



Advanced Manufacturing Industry Roundtable

FINAL REPORT

Introduction

Natalie Littlefield, Program Specialist, Workforce Solutions Borderplex

On March 22, 2017, Workforce Solutions Borderplex, the Borderplex Alliance and the City of El Paso co-hosted an Advanced Manufacturing Roundtable discussion at the Butterfield Trail Golf Club. Fifty-eight people working in the advanced manufacturing industry were in attendance, including business leaders, training providers and professionals in economic and workforce development. Through facilitated breakout sessions, the group discussed best practices and challenges in recruiting, retaining and training talent. Additionally, a representative from the Texas Workforce Commission gave a presentation on the Skills Development Fund, which is available to businesses to pay for training courses.

The team, made up of the three partner organizations, had various planning meetings to determine logistics and to design an agenda that would yield optimal results. The meeting was facilitated by a neutral third party contractor, Incite Consultancy, LLC. The agenda began with an overview of how workforce development plays into economic development. Then there was a breakout session where individual tables answered two questions on best practices and challenges in attracting, retaining and training employees. Next, each table reported the results of their discussion to the larger group. Then training providers were invited to come to the front to discuss their relevant training programs. A representative from the Texas Workforce Commission then gave a pitch for the Skills Development Fund, which could potentially fund some of the training programs desired by the businesses in the room. Finally, the meeting ended with a networking session where all three groups – businesses, training providers, and economic and workforce development professionals- could discuss working together more in depth.

Below is a summary of the information gathered during the roundtable event.

Workforce Development in Economic Development

Tony Ramirez, VP of Business Development at the Borderplex Alliance

Business site selectors look primarily at the education and workforce system, talent pipeline, and PK-12 system when among deciding factors whether to enter an area/region. Site selectors explore a particular region's Quality of Workforce (availability of skilled talent) & Workforce Development (talent development). Within the PK-12 system, factors such as overall programing, private sector, access to technology and graduation/dropout rates also influence decisions and have the propensity to shape a site selector's impression of an entire region.

Site selection firms typically conduct an initial set of primary research. The primary research is conducted by an internal team of analysts using industry expertise and market knowledge. Local economic development organization's will often provide additional details, market studies, and analytics to help enhance the level of information as well.

For a company to be fully productive with long term sustainable growth, a region must have key capacity assets available. The universal need across every industry is a skilled workforce and a strong education system.

Professionals at the Borderplex Alliance (BPA) work with three main sources—site selectors, main companies, members of Texas 1 (economic development arm of Austin); they also grow relationships with c-level and V-level partners. When site selectors do engage with the BPA, the BPA focuses on building relationships and serving as a single point of contact. BPA also communicates often with site selectors and companies. Overall, strong teamwork between the various economic, workforce, and educational institutions can result in wide industry expertise and the flexibility to meet the business’ needs to attract and retain businesses.

Roundtable Discussion

I. Recruitment

a. Challenges

This part of the discussion allowed manufacturing employers to identify their immediate talent needs regarding employee training, recruitment, and retention.

- A general lack knowledge about available careers in manufacturing
- Finding ways to recruit and secure highly trained military (retirees and veterans)
- Finding local talent with specific skill sets
- Hard to find people with less common certifications and training in general
- Hard to find experienced individuals

b. Best Practices

- Have an online presence through job posting/recruitment websites (e.g. Work in Texas via Workforce Solutions and Indeed), social media sources such as LinkedIn and Facebook, college/technical school job boards
- Participate in open houses at schools
- Word of mouth
- Industry-specific seminars
- Internal recruiting
- Career fairs
- UTEP Career Center
- Workforce One-Stop Centers
- Temporary staffing companies to screen candidates
- Combination of using staffing/temp agencies and adding an additional screening process of referrals from temp agencies
- Educate public on career opportunities
- Acknowledge job stability as an important component to a person’s decision
- Developing an internship program to potentially recruit interns after they graduate

- Working with partner organizations and other agencies to identify candidates and recruiting internally. This group noted they partnered well with UTEP and NMSU to obtain interns and on-the-job training
- Networking
- Employee referrals
- Promote/identify career growth opportunities
- After school programs

II. Retention

a. Challenges

- Keeping talent in El Paso
- Lack of motivation
- Lack of competency in plastics, logistics, and general skills





Problems
 Solutions

b. *Best Practices*

- Evaluate and reward progress through promotions, wage increases, bonuses, certificates of appreciation, and other incentives
- Provide cross-training to ensure exposure to other areas
- Prioritize employee engagement and development
- Engage employees in workplace training
- Improve the interview process with an additional layer of interviews
- Provide job stability
- Conduct training, recognizing achievement, and rewarding behavior.
- Provide recognition for good work

III. Training

a. *Challenges*

- **Lack of certifications** that are difficult to find, such as:
 - Program management
 - Plastic injection molding
 - Overhead crane
 - Automation
 - Robotics
 - Process technicians
 - Maintenance specialist
- **Training (non-certification):**
 - Internal, mapped-out training
 - Soft skills, such as professionalism and work ethic
 - Critical thinking
 - Tool making
 - Logistics
- **Apprenticeship programs:**

- Training for needed certifications expensive and often offered out of town
- Perceived lack of certifications and partnering programs in needed areas
- Awareness of the programs and training that are available
- For customized training, must prioritize training needs
- Must identify whether new hires are being developed to perform one task or multiple tasks

b. *Best Practices*

- Conduct specific in-house training, assessment tests, credited programs
- Conduct internal cross-training to assist with upward mobility
- Assign trainers to work with new hires for 1-2 weeks (longer in some cases)
- Partner with magnet schools and other trainers
- Ensure mentorship opportunities in conjunction with cross-training
- Focus on foundational and other technical skills. Again, they noted they had good experiences with EPCC to develop training.

Required or Preferred Certifications Identified by Employers

ISO

ISO 9001

ISO 9002

ISO 13485 Medical

ISO 14155 Medical

TS16949 Auto

Lean Process

ISO Quality Enhancement

OSHA

OSHA 10

OSHA 30

Sig Sigma

Black Belt

Green Belt

Logistics

Forklift

Production

Paulson Training

Plastic Injection Molding Process (Paulson Training, Plastic Processes, Introduction to Plastics, etc.)

RJG Master Molder (I-II-III)

Quality

Statistical Process Control
Fundamentals of Geometric Dimensioning and Tolerancing
Fundamentals of GD&T
Quality Control
Blueprint reading (plastics)

Tooling

Journeyman Toolmaker

Maintenance

Auxiliary Equipment
Lock Out/Tag Out
Electrical Troubleshooting
Industrial Maintenance
Preventive Maintenance

General

Microsoft Office (Excel, Word, PowerPoint, etc.)
Leadership
CPR/First Aid
Safety



TRAINING PROVIDERS SOLUTIONS

TMAC Texas Manufacturing Assistance Center (located at the University of Texas at El Paso)

- Lean Enterprise
 - Lean Six Sigma Green Belt & Black Belt Training

- Quality
 - ISO 9001
 - ISO 13485
 - AS 9100
 - AS 9120
 - QMS (Quality Management System)
 - SPC (Statistical Process Control) Advance and Basic

- Strategic
 - Supply Chain Training
 - Supplier Development
 - Financial Fundamentals
 - Strategic Planning

Training Grant Opportunity: TWC Skills Development Fund

The Texas Workforce Commission's Skills Development Fund in the amount of \$24 million is available to Texas businesses through the unemployment tax. The SDF Team is willing to come onsite to various locations and talk about programs in detail. The core SDF Team is comprised of El Paso Community College, the City of El Paso, the Borderplex Alliance, Workforce Solutions Borderplex, and the Texas Workforce Commission. El Paso Community College plans to hold at least one SDF orientation meeting following the roundtable discussion. Individual meetings with businesses will occur afterwards depending on each business' interest and the College's capacity.

More information on SDF can be found here: <http://www.twc.state.tx.us/partners/skills-development-fund>



Conclusion: Action Items from Roundtable and Post-Roundtable Analysis

The following action items were developed by both the participants of the roundtable discussion and the conveners of the roundtable after analysis of the post-roundtable data.

Business

- Give tours of business or job shadowing for youth and allow them to observe how work is conducted
- Give tours of business or job shadowing for teachers to allow them to observe the skills needed to adapt their curriculum
- Have a standardized training program for new and upcoming employees. Businesses and training providers can partner to develop internal employee training programs
- Businesses can work with school districts and STEM programs to help modify curriculum to align with industry standards, and to develop internship programs
- Develop a marketing campaign to educate students on what careers entail and what career opportunities exist
- Businesses can explore training grant opportunities through the Texas Workforce Commission and the El Paso Community College. See <http://www.twc.state.tx.us/partners/skills-development-fund-training-providers-workforce-development-partners#collegeResources>
- Participate in industry surveys and focus groups. Beginning in May 2017, the Medical Center of the Americas Foundation, the Borderplex Alliance, and Workforce Solutions Borderplex are joining forces to conduct a formal skills gap for the advanced manufacturing industry that includes an analysis of the medical device cluster. They hope to use outcomes to inform and build upon the work of educators and economic developers. To that end, the consortium's contractor will be contacting employers and educators for organizational information or expert advice. Participation and cooperation by educators and businesses is requested to make this a useful document for the whole industry.
- Create a trade association that includes business, training providers and economic and workforce development professionals

Educators

- Educators should develop students that have basic technical skills such as welding, metal stamping, plastic injection molding
- Training providers can invite companies to observe their business training
- Inform community of what programs are available with potential salary earnings upon completion of the program
- Develop a marketing campaign to educate students on what careers entail and what career opportunities exist
- Conduct follow-up meetings with new connections from roundtable to discuss ways to work together
- Participate in industry surveys and focus groups. Beginning in May 2017, the Medical Center of the Americas Foundation, the Borderplex Alliance, and Workforce Solutions Borderplex are joining forces to conduct a formal skills gap for the advanced manufacturing industry that includes an analysis of the medical device cluster. They hope to use outcomes to inform and build upon the work of educators and economic developers. To that end, the consortium's contractor will be contacting employers and educators for organizational information or expert advice. Participation and cooperation by educators and businesses is requested to make this a useful document for the whole industry.

Economic and Workforce Development

- WSB should continue to develop and conduct an “education roadshow” to advertise careers in growth industries such as advanced manufacturing, which will include industry career cards and career pathway cards, among other materials. WSB plans to gear up its career fairs by integrating innovative ideas from Biz Town and Thinkabit labs in San Diego. Businesses can reach out to WSB to do similar, business-specific marketing campaigns.
- Continue to conduct roundtable discussions
- Identify/project future careers and labor needs within the industry
- Conduct a skills gap analysis of this industry to fully inventory the certifications required, the education supply chain and any gaps or opportunities for improvement in educational programming or the workforce pipeline; may highlight areas where the pipeline exists but there is need for better business recruitment strategies

Presenters and Support Team

- Opening Remarks: Natalie Littlefield, Workforce Solutions Borderplex
- Meeting Facilitator: Rosalinda Natividad, Incite Consultancy
- Economic Overview Presentation: Tony Ramirez, the Borderplex Economic Alliance
- Skills Development Grant Presentation: Prady Mahale, Texas Workforce Commission, Office of Employer Initiatives
- Table Facilitators: Orlando Rodriguez, Business Services Unit at Workforce Solutions Borderplex; Laurie Banitch, Borderplex Alliance; Aimee Olivas, City of El Paso

Economic and International Development Department; Natalie Littlefield, Workforce Solutions Borderplex

- Note takers: Liz Saucedo, Maria L. Garcia, Liz Ayoub, Christine London
- Planning team: Laurie Banitch, Borderplex Alliance; Oscar Licon, Workforce Solutions Borderplex; Aracely Martinez, Workforce Solutions Borderplex, Natalie Littlefield, Workforce Solutions Borderplex; Annaelisa Holguin, City of El Paso; Aimee Olivas, City of El Paso

Participants

Business

- Becton Dickinson
- Cardinal Health
- Cesar Scott
- Excel Manufacturing
- Keats Southwest
- Lark Industries
- Lucchese
- MDA
- Plastic Molding Technology (PMT)
- ResourceMFG
- Strattec Security
- Technamark
- Toro
- Volt
- Wallner Expac

Economic and Workforce Development

- City of El Paso
- County of El Paso
- Doña Ana County
- Medical Center of the Americas Foundation
- The Borderplex Economic Alliance
- The Bridge of Southern New Mexico
- U.S. Small Business Administration
- Workforce Solutions Borderplex

Educational Institutions

- Clint ISD
- Dona Ana Community College
- El Paso ISD CTE
- EPCC
- Park University
- Pride Industries
- Socorro ISD CTE
- Southwest University
- UTEP Mechanical Engineering Dept.
- UTEP P3
- Western Tech
- Ysleta ISD