) – mean that many of the workforce challenges and needs are the same.

Target industries and occupations

For this work, we revisited the target sectors identified in the 2005 cluster analysis. Despite significant changes in the national and regional picture since that time, the majority of the sectors remain appropriate for the region. The following recommendations build on the current list by offering some refinements, as well as suggesting new areas of interest. One sector – Retail & Hospitality – has been removed from our recommended sectors. While this sector is still projected to account for a large share of the region’s future job growth, most of the occupations do not present good targets for training either due to the low wages or the minimal preparation that is required. Customer service training should continue to be available on a custom basis as requested by area employers.

- **Healthcare.** Healthcare will continue to be a significant driver of employment growth in the region. Because of the region’s demographics, most notably the large share of low-income residents and the persistence of chronic conditions such as diabetes, much of this growth is expected to be in home health occupations, which are covered by federal health care programs. Demand is also expected to continue for technician-level workers — those that provide diagnostic and therapeutic services. The push for electronic medical records is also expected to create demand for health information technology workers. Although training exists for aspects of this occupation in isolation – there are a number of medical coding and computer programming offerings in the region – there is no curricula that effectively brings these areas together in the way the industry will now require. The inclusion of social assistance occupations, such as case managers and counselors, should also be considered given the overlap between these two areas.
- **Energy.** We recommend that alternative energy be added to the region’s target list in light of proposed investments in the area and federal priorities. Two of the partners in this grant – Baryonyx (wind) and SOL Technologies (solar) – are renewable energy companies planning to add alternative energy facilities in the region. In addition to demand for workers to construct and service solar arrays and wind turbines, employment growth related to this sector includes transmission line workers, telecommunications installers, and programming occupations (related to remote operations of these facilities, particularly off-shore wind farms). Demand for this sector, however, is strongly correlated with energy prices and has been largely driven by federal subsidies. As a result, timing of demand for workers in this sector remains a question.
- **Construction/Skilled Trades.** Construction employment was hard-hit during the recession. While it will take some time for demand to return to prior levels, the Valley has seen a resurgence of activity in recent months, with a number of major projects on the horizon. Ensuring that the region has the supply of construction workers and skilled trades people needed to meet this demand should continue to be a focus of training. The projected retirement of a large share of workers in the trades – plumbers, electricians, heating and air conditioning technicians – makes this need even greater.

- **Advanced Manufacturing.** Although manufacturing experienced significant job losses both regionally and nationally, it remains a valid target for workforce and training activities. Slight gains are projected in the coming years, with a small number of expansions and locations already in the works. In addition, manufacturing still provides one of the best opportunities for high wage jobs and career development. This is particularly true of advanced manufacturing, which is not a specific sector or product, but rather refers to firms that use high-tech processes, such as robotics and other “intelligent” systems, in the production process. Industries which are classified as part of the State of Texas’s advanced manufacturing cluster and which have a substantial presence in the Valley include Ship and Boat Building and Aerospace Product and Parts Manufacturing. Logistics is a related sector.
- **Criminal Justice/Homeland Security.** This sector should also remain a high priority for a number of reasons, not the least of which is the demand for public safety workers – police officers, fire fighters, and other first responders – required to serve the region’s growing population. Along with this basic need, the LRGV faces several distinct issues. National security issues continue to dominate headlines, as drug violence endures along the Texas-Mexico border, concerns about the impact of illegal immigration remain, and fears of a terrorist threat linger. In addition, the presence of a state prison in Willacy County creates a constant demand for correctional officers.
- **Education.** In addition to growth in public safety employees, the region’s projected population growth and its relatively young population will create continued demand for educators at all levels. In our review of growth occupations, teachers held a number of the top spots. Because teaching requires relatively high levels of educational attainment, the demand for this occupation cannot be met quickly. Ensuring that there is a sufficient number of teachers in the pipeline will require a continuous effort. A sufficient supply of quality teachers is doubly important to the region’s economy because of the role teachers play in preparing others for entry in the workforce.
- **Business Services.** The Valley still lags in business services and related employment. These firms provide a range of support activities, such as marketing, accounting, and information technology (IT) services, to local companies. IT jobs were identified as an important sub-cluster in the 2005 report. Yet, the colleges report a flattening in IT-related enrollment, despite the fact that computers are now an integral part of virtually every workplace. This trend could be a reflection of new tools that make some computer-related tasks simpler (like website development). More likely, the slow growth in enrollment reflects the fact that technology training is now embedded in almost every course. High school students, most of whom have been exposed to information technology for years, graduate with a basic level of knowledge that prior generations lacked. From a training standpoint, accounting occupations are likely to have the highest demand in the area short-term. However, the region’s growing border-related employment could drive demand for additional IT and communications needs to support increasing sophistication in surveillance and inspection operations. The alternative energy investments described above could create similar types of needs, as investments like off-shore wind farms are operated remotely.

Border literacy

The human resource challenges identified in our earlier work also remain relevant. (*See page 6.*) Along with persistent low levels of literacy and educational attainment, the recent restructuring of the economy has exacerbated the skills gap identified in 2005. In fact, the economic recession has heightened the challenges in some respects. The growing gap between skilled and unskilled workers has created what one person interviewed for this work referred to as “two parallel economies.” One economy is represented by the growing number of professionals drawn to the region’s affordable lifestyle and dynamic economy; the other is comprised of workers who lack the skills and language proficiency to gain meaningful employment. Even as the number of workers in the latter category continues to expand, funding levels for essential programs, such as adult basic education, high school equivalency (GED) certification, and English as a Second Language (ESL) continue to decline. Addressing the needs of this group will be essential to the region’s success. The newly created Border Workforce Alliance, comprised of the five workforce development boards along the Texas/Mexico border, is an important first step.

Entrepreneurship

The economic downturn has also created renewed interest in entrepreneurship. As talent becomes more mobile and fewer employment options are available for some workers, starting a business has become more viable than finding traditional employment. Creating an entrepreneurial track for workforce and training activities can provide an alternative mechanism for economic growth. At minimum, this strategy would mean providing support to existing entrepreneurship organizations in the region. A more aggressive approach would include offering customized entrepreneurship trainings, adding entrepreneurship-related occupations to the region’s target occupations list, or helping to create a network of entrepreneurial coaches in the region.

Career & technical training

According to a 2008 publication by the Texas Comptroller of Public Accounts, the number of academic contact hours taken at the state’s two-year colleges continues to rise while technical instructional hours at these institutions remain flat. At the same time, roughly two-thirds of the 30 occupations projected to have the largest job growth over the next decade by the U.S. Bureau of Labor Statistics, require less than a four-year degree. (*See Figure 5.4.*) At least in part, this divergence may reflect misconceptions about employment opportunities associated with postsecondary programs other than a four-year degree. Helping to raise awareness about employment opportunities, wage rates, and working conditions in technical fields could help draw more students into these areas. Texas State Technical Institute’s mechatronics program is one example of a program that could benefit from this type of marketing both to help educate area residents about what mechatronics entails and to identify the types of career ladders such training would open up. Given the impending retirement of the baby boom generation, a regional effort to change perceptions around skilled trades should also be considered.

“Mechatronics is another way of saying ‘intelligent mechanical systems’ and it is the foundation of many 21st century enabling technologies. Mechatronics involves the integration of mechanical and electrical systems with control systems and information technology.”

Texas State Technical College website
Overview of *Mechatronics: A Technology Forecast*, Vanston, John, et al., July 2007

Creative approaches

The Valley's challenges are formidable. But so is the determination of the regional leadership to address them. A number of past and current initiatives are evidence of this fact, including the 2005 Industry Cluster Analysis (Workforce Solutions LRGV), the Rio Grande Valley Allied Health Training Alliance (Valley Interfaith Development Alliance, or VIDA), the Breaking Through career pathways (South Texas College, VIDA, and Jobs for the Future), and more recently, the Partners for Postsecondary Success planning process (consortium of partners in Cameron County, including Workforce Solutions Cameron, Brownsville Economic Development and UT-Brownsville). Developing a framework for sustaining and expanding these initiatives throughout the region should be explored. This strategy could be part of a formal "State of the Workforce" event or could entail creating a regional clearinghouse for sharing curriculum and other lessons learned.

Whatever course of action the Regional Partners undertake, identifying potential funding sources will be paramount in light of federal and state budget issues. One important component of this funding strategy will be aligning regional initiatives with government and foundation priorities. Our recommendations provide a starting point in that most can be aligned with existing initiatives. For example, increasing educational attainment and literacy dovetails with priorities of groups such as the Hispanic Scholarship Fund, the Gates Foundation (sponsor of Partners for Postsecondary Success), and with President Obama's pledge to make the U.S. the world leader in college attainment by 2020 by calling for 8 million college graduates by 2020.

Conclusion

Opportunities abound for the Lower Rio Grande Valley. Local communities often appear on "best of" lists that tout the region's strong economic growth, business friendly environment, and affordable lifestyle. The region can claim a number of assets, including a network of quality educational institutions, two regional airports, a growing medical cluster, and proximity to an international border. Creating regional strategies around these kinds of assets can be challenging, as political jurisdictions often compete with one another for capital investment, jobs, and tax revenues.

Collaborating on workforce and education strategies should be viewed differently. In an economic region like the four-county LRGV, everyone shares the same workforce. The Valley is home to a relatively young population, many of whom are bi-lingual. In today's global economy, these characteristics could make the workforce very appealing to employers. Yet, this important differentiator has yet to be fully realized. Addressing workforce challenges and leveraging opportunities as a region can help everyone succeed; failure to do so will prevent the Valley from realizing its full potential.

Human Resource Challenges in the Lower Rio Grande Valley

- 1: A young workforce.** Although a young workforce can be seen as an advantage relative to regions facing an aging population, it does present specific challenges from a human resource standpoint. High dropout rates and a lack of basic skills (such as reading, writing, and mathematics) make it difficult to find qualified applicants even for entry-level jobs. This problem can be confounded by the fact that younger workers often lack a career mindset, which can prohibit them from developing the skills they need to move up when they are able to find employment.
- 2: Employability skills.** The implications of the region's dropout rate are not limited to its youth. Nearly half of the Valley's existing labor force lacked a high school diploma or general equivalency degree (GED) in 2000. Other general employability skills affect both youth and adult workers. Attendance, attitude, and customer service skills are barriers to recruitment and advancement across all age groups. Limited English proficiency also presents a significant challenge in hiring. Data from the 2000 U.S. Census show that roughly one in four working-age people (24 percent) in the three-county region speak English "not well" or "not at all." Even where English was not cited as a problem, poor communication skills were frequently mentioned as an issue in the region.
- 3: Leadership and supervisory skills.** Finding qualified applicants for management positions represents another challenge for human resource managers. In addition to the lack of communication skills among the applicant pool mentioned previously, those we interviewed indicated that critical thinking skills and cultural awareness were also a problem. Management ethics or fraud was also cited as an issue, both for rank-and-file and managerial positions. The "Peter Principle," which contends that people tend to be promoted up to their level of incompetence, was also mentioned as a factor.
- 4: Lack of advanced technical skills.** Recruiting and retaining workers with advanced technical skills was cited as a problem across industries from a lack of industrial maintenance mechanics to a shortage of qualified information technology workers. The effects of this shortage will only intensify as manufacturing and service work becomes increasingly technical in nature. However, specific initiatives designed to address this issue, such as the South Texas Manufacturers Association apprenticeship program, reportedly suffer from a lack of interest.
- 5: Lack of knowledge of skill levels of local workforce.** Human resource managers cited a lack of knowledge about the skills of the local workforce and the growing burden created by assessment and screening tools as challenges in hiring. Employers in virtually every industry are faced with assessing potential applicants on basic job skills, customer service skills, computer literacy, as well as an array of specialized screening tools, such as background checks, credit checks, drug test, lie-detector screenings, and even personality profiling. The lack of a labor pool database was cited by economic development professionals as specific impediment to job growth in the region.
- 6: Professional labor skills shortages.** Finding qualified professionals was another obstacle identified during the course of our work. Specific reference was made to a lack of skilled computer maintenance and network specialists, engineers, registered nurses, and other health care applicants (such as lab techs). A shortage of certified teachers was also cited, particularly those qualified to teach math and science, and bilingual educators.

Source: *Industry Cluster Analysis for the Lower Rio Grande Valley*, TIP Strategies, February 2005.

6: Recommendations

The following recommendations provide a framework for regional collaboration around the workforce issues identified during this planning process. For each recommendation we provide examples of potential strategies and funding sources that could be pursued by the Regional Cooperation Partners and other stakeholders in the region, such as the Valley Initiative for Development and Advancement (VIDA).

6.1: Expand industry-driven approaches to curricula development throughout the region.

The LRGV has already made significant strides in using an industry-driven, regional approach to the development of workforce curriculum. The industry task forces established to validate the 2005 cluster analysis are an example of private sector involvement, as are VIDA's work on mapping career ladders for healthcare occupations, and the Breakthrough Collaborative initiative undertaken by VIDA and South Texas College.

The Regional Cooperation Grant Partners could provide a mechanism for tying existing initiatives together and incorporating "lessons learned" from other similar models across the country. Emphasis should be placed on increasing private-sector involvement, with the goal of creating more "employer-driven" initiatives. The National Governors Association Center for Best Practices' June 2010 report on the Automotive Manufacturing Technical Education Collaborative (originated as a partnership between Toyota and the Kentucky Community & Technical College System), can provide a starting point for these kinds of sector-based strategies.

Potential strategies:

- Convene regionwide industry councils to verify industry and education data and stay attuned to workforce needs.
 - The industry task forces established during the 2005 Industry Cluster initiative could serve as a model.
 - Involve relevant state and regional trade associations as a means for broadening input.
 - Coordinate with state-level target sector initiatives where applicable.
 - Identify the "value proposition" for private sector participants – *What benefit will they get from participating?* – and stick to it.
 - The Lumina Foundation's interactive web-based tool *Engaging Business Partners in Education Programs* can be a resource in this regard (<http://www.bizedkit.org/>).

DEFINITION: Sector-based strategies are regional, industry-specific approaches to workforce needs, implemented by an employer-driven partnership of relevant systems and stakeholders.

- Conduct workforce-mapping initiatives for key occupations in target sectors – starting with potential gaps identified in this planning process – in order to:
 - confirm knowledge, skills, and abilities with employers and share this information with educators;
 - identify non-traditional sources for recruitment or advancement into the occupations; and
 - identify and address barriers to entry, such as needed reciprocity agreements or articulation issues.

- Create a formal mechanism for sharing best practices and curriculum in the region.
 - A web-based application, such as Mindmeister or Wikispaces, could be used to point educators and economic development and workforce professionals to on-line resources and to store relevant documents.
 - An annual “State of the Workforce,” or other similar event, could provide an opportunity to bring education, workforce, and economic development professionals together to network and exchange ideas.
 - Bring in outside presenters and experts to introduce new ideas and concepts to the region.

- Help identify relevant resources to help sustain resulting initiatives.
 - Emphasize direct business impacts whenever possible to encourage private-sector matching.
 - Promote successes to help build support among private and public organizations in the region.

EXAMPLE: Advanced Manufacturing/CNC Consortium

Organized by Workforce Solutions of Tarrant County in late 2008 at the request of five local companies, this partnership of advanced manufacturing companies, education providers, and economic development entities was designed to address the critical shortage of CNC machinists in Tarrant County. The partnership, which has grown to over 15 companies, has created a curriculum designed to prepare individuals for entry level jobs as machinists, and to upgrade skills of CNC machinists. Tarrant County College used existing funds to purchase the equipment needed to simulate the desired work environment. Employers have donated the time, equipment and expertise, including marketing expertise used to produce a video, “Gotta Make It” which was funded through a \$50,000 Texas Workforce Commission grant and is now available to local students on DVD and via YouTube.

Potential funding sources:

- The U.S. **Department of Labor Employment and Training Administration (ETA)** has a number of initiatives that could support this recommendation:
 - The *Trade Adjustment Assistance Community College and Career Training (TAACCCT)* Grants Program will provide community colleges and other eligible institutions of higher education with funds to expand and improve their ability to deliver education and career training programs that: 1) can be completed in two years or less, 2) are suited for workers who are eligible for training under the Trade Adjustment Assistance for Workers program, and 3) prepare program participants for employment in high-wage, high-skill occupations. The Department intends to fund grants ranging from \$2.5 million to \$5 million for individual applicants and from \$2.5 million to \$20 million for consortium applicants. ETA just released a Notice of Availability of Funds and Solicitation for Grant Applications for this program.
 - The *Career Pathways Innovation Fund* replaces the Community-Based Job Training Grants (CBJTG). The program will continue the support for community colleges provided by the CBJTG, but will focus on career pathway programs. Grants will be awarded to community colleges and consortia of community colleges that are developing or expanding career pathway programs in partnership with education and training providers, employers, and the workforce investment system. Grants may also be awarded to two-year colleges that meet these criteria and have been designated as Hispanic-Serving Institutions or Historically Black Colleges. \$65 million of the total funding will go toward programs that focus on training for health care fields.
 - The *Green Jobs Innovation Fund* will allow ETA to build upon the lessons learned from the green job investments provided under the American Recovery and Reinvestment Act. Through competitive grant opportunities, the fund will help workers receive job training in green industry sectors and occupations and access green career pathways. Green industries supported by this program include the energy efficiency and renewable energy industries, as well as sectors that impact the environment such as transportation, green construction, environmental protection, sustainable agriculture, forestry, and recycling and waste reduction.
- The **National Fund for Workforce Solutions** is a collaboration between the nation's top foundations and a nationwide network of companies, workforce intermediaries, and government agencies. In December 2010, the organization provided \$5.5 million in grants to 10 communities to expand innovative approaches to job training and career support.
- The **Ford Foundation** promotes economic fairness through programs that promote the next generation of workforce strategies. The foundation supports four main strategies to improve opportunities for low-wage workers: 1) working with stakeholders in the workforce development system, 2) supporting innovations that increase the effectiveness and ability of training programs, 3) helping to increase the capacity of worker centers, and 4) supporting research and policy analysis. Examples of projects funded by the Ford Foundation include the National Governor's Association *Accelerating State Adoption of Sector Strategies*

project. Other funders of the NGA project include the Charles Stewart Mott Foundation and the Joyce Foundation. The Joyce Foundation focuses on the Great Lakes region and does not offer additional grants in Texas. The Charles Stewart Mott Foundation is described in recommendation 6.2 below.

- The **WK Kellogg Foundation** offers grants for programs that create new employment pathways in the emerging green-collar economy. As such, the foundation could be a source of funding for curriculum development costs related to this sector. *(Additional information about the WK Kellogg Foundation focus is provided under recommendation 6.2.)*

6.2: Create a regional plan to address literacy issues and skills gaps along the Texas-Mexico border.

The success of any economic or workforce initiatives in the LRGV will continue to be affected by the human resource challenges identified during the original cluster analysis conducted by TIP Strategies in 2005 (*see page 6*). The most pressing of these challenges relate to literacy and skills. The number of workers in the region that lack proficiency in English (and may be illiterate in their native language) and who are unequipped to meet the demands of today's employers continues to grow. While this population is a challenge for many communities, the issue is particularly acute along the Texas-Mexico border.

The five workforce boards located along the Texas-Mexico border came together in December 2010 to propose a plan of action around Border literacy and skills training. As a result of the December event, a strategic coalition, the Border Workforce Alliance (BWA), was formed to provide a unified voice for addressing this challenge. The purpose of the BWA will be to identify effective strategies for engaging these disenfranchised workers in the education and training system in order to bring them into the labor pool as quickly as possible. If the BWA is successful, this population of bi-lingual workers could be transformed into a competitive economic advantage for the Texas/Mexico border region. Failing to act and address these critical shortfalls will serve to severely inhibit the region's economic future.

SPOTLIGHT: Breaking Through

South Texas College was invited to join Jobs for the Future's *Breaking Through* initiative. Breaking Through promotes and strengthens the efforts of 35 community colleges in 18 states to help low-skilled adults prepare for and succeed in occupational and technical degree programs. The program rests on four strategies:

- ✓ **Accelerated learning.** Through the innovative use of assessment tools, restructured curricula, targeted instruction, contextualization, and other strategies, change delivery methods and content so that students can meet their goals faster.
- ✓ **Comprehensive support services.** Make academic, economic, and social support services easily accessible to students whose life challenges put them at risk of not completing their education.
- ✓ **Labor market payoffs.** Restructure both pre-college and college-level instruction to connect course content with the workplace and to connect students with actual employers and workplaces.
- ✓ **Aligning programs for low-skilled adults.** Reorganize college programs and link them with external programs to provide students with a better understanding of how they can move into and through college, and to provide clear pathways that enable them to do so.

SOURCE: <http://www.jff.org/>

Potential strategies:

- Provide support to existing initiatives that address the needs of this population.
 - Focus on programs that facilitate rapid entry into the workforce, such as the use of stackable credentials. STC’s Breaking Through program is an example of this approach. *(See text box, previous page.)*
 - Look for mechanisms than can help scale these initiatives to serve larger populations.
- Link these efforts to an entrepreneurship strategy.
 - Capitalize on upward trend in small business ownership among Hispanic population.
 - The number of Hispanic-owned businesses in the U.S. increased by 43.7 percent to 2.3 million, more than twice the national rate of 18.0 percent between 2002 and 2007, according to a September 2010 release by the U.S. Census Bureau.

Potential funding sources:

- The **Gates Foundation** has funded a number of projects addressing the needs of this group. For example, in May 2009, the Gates Foundation awarded \$1.5 million to the Manufacturing Institute (a nonprofit affiliate of the National Association of Manufacturers) to integrate NAM’s Manufacturing Skills Certification System with postsecondary credentials. The Gates Foundation has also funded pilot projects in eight states aimed at placing low-income young adults into energy jobs.
- The **ETA** also has ongoing funding opportunities under its Employment and Training Administration Pilots, Demonstrations, and Research Projects fund. Current priorities include demonstration projects to fund and evaluate transitional jobs models focused on the needs of low-income non-custodial parents (primarily fathers) in connection with President Obama’s Fatherhood Initiative. Through the Consolidated Appropriations Act, Congress appropriated \$30 million of the Employment and Training Administration’s (ETA) Pilots, Demonstration and Research fund and \$15 million of the Reintegration of ExOffenders fund to support new competitive grant programs to provide and evaluate transitional jobs activities.
- Applicable **U.S. Department of Education** programs include:
 - The *Adult Education and Literacy Program* provides grants to states to fund local programs of adult education and literacy services, including workplace literacy services, family literacy services, English literacy programs, and integrated English literacy-civics education programs.

Participation in these programs is limited to adults and out-of-school youths age 16 and older who are not enrolled or required to be enrolled in secondary school under state law.

- The Institutional Development and Undergraduate Education Service (IDUES) administers programs as part of the College Cost Reduction and Access Act (CCRAA) of 2007. Relevant IDUES grant opportunities include the *Developing Hispanic-Serving Institutions (HSI)* program (which can be used for a variety of initiatives including academic tutoring or counseling programs) and the *Strengthening Institutions* program (which can be used to fund innovative programs to move students rapidly into core courses and through program completion, which may include remedial education and English language instruction).
- The **Economic Development Administration (EDA)** provides planning assistance grants through its Planning Program. While these grants are typically used to support the development of a Comprehensive Economic Development Strategy or CEDS, they can also be used to provide support for related short-term planning investments and State plans designed to create and retain higher-skill, higher-wage jobs, particularly for the unemployed and underemployed in the nation's most economically distressed regions. Eligible grantees include institution of higher education or a consortium of institutions of higher education. Broad representation in the process, particularly the involvement of the region's business leadership, is among the criteria considered for funding. Requests must demonstrate the relationship to the region's existing CEDS. *Ignite Hidalgo County* (2011-2015) is the region's most recent completed CEDS effort.
- The **Charles Stewart Mott Foundation** funds the *Pathways Out of Poverty* program. Its mission is to identify, test, and help sustain pathways out of poverty for low-income people and communities. The program is organized into four grant-making areas: Improving Community Education, Expanding Economic Opportunity, Building Organized Communities, and Special Initiatives.
- The **Sundt Foundation** is a non-profit organization focused on the needs of disadvantaged children and adults. The Foundation receives most of its funding through employee contributions, which are matched by the company. To date, it has provided more than \$3.5 million in aid to community organizations in Arizona, California and Texas. Grants range from \$1,000 to \$10,000 and are typically made to community service organizations.
- The **Dollar General Literacy Foundation's** *Adult Literacy Grants* award funding to nonprofit organizations that provide direct service to adults in need of literacy assistance through Adult Basic Education, GED, or ESL programs. Funding organizations must be within 20 miles of a store location and must be listed in Dollar General's National Literacy Directory (both Workforce Solutions LRGV and South Texas College are listed). The current funding cycle grant deadline is February 24, 2011.
- The **Annie E. Casey Foundation** makes grants that help states, cities and neighborhoods fashion more innovative, cost-effective responses to the needs of vulnerable children and families. The Foundation's *Center for Family Economic Success* supports efforts aimed at linking economic opportunity and the creation of mixed-income communities in ways to alleviate poverty. One of the center's three focus areas is creating successful working families. This strategy incubates and takes to scale models combining workforce training and asset-building for families and communities.

- The **WK Kellogg Foundation** supports programs that increase family stability; foster quality jobs, careers and entrepreneurship; and promote secondary achievement and financial independence through its *Secure Families* strategy. One of the three primary areas of focus under this strategy is supporting pathways that lead to economic mobility and quality job opportunities. The organization provides funding nationwide, however, its priority places for grantmaking are Michigan, Mississippi, and New Mexico – with a stated goal of awarding 60 percent of its funds in these states.

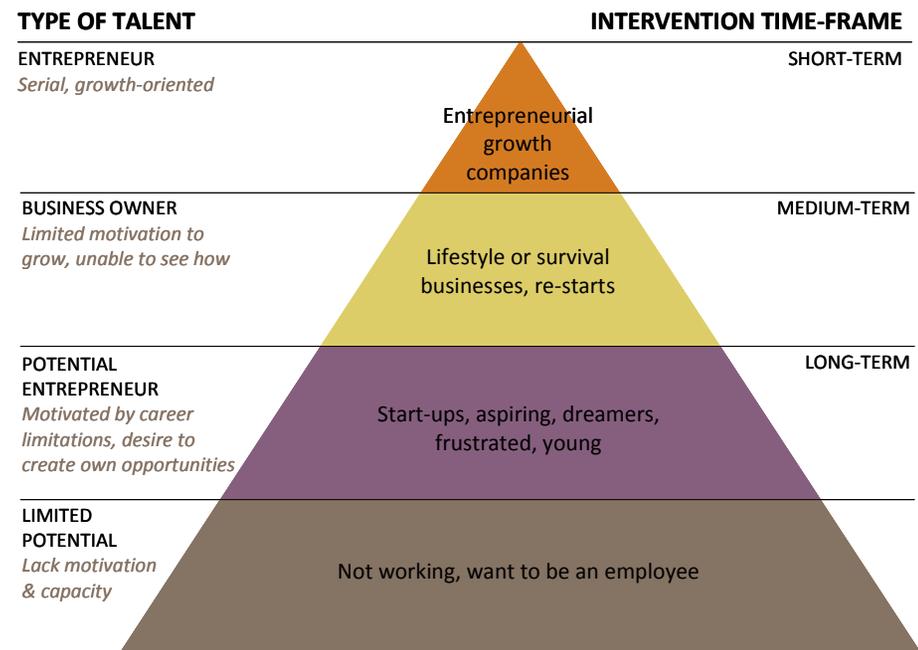
6.3 Strengthen entrepreneurship in the region.

Entrepreneurship has become an essential tool in the economic development toolbox. Especially in rural areas, communities are recognizing that a “grow your own” strategy has a higher probability of success than recruiting a major employer to the area. In addition, entrepreneurship strategies that foster new business and job creation are often more cost effective than incentives paid to recruit businesses to a community. A recent study of the Appalachian Regional Commission’s Entrepreneurship Initiative published by the Rural Policy Research Institute’s (RUPRI) Center for Entrepreneurship found the public cost of the initiative per job created ranged from \$579 to \$3,994 (*Creating an Entrepreneurial Appalachian Region*, RUPRI, April 2008). In addition, fostering entrepreneurship can help stabilize and support micro- and small businesses, which comprise the majority of firms in the Valley, as illustrated in **Figure 2.27** (page 22).

Figure 6.1 presents a framework for thinking about the types of entrepreneurial talent – entrepreneurs, business owners, potential entrepreneurs, and those with limited potential – and the timeframe for intervention. Each type of talent differs in terms of its needs and motivations, but each is an important part of a regional strategy. Targeting potential entrepreneurs encourages a more entrepreneurial culture and can lead to more start-ups in the future. Business owners account for the large majority of businesses. At the top of the pyramid, true entrepreneurs are not very common, but their ventures have the highest economic impact potential.

Our review of entrepreneurship indicators and resources (**Section 2**) suggests that access to technical assistance and support services is lacking in some parts of the region. And like

Figure 6.1 Entrepreneurship Framework



SOURCE: Patterned after graphic created by the RUPRI Center for Rural Entrepreneurship.

most areas of the country, entrepreneurs in the LRGV need greater access to capital other than debt. In terms of industries, we found services for high-growth entrepreneurs in sectors other than advanced manufacturing to be lacking. Our discussions with area providers indicate that the local culture embraces the concept of starting small or micro businesses, but is less supportive of starting a high-growth venture.

Potential strategies:

- Continue to explore ways to add entrepreneurship to the region's target occupations lists. The Entrepreneurship Competency Model created by ETA and the Consortium for Entrepreneurship Education could be a starting point.
- Organize industry-specific entrepreneurship groups to support high growth entrepreneurs in target industry sectors.
- Train entrepreneurial coaches / concierges in low access areas to help connect entrepreneurs with service providers and support that they need.
 - See **Appendix K** for an overview of the Kentucky Entrepreneurial Coaches Institute and other best practices in entrepreneurship.
- Assemble a network of mentors to support entrepreneurs.
- Assemble a capital network to help entrepreneurs identify their capital needs and raise funds through optimal avenues.
- Support initiatives to promote youth entrepreneurship to enhance the entrepreneurial culture of the region.

GUIDANCE: Entrepreneurship

In November 2010, the US Department of Labor ETA issued Training and Employment Guidance Letter 12-10. Entitled *Supporting Entrepreneurial and Self-Employment Training through the Workforce Investment System*, the letter states that workforce investment boards are “strongly encouraged to examine existing strategies for promoting entrepreneurship as an employment strategy, establish parameters for funding entrepreneurial and self-employment training, and explore further opportunities for supporting entrepreneurship.”

The letter included the following examples of role the workforce investment system can play in support of entrepreneurship:

- ✓ Engaging with partners to develop an entrepreneurial environment and strategies to leverage workforce system resources to identify and support potential entrepreneurs;
- ✓ Informing One-Stop customers about opportunities for self-employment and entrepreneurship and working with customers to assess whether self-employment is a good fit;
- ✓ Helping One-Stop customers understand the range of resources available and referring them to counseling and training that best meet their needs;
- ✓ Partnering with organizations that support entrepreneurship and co-locating small business development resources within One-Stop Career Centers as partners;
- ✓ Seeking out opportunities to add entrepreneurship training programs to the eligible training provider list;
- ✓ Encouraging recipients of Individual Training Accounts to pursue entrepreneurship training where appropriate;
- ✓ Integrating entrepreneurship strategies into overall youth education and development activities for at-risk and out-of-school youth; and
- ✓ Developing strategies, including training programs to help small business owners to grow their businesses.

SOURCE: <http://wdr.doleta.gov/directives/attach/TEGL/TEGL12-10.pdf>

Examples include:

- Organize a contest to teach students how to start and run a business. Could be modeled after the Apprentice TV show or Lemonade Day.
- Explore ways to incorporate concepts of entrepreneurship in school curriculum.
- Support initiatives that promote youth entrepreneurship (such as Junior Achievement).
- Organize an institute or training workshop for representatives from around the region.
- Organize capital workshops (both virtual and in-person) that cover topics such as:
 - Assessing how much capital the business needs.
 - Pros and cons of debt and equity financing.
 - How to secure the appropriate type of financing.
 - Once entrepreneurs are ready to approach financiers, introduce them to network participants that could help them secure the financing.

Potential funding sources:

- The **Kauffman Foundation** partners with organizations to advance promising national programs and to leverage additional funding and resources for their two areas of interest: education and entrepreneurship. Their focus is on funding programs and initiatives that have significant potential to demonstrate innovative service delivery. Kauffman provides funding, consultation, and technical assistance throughout the U.S., however, the majority of the foundation's education grants go to organizations within the Kansas City metropolitan area.
- The **Harry and Jeanette Weinberg Foundation** distributes approximately \$100 million each year to a wide range of charitable organizations that provide direct services to poor and vulnerable individuals. The Foundation supports economically disadvantaged persons' entry into, and long-term attachment to, the workforce and the mainstream economy by providing "life-tools" needed to lift people from poverty and advance them into solid self-support. In addition to their job-readiness grants (which support training initiatives that result in job placement in partnership with employers), the foundation supports grants for adult entrepreneurship and financial literacy.
- As part of its focus on quality jobs, **WK Kellogg Foundation's** *Secure Families* includes entrepreneurship as an area of interest. *(Additional information about the WK Kellogg Foundation is provided under recommendation 6.2.)*

- The federal **Minority Business Development Administration** recently announced funding for the operation of Minority Business Centers to provide technical assistance. Eligible applicants under this announcement include nonprofit organizations, for-profit firms, state and local governments, and educational institutions, with funding typically provided for a five-year period. The current funding cycle has closed, however, funding for similar projects has been issued in the past, suggesting that additional funding opportunities could be available in future budget years.

6.4: Work with the colleges to change perceptions about careers requiring career & technical training.

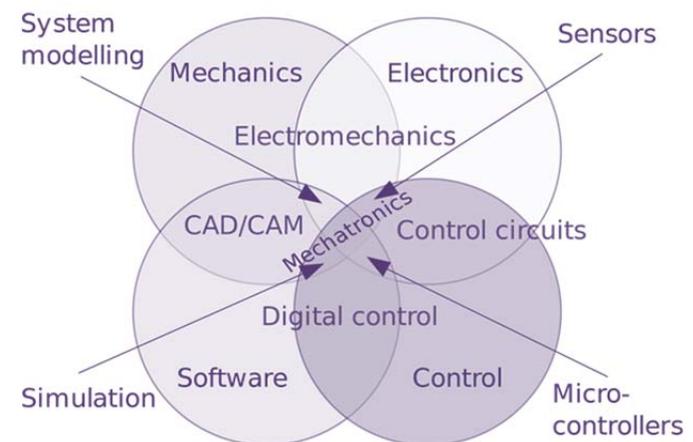
The national emphasis on increasing educational attainment levels — exemplified by the federal government’s recent goal for the U.S. to have the highest proportion of college graduates in the world by 2020 — may have the unintended consequence of siphoning students from technical training. **Figure 5.4** (page 61) provides data on this point for Texas’s community colleges. Although the total number of contact hours taken statewide at two-year colleges continues to increase, technical contact hours at these institutions have remained flat. The push by government agencies, nonprofit organizations, and community groups to increase the number of “college graduates” may be interpreted as promoting (and is sometimes specifically geared towards) the attainment of a four-year degree. Yet, many of the nation’s fastest growing occupations require less training and offer higher earnings potential. Workforce and education professionals should continue to emphasize the importance of this alternative path to success.

TSTC’s “mechatronics” program is a case in point. This program provides training in a number of mechanical, electronic, and electrical systems that are integral to many of today’s business and consumer products. Created in 2006 as part of a \$1 million Community Based Job Training Grant from the U.S. Department of Labor, enrollment in the program has not kept pace with expectations. The Regional Cooperation Grant Partners could support the mechatronics program by helping raise awareness about mechatronics as a career. This effort should emphasize earnings potential of related occupations and the connection between mechatronics and other career opportunities.

Skilled trades is another area around which perceptions could be influenced. The aging of the workforce in occupations such as plumbing, electrical, and HVAC will leave a tremendous shortage in these areas as baby boomers retire. Although some aspects of these jobs can be unpleasant (working in hot attics, dealing with clogged pipes) the jobs can appeal to workers looking for solid earnings potential or who may not want to work in an office environment.

Figure 6.2

Mechatronics Diagram



SOURCE: Wikipedia

Potential strategies:

- Identify state and national initiatives that could be a model or that could be leveraged.
 - Examples such as the “Gotta Make It” DVD produced by Workforce Solutions of Tarrant County to encourage people to enter manufacturing fields can be a model. *(See text box, page 89.)*
 - Host “Skilled Trades Days” in connection with youth-focused events, such as sporting events.
- Explore the feasibility of creating a state-level campaign (e.g., public service announcements) to encourage people to go into career & technical training.
 - These efforts should focus on career opportunities and earnings potential for these fields.
- Link mechatronics and skilled trade occupations to creativity.
 - While these jobs are sometimes viewed as “dirty jobs,” they often involve problem-solving and other aspects of creative thought.
 - Connecting technical training to events such as Maker Faire can help make the link between craft and technology. Created by *Make* magazine, Maker Faire events take place in a limited number of cities annually. The events celebrate arts, crafts, engineering, science projects and the “do-it-yourself” mindset.
- Make sure school guidance counselors and teachers are armed with the best possible information about career options in these areas.
 - Having current information about mechatronics and skilled trades careers can help counselors guide students who are not interested in pursuing a traditional academic track into these occupations.
 - Link career information to the classroom. For example, the Rochester (NY) Education Alliance of Labor, or REAL helps teachers become better informed about career-related issues by developing an occupational safety and health curriculum module for high school students, preparing work-related exercises for pre-K to 8th grade students, and producing professional development activities for teachers.

EXAMPLE: BioWorksU

BioWorksU is an innovative, interactive website created by the Indiana Private Industry Council to introduce students to life science careers. Funded in part by the US Department of Labor, the site offers visitors the opportunity to tour a virtual university. The site uses games, experiments, and simulations in various settings– including a diagnostic lab, pathology lab, radiology department, and pharmacy– as well as videos of professionals describing what they do, to help visitors get a better understanding of life sciences occupations.

Interactive applications like BioWorksU represent a creative and engaging approach to introducing students to career information.

WEBSITE: www.bioworks.com

- Host summer “internship” opportunities for area school teachers with firms that hire people in mechatronics and skilled trades. These programs allow teachers to learn first-hand about career options so they can better inform their students.
- Identify creative solutions for providing training in work settings to encourage incumbent workers to move into technical fields.
 - Florida Gateway College (formerly Lake City Community College) worked with state and local partners to create a distance learning, satellite-provided training program that could be delivered in the workplace to address a critical shortage of trained and certified RV technicians.

Potential funding sources:

- **ETA’s** *Trade Adjustment Assistance Community College and Career Training* (TAACCCT) Grants Program could fit within this strategy due to its focus on education and career training programs that can be completed in two years or less, and that prepare participants for high-wage, high-skill occupations. *(See recommendation 6.1 for additional details.)*
- The **Greater Texas Foundation’s** primary focus is related to post-secondary education access, preparation, persistence and completion. GTF invests in activities which help facilitate successful transition to postsecondary education, focusing on student planning and preparation, improved developmental education programs and better alignment of education systems. GTF is also focused on increasing the rate of post-secondary completion through investments in support for students and system reform. Proposals requesting funds to match federal, state, or other foundation grants for programs related to the Greater Texas Foundation’s focus areas are encouraged.

6.5: Explore potential funding sources for strategies 6.1 through 6.4

For each of the above recommendations, we have provided specific suggestions for funding sources. However, given the continued tightening of resources available for workforce development, an ongoing funding strategy should be pursued. An essential element of this strategy will be aligning funding requests with national education priorities.

The strategies outlined in this document dovetail with the national mandate for increasing educational attainment rates, especially for higher education. The President’s goal of returning the U.S. to number one in the world in higher education attainment (the U.S. is currently ranked 12th) has prompted a number of organizations to focus their efforts. Among the organizations relevant to the Rio Grande Valley are the Bill & Melinda Gates

STATISTIC: Lumina’s “Big Goal”

The Lumina Foundation’s “Big Goal” is to increase the percentage of Americans with high-quality, two- or four-year college degrees and credentials from 39 percent to 60 percent by 2025. Attainment of this goal would regain America’s position as number one in educational attainment and would represent an increase of 23 million graduates above current rates.

More than 30 percent of white, non-Hispanic American adults have at least four years of college, but only 18 percent of African Americans and 12 percent of Hispanics have reached the same level of attainment.

SOURCE: <http://www.luminafoundation.org>

Foundation, the Lumina Foundation, Excelencia in Education, and the Hispanic Scholarship Fund. Each of these groups recognizes that the national goals will go unmet without addressing this issue among the nation’s Latino population (the fastest growing population, while at the same time the population that participates in higher education at among the lowest rates).

These organizations, along with a number of corporate partners, have formed a coalition to pool resources and influence to create a national movement. This initiative is in its embryonic stage but is growing rapidly. If organizations in the Valley can align part of their initiatives behind this movement, there may be opportunities to pursue grant funding from several of the partners. Specifically, the Hispanic Scholarship Fund is planning to conduct pilot studies to better understand the impact of higher education on the Latino community and regional economic development. The Valley should position itself as one of the regions for the pilot phase of the HSF’s work.

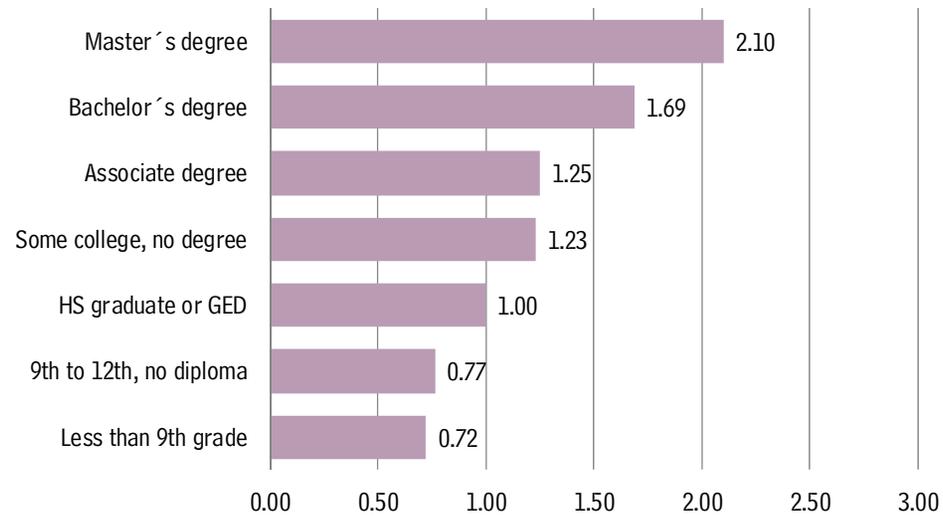
Potential strategies:

- Use the partnerships formed under this grant to create a regional funding collaborative for the Valley.
 - From the National Fund for Workforce Solutions: “Regional funding collaboratives bring together government agencies, foundations, and other philanthropic organizations to target financial resources and strategic thinking on creating jobs and careers.”

Figure 6.3

Hispanic earning power increases with educational attainment

Median earnings for a Hispanic individual age 25 or older with a high school diploma or GED alone indexed to 1.00



SOURCE: U.S. Census Bureau, CPS 2009 Annual Social and Economic Supplement, PINC-03

Earning power rises as educational attainment increases. This is true for the overall US workforce and it is true for the Hispanic workforce as well.

The average Hispanic worker without a high school diploma earns about a quarter less than someone who finished high school.

The rewards are high for those who go beyond high school. Earnings can rise by a quarter with an associate degree and by as much as two-thirds with a bachelor's degree. For those who go on to get advanced degrees, they can expect to earn more than double the average worker with only a high school diploma.

- Identify contacts with relevant organizations, including the Bill & Melinda Gates Foundation, the Lumina Foundation, Excelencia in Education, and the Hispanic Scholarship Fund. Use networking opportunities with these groups to better understand their specific priorities.
- Explore the feasibility of making the Valley one of the Hispanic Scholarship Fund's pilot regions.
- Establish the Regional Partners as a technical resource for these groups by providing relevant data and expertise.