

Manufacturing Sector Strategy Report
Southwest Oklahoma Region
November 27, 2007

This report was prepared for the Governor's Council for Workforce and Economic Development and Grow Oklahoma Strategic Plan. It is submitted through the Southwest Oklahoma Impact Coalition (SOIC) using input gathered by Oklahoma Manufacturing Alliance Extension Agents Paul Walenciak, Mike Raymond and Bill Cunningham covering the following counties: Grady, Canadian, Kingfisher, Blaine, Dewey, Custer, Washita, Roger Mills, Beckham, Kiowa, Greer, Harmon, Jackson, Tillman, Caddo, Comanche, Cotton, Stephens and Jefferson.

The sector strategy initiative is an employer-driven, industry-focused partnership that addresses regional needs within specific industry sectors. Focus of this plan is on the fact that there are too few Oklahomans with skills to fill our manufacturers' needs. This causes fewer companies to expand, some to close or relocate, and others to choose not to locate in Oklahoma, thus negatively impacting our local, state and regional economies. We must re-think the way we are developing workforce pipelines for our manufacturers.

The goals of this initiative are to strengthen each sector's relationships with education/training providers; leverage/align private and public resources; enhance a community's ability to sustain middle-class and advance low-income workers; and help employers to re-imagine the way they interact with peers in their region to develop innovative work and learning solutions to solve complex market challenges.

Our assignment was to gather from our champions their labor market information, barriers to growth and other information impacting their operations. SOIC and Workforce Oklahoma then will lead the partnership in developing goals and strategies. Then the key strategies and activities (career ladders, training courses and curriculum, learning networks, etc.) will be implemented.

Overview

Most manufacturers in this region report that workforce (recruitment, quality and retention) is their number one operational issue.

The first and foremost complaint across the board is regarding a work ethic driven by culture clash of generational attitudes. Finding people with ambition and work ethic has been a constant problem because people cannot read, cannot perform basic math, do not want to work regular job hours, use drugs, and do not care. The mentality is to get paid for showing up for work, and they expect to be paid even more if they produce more output. This plays havoc in advanced manufacturing plants that have embraced Lean/Six Sigma enterprise

because many employees do not want empowerment - they want oversight or they will slack off. They do not stay on steady like the baby boomer 20-year veteran employees did. They don't want overtime despite the higher compensation. Many employees only want to work 3 days a week. Absenteeism and job-hopping drive turnover. We must cultivate the younger employees to gain the skill levels that the veterans have or we will face a gap. There is no reason that women cannot take more of the jobs traditionally held by males, especially now with automation and advanced tooling. We must act immediately to head off this coming crisis. The technology centers play a key role in this by training eligible workers and by providing skills development.

The technology centers continue to do an excellent job of providing customized training for many companies while other manufacturers curiously resist the help. This may be due choices made by local plant managers based on their biases toward public vocational-educational training or their unfamiliarity with it. Some simply will not afford the nominal cost that is offset by TIP funding because they cannot afford the time and wages involved. Not surprisingly, these are the same companies that complain the most about local workforce quality.

One issue affecting career path development beyond entry level is that there are many different types of manufacturing in this region:

- metal fabrication/machined parts
- flow measurement devices, fluid power valves and hose fittings
- vehicles, trailers, and material handling equipment
- tires and other automotive rubber products
- building materials
- aircraft
- cosmetics
- meat processing
- printed circuit board assemblies and electronic switches and sensors
- boxboard, packaging and paper mill

Although there is some local concentration of particular industries such as metal fabrication/machined parts in the Duncan-Marlow corridor, most others defy category. Some are one-company towns (Frederick, Eric and Hobart) while others contain a disparate mix (Lawton and Altus). This makes skills training a challenge.

Travel distance to good jobs mixed with low population densities also limit operations and expansions of manufacturing plants. Yet hundreds of people commute daily between towns and cities in the region. Increased gasoline prices and reliable personal vehicles quickly drain entry level paychecks. Federal cut-backs on public transportation funds have hampered efforts to establish rural bus service.

Locating manufacturing plants in rural communities has been a successful formula for years, but changing times are evidenced by relocations offshore due to cost-down pressures. Farm families once provided the backbone of heavy industry in this region with their common sense, mechanical ingenuity, welding skills and ability to fix anything. The demise of small family farms and other social factors have dramatically decreased this labor pool. More and more people and factories are condensing into urban locations, and lifestyle preferences in the direction away from hot, hard work are on the increase. People with technical skills are particularly hard to recruit to move to a small town no matter their high pay scale. Property values depreciate on new homes as soon as they are built, so this is a disincentive to folks wanting to move there. Quality of life claims are quickly diminished when the grocery store closes and the nearest Wal-Mart is 50 miles away.

Recent plant closures in this region include Ferrania in Weatherford; Haulmark Industries in Duncan; EBI/Biomet Bracing in Marlow; Delta Faucet and ArvinMeritor in Chickasha; and King Manufacturing in Lawton. Plant expansions being limited by workforce availability include Metzeler Automotive Profile Systems in Frederick and Bar-S Foods in Lawton. Even venerable giants such as Goodyear in Lawton and Halliburton in Duncan report recruitment issues.

Demand occupations such as machining, welding and metal fabricating have driven much voluntary turnover as skilled workers compete for higher wages and better benefits. Similarly, the need for experienced accounting managers, maintenance, IT, electrical and instrument technicians experienced shortages. Engineer vacancies were common as companies reported fewer U.S. university graduates desiring to live elsewhere, and even engineers recruited from India and other countries did not stay long before moving to other opportunities.

Most agree that manufacturing deserves a make-over image. Advanced manufacturing has reformed the workplace, and it sets the pace for wages and benefits. Some manufacturers visit public schools while others expect educators to promote manufacturing as a desirable career path. Most manufacturers will not afford the average \$7,000 cost per job profile needed to Work Keys although they find the measurement program helpful.

Data Gathered

The Alliance MEAs gathered the following data based on our own informal surveys, experience, discussions, and meetings with manufacturing clients. While some of this data was gathered from first-hand dealings with individual clients, much of it came from formal meetings of our regional manufacturing councils and other data came from direct answers to email surveys.

What are the skill sets you need your new hires and existing workforce to have?

- Forklift operation
- Safe working habits
- Basic hard work ethic
- Attendance
- Responsibility
- Teachability
- Reliability
- Honesty
- Basic and relevant math skills
- English reading comprehension and communication skills
- Problem solving skills
- Locating information skills
- Maintenance will need strong electrical, math and computer skills.
- Computer skills
- Team and people skills with ability to work well with others
- Readiness for steady work
- Understanding of attendance policies
- Understanding of a long-term focus
- Understanding that work is a top priority and that jobs are not disposable
- Supervisors and managers skills in coaching, customer service, generational attributes, teamwork, presentations, meetings, interviewing, etc.

What are the critical career paths at your company that you need Oklahoma to prepare people for in the coming years?

- Production Equipment Operators and Assemblers (OJT)
- Heavy Equipment Operators (OJT)
- First Line Supervisors (OJT)
- Welders and Fabricators (OJT with certification preferred)
- Machinists (degree/certification preferred)
- Maintenance:
 - Mechanical Maintenance Technicians and Mechanics (degree/certification preferred)
 - Electrical and Instrumentation Technicians (degree/certification)
 - Reliability Technician - Vibration analysis (certification level 3);
 - Lubrication Technician (certification level 3)
 - Infra-red Technician (certification level 3)
 - Oil analysis Technician (certified)
 - Industrial Electrician
 - Industrial Mechanic/Welder
 - We offer training for maintenance employees with a pay for tested skills.
 - We offer training for operators with pay for tested skills.
- QA/QS Inspection: Associates, Inspectors, Group Leaders, Managers (OJT/degree)
- Quality Engineering: Specialists, Coordinators and Professionals (degree)
- Engineers – Industrial, Mechanical, CI/Process, Aeronautical (degree)
- Warehouse/Material Handling Supervisors (OJT)
- Purchasing/Supply Chain, Materials & Facilities Managers (degree + certification)

- Information Technology Technicians & System Administrators (degree/certification)
- Human Resources (degree + PHR)
- Industrial Safety and Health Managers (degree)
- Accounting Managers and Controllers (degree)
- Management and Administration (degree + MBA)

What comments in general do you want to be heard by our public policy makers and educators?

- Rural towns have shrinking populations affecting available labor pool; need to help stabilize communities if possible.
- Workforce shortage has prevented our plant expansion.
- Our core employees are very stable but have 50% turnover of unskilled new hires
- Retention of experienced/skilled workers is difficult because the energy sector pays \$17-20 hour starting wage.
- Shortages of welders, machinists
- Shortages of industrial engineers
- Shortages of electrical & instrument technicians
- We need to begin Industrial maintenance classes at the high school level to prepare them for integration directly to the workforce and prepare some of them for more advance training through the Tech schools or career techs.
- Need Career Tech to shift from certification training to fast-track skills training and fund it adequately.
- Need education tuition reimbursement/waivers for people seeking skills needed by industry because 80% of college grads gain skills training later for their jobs/careers.
- We prefer live instructors over computer-based training for coaching better results.
- Need Common Ed to support CareerTech skills training as much as pushing Higher Ed degrees.
- Need federal government to understand Oklahoma's Career Tech functions within the scope of community colleges elsewhere; this affects funding for CareerTech.
- K-12 education produces underperforming students without necessary reading proficiency, life skills and work ethics; need re-hab programs for this problem.
- Need to train students for a flexible, high-performance and high-quality workplace with new emerging technologies.
- Need to re-train and re-orient teachers too.
- Adopt NAM's "Dream It Do It" initiative to align education's unwillingness to prepare a ready workforce for manufacturing.
- Transportation funding is needed to help bus employees to work due to increasing gasoline costs.
- State needs to fund out-of-state recruitment of people to come work in Oklahoma due to our low unemployment rate.
- State needs to fund an awareness campaign to promote manufacturing careers
- Casino industry is depleting job pool.
- Need skills gap analysis done and training plans developed.
- Need manufacturing job-shadowing, summer internships and trades apprenticeship programs funded and expanded.
- Need discrete industry training (eg., paper making) is needed to support industries.

- Need state funded childcare centers for manufacturing workers' kids.
- State should fund health care clinics and hospitals just for manufacturing workers.
- Need soft skills training funded. Soft skills training is critically needed for supervisors and managers: coaching, customer service, generational attributes, teamwork, presentations, meetings, interviewing, etc.
- Product innovation is needed.
- Immigration issues are serious and need federal reform because the jobs gap will be filled mostly by immigrants.
- Drug use remains a big issue in the workplace and for new hires failing the screening
- Limited/spotty success with DOC and VA programs
- This state and its lending institutions fail to support start-up manufacturers by placing unrealistic collateral demands on them.

Next Steps

Simply capturing and organizing the information provided above was not an easy task, so additional forums may be useful in gathering and improving the input. We will remain available should additional data needs be determined and sources of information needed. We have discussed but not committed to hosting a regional focus group meeting in support of the manufacturing sector strategy initiative.

We expect and request to remain included and informed as this initiative moves forward rendering its findings, conclusions and recommendations. Thank you for requesting our assistance on this important initiative.



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Oklahoma's Motto: *Labor Omnia Vincit "Labor (hard work) conquers all things"*