Manufacturing Needs Assessment

For Northwest Lower Michigan 2014





Manufacturing Needs Assessment: Introduction

This is a regional assessment of manufacturing businesses' needs across a wide array of economic issue areas that are analyzed in the Regional Prosperity Plan. We asked manufacturers and economic developers, through focus groups and one-on-one interviews, what are the most significant issues manufacturers face, what problems exist within those issue areas, and what types of solutions are most feasible and likely to engage stakeholders.

This assessment is the first look at the needs of manufacturers from the subjective view point of manufacturing and economic leaders across the tencounty region. It is intended to identify problems of common concern, ideas for promising solutions, and to point a general direction toward issue areas that warrant further conversation and study among manufacturers and economic partners. This assessment is not intended as empirical research, nor is it a needs assessment to

determine a set of specific assistance programs or service delivery areas. This needs assessment is a big picture look at the economic issues that face manufacturers today in Northwest Lower Michigan. It is intended to create a platform for consensus-building and prioritization of resources to assist the growth of the manufacturing sector.

Background & Data Sources

This needs assessment relies upon three sources of information –quantitative secondary data, as presented in the Manufacturing Fact Sheets, qualitative data from focus group discussions, and qualitative data from one-on-one interviews.

Focus group discussions were conducted throughout 2012-2014 as Employer Forums, which is a group facilitation process of Northwest Michigan Works! that is used to identify specific skill and training needs of employers. Multiple Employer Forums were conducted in Charlevoix, Grand Traverse and Wexford Counties. These three counties comprise 70% of manufacturing employment and 57% of manufacturing businesses in the ten-county region. The Employer Forums focused on employer needs for skilled machinists and welders, but discussion topics included general needs for attracting and developing talent, and for upgrading incumbent worker skill sets. Each Employer Forum included between five and sixteen manufacturing employers, and numerous partners in the education and economic development fields.

Individual interviews were conducted in summer 2014 to gain information about economic issues that affect the manufacturing sector.

Northwest Michigan Works! staff interviewed multiple manufacturers and economic developers in Antrim, Charlevoix, Grand Traverse, Manistee and Wexford Counties. Interview respondents were asked to define the most critical issues facing manufacturers in Northwest Lower Michigan, and to prioritize the issue areas by the importance, feasibility of solution, and willingness to engage

in solving the problems that exist within each issue area. Respondents were asked open-ended questions, and were also asked specifically about talent, transportation, trade, growth and investment (e.g., land, utilities, energy), housing, and community health.

This assessment presents a subjective view of "need" because there is not an agreed upon standard or benchmark for the manufacturing sector as it relates to issues of talent, transportation or housing, etc. Therefore, the "needs" were intentionally not defined by the facilitator/interviewer and were not all commonly defined by the respondents. Further work needs to be pursued to define, and measure progress toward, goals in each of these issue areas.

Manufacturing Needs

The results of the manufacturing needs assessment are presented in three sections. The first section describes the results from openended discussions on strengths and weaknesses of the sector. The second section presents results from a priority ranking exercise of major economic issues. The third and final section present results from a priority ranking exercise of talent issues only.

Strengths and Weaknesses

In SWOT fashion, interview respondents were asked openended questions about strengths and weaknesses, and drivers and impediments to growth in the manufacturing sector. In many cases, the answers were two sides of the same coin, especially in terms of talent, business culture, and sector diversity.

Talent: All respondents mentioned talent in their answers, mostly in a positive sense; however, talent was also identified as the number one issue facing manufacturers. Respondents described talent as a strength of manufacturing in the region by using words and phrases such as: loyal, committed, work ethic, diverse talent, easy to find unskilled people willing to work, talented people, willing to learn and grow. On the other hand. respondents described talent as a weakness or impediment to growth with words and phrases such as: devoid of skilled trades talent, not having the right training, lacking soft skills and reliability, lacking skilled labor at competitive rates, willing to work labor, finding skilled tradesmen, talent pool not large enough, not competitive wages.

Business Culture: Half of respondents noted a particular downfall in manufacturers' ability to collaborate. Respondents identified manufacturers' entrepreneurism and independence as strengths of the sector; however, many speculated that this characteristic also leads manufacturers not to participate in networks that could help the sector grow. One very specific comment was that manufacturers aren't willing to spend time benchmarking and working with others to solve common problems. Other comments were that industry associations and B-B networks are good, but manufacturers aren't participating or utilizing resources that are available. When pressed as to why these respondents felt that manufacturers weren't participating, they speculated several reasons: that there wasn't a critical enough mass; staffs were too lean to participate; everyone is independent and doing niche stuff; champions are needed, but have limited time; manufacturers don't see it as important.

Sector Diversity: Several respondents felt that the strength of the sector is its diversity, but that the lack of large manufacturers, or concentrations in the sector, is also a weakness that impedes growth. For example, respondents felt that manufacturing in Northwest Lower Michigan was strengthened by not having all eggs in one basket, so to speak. Conversely, the downside of an extremely diverse manufacturing sector is that employers cannot share a talent pool or suppliers, and do not have a regional competitive advantage to market overseas. Additionally, as indicated above, lack of a critical mass may also inhibit collaboration.

Other strengths and drivers of growth included:

Resources for business:

Respondents reported that state and local government programs, chambers that make areas attractive to talent, and responsive elected officials all create a pro-business atmosphere. **World Markets:** Recovery of world markets is a boon to those businesses that engage globally.

Other weaknesses and impediments to growth included:

Infrastructure: The needs for infrastructure are not common. This is an example of an issue area that needs to be explored in more depth, by subsector and sub-region. Some respondents reported that energy was reliable and affordable, while others listed this as a top, critical concern. Some also reported that freight and logistics were an impediment, while others chalked it up to an expected cost of being located farther from markets. For some, roads were important, and for others, air service. Broadband internet and facility space were also mentioned as infrastructure needs by one respondent.

Cost of health insurance: This was mentioned by many respondents as an acknowledged common concern, but it wasn't discussed. Regulatory and Perception: Even when manufacturers comply, the perception is that the sector is not environmental, which hurts its overall image. Many respondents reported that regulatory environment does not hamper or help the sector; it's just a part of doing business.

Prioritized Issue Areas

Respondents were asked to rank a set of issue areas by the importance of the problems, the feasibility of a regional solution, and their willingness to engage in a solution. While the broad issue areas were identified by the interviewer, the issues themselves and the problems inherent within were purposefully not defined by the interviewer. In the section above about strengths and weaknesses of the sector, divergent definitions were observed that warrant further investigation. The overall ranks of

the issues, with some respondents' clarifications as to the definitions of the problems, can be found in the table below. Respondents were asked to rank all six issues in terms of importance of the problems within the issue area on a scale from one to six, with one being most important. Talent was the clear winner, ranked by all but one respondent as most important. Land, Utilities and Energy (Growth and Investment) and Transportation were closely ranked second, and then Housing was the next most important.

Respondents were also asked to identify the top two or three issues for which they thought solutions were most feasible and for which stakeholders would be most willing to engage. Not every respondent participated in these rankings, but among those who did, 100% selected Talent as the most feasible issue for which to generate a regional solution. Housing was the second most frequently mentioned issue for a feasible regional solution.

Talent was also mentioned by all but one participating respondent

as the issue for which they thought stakeholders were most willing to engage. In terms of willingness to engage, one respondent also highly ranked Land, Utilities, and Energy (Growth and Investment), while another mentioned Housing.

Issue Area	Importance of Problems
TALENT	
- Definition of talent issues in section below	1.4
LAND, UTILITIES, ENERGY (GROWTH & INVESTMENT)	
- Energy reliability and cost.	
- Access to and adequate supply of natural gas.	2.25
- Access to facility space - too expensive to build new, not enough quality space on market	2.25
- Broadband to link multiple facilities and to do business with customers	
TRANSPORTATION	
- Product delivery infrastructure - ports, rail, roads	
- Roads conditions	2.8
- Reliable and affordable commercial air service	
HOUSING	
- Need quality housing available to workers making \$12-15/hr	
- Need housing that is attractive to young professionals; quality rentals in downtown locations.	
- Need quality, affordable housing that is close to work places.	3.5
- Related to transportation: unskilled labor especially has to commute long distances and purchase expensive gasoline for car and propane for house.	
TRADE	
- Getting into emerging markets	
- Import/Export controls and policy that is beyond regional reach.	
- Accessing more markets, even within US.	4.4
- Level playing field at the local source for government contracts.	
- Education is not the issue - lots of resources are available.	
COMMUNITY HEALTH	
- Non-issue or lack of awareness.	6

Prioritized Issue Areas

Respondents were also asked to separately prioritize the problems within the Talent issue area, using the same ranking exercise as explained above. The talent issues were identified, but intentionally not defined by the interviewer. Respondents were asked to rank all six talent issues in terms of importance of the problems within the issue areas on a scale from one to six, with one being most important. The table below presents the results of the rankings, along with some respondents' clarifications as to the definitions of the problems.

"Attraction and preparation of the future workforce" was the clear and consistent winner, with all other talent issues getting very mixed results:

The "skill level of the current workforce" and "age of the current workforce" were ranked in the top three for half of the respondents and the bottom three for the rest.

"Availability and access to training programs" was another anomaly: For one respondent, it was the number one issue, but for others it ranked fifth and sixth. This is another issue that warrants further study based on sub-region and subsector.

"Competitive compensation" was not remarked upon much by respondents, but when compared to the "Employee Development and Incentives" responses, there is a direct contradiction. On the one hand, the quality of life is a reason that workers will accept lower pay; on the other hand, the ability to enjoy the quality of life means that workers have certain expectations for benefits.

"Employee Development and Incentives" ranked low overall, with the perception that companies don't need government incentives to train employees, but that when incentives are available, it's a good thing because many more employees receive training.

Although not on the list of talent issues, daycare availability was reported by one respondent as a significant problem, particularly for manufacturers with multiple shifts. While this issue was only identified by one respondent, it is an employment barrier that warrants mention.

Respondents were also asked to rank the talent issues by the feasibility of a regional solution and stakeholders' willingness to engage. The results were clear: "Attraction and Preparation of the Future Workforce" is feasible and there is willingness to engage in this solution. Other talent issues that consistently ranked in the top three were "Skill Level of the Current Workforce" and "Availability and Access to Training Programs". It is interesting to note that two respondents ranked "Availability and Access to Training Programs" fifth in terms of the importance of the problem, but then ranked it first and second in terms of feasibility for a regional solution.

The results that prioritized "Attraction and Preparation of the Future Workforce" as the talent issue that is most important, feasible, and engaging, are consistent with the data gathered at Employer Forums. At every single Employer Forum over the last two years, the conversation has turned toward a discussion of how to market the manufacturing sector to attract new workers, particularly youth. During the one-on-one interviews, respondents put forth several ideas, on the spot, for how to achieve this goal. It appears that there are many activities underway across the region, but to one respondent's point, what's needed is a regional brand for what it means to "work" in manufacturing today.

Respondents' comments about the "Availability and Access to Training Programs" and the need for life skills training are also consistent with the data gathered at Employer Forums. The intention of the past few Employer Forums has been to listen

to employers' training needs for those skill sets that are common across the manufacturers' work places, in order to develop a shared, short-term, intensive training for a class of new hires or an apprenticeship curriculum that several employers could leverage. At the Employer Forums, the conversation often turned toward the differences in manufacturing practices, and therefore difference in skill needs, across the employers. For this reason, manufacturers have advised Northwest Michigan Works! and educational partners that highskilled CNC classroom training, for example, is not needed, and that instead it makes more sense to focus classroom training on the foundations skills for trades positions (such as blue print reading). Another common request and concern has been for improved "life skills" or "soft skills". These comments were also reflected by the interview respondents.

Respondents' comments about community colleges are another arena that mimics what employers have shared at Employer Forums. There is a very positive perception of colleges in Northwest Lower Michigan as great resources for training, but there is understanding that programs cannot be totally in sync with all manufacturers needs (unless it's customized training), or that there are not enough trainees to make "in sync" classes feasible. This recognition, along with the advice manufacturers have given workforce partners in regards to focusing on foundational and life skills, makes the respondent's comments about apprenticeship an appealing option. Apprenticeships can take advantage of foundational skill programs—in class size-at colleges, and offer life skills and very specific occupational and on-the-job training during the employers' mentorship/journeyman portion of the apprenticeship training. It's also intriguing that apprenticeship was mentioned by a respondent as a workforce attraction strategy, because it layouts out a pathway that otherwise might seem opaque.

Talent Issue Area	Importance of Problems
ATTRACTION AND PREPARATION OF THE FUTURE WORKFORCE	
- Has to be a multifaceted solution.	
- Reach out to schools so youth stay connected to jobs in the community.	
- Apprenticeship programs create pathways.	
- Use web to attract young professionals and print media to build awareness among older generation.	1.6
- Actively market trades jobs availability.	
- Regional branding of the "Work" in "Live, Work, Play" because the jobs here aren't portable.	
- Working on this issue helps solve other problems with aging workforce and lack of investment/kids going into school trades programs.	
SKILL LEVEL OF CURRENT WORKFORCE	
- Need skilled trades, not CNC	3.2
- Life skills: come to work on time and communicate well.	3.2
AGE OF CURRENT WORKFORCE	
- Older workers are the most productive; this is not a deficit.	3.8
(Despite comment above, this is a concern for some respondents, as indicated by their high rankings.)	3.0
AVAILABILITY AND ACCESS TO TRAINING PROGRAMS	
- Have the resource in Community College.	
-Community Colleges are good resources, but never quite in sync with what manufacturers need because there are too many differences.	4
-Skilled trades gap – want Community College to service, but not enough numbers to make work.	
COMPETITIVE COMPENSATION TO ATTRACT/RETAIN QUALIFIED WORKERS	
- Hasn't been an issue; quality of life is worth making less money.	4
- Competition with foreign workers means we need to keep costs low.	7
EMPLOYEE DEVELOPMENT AND INCENTIVES	
- Companies can grow their own talent with their own dollars and don't rely on government incentives.	
- Let's face it: businesses do more training when there's government dollars available.	4.4
- People who live up here want to enjoy it, and therefore want benefits and incentives for shifts, PTO, etc.	

Conclusion

Talent is the most important issue facing manufacturers today, followed by variant problems in Land, Utilities and Energy (Growth and Investment) and Transportation. Among the Talent issues, there is consistent thought that Attraction and Preparation of the Future Workforce is the most important problem for which there exists a feasible regional solution. This assessment is a first look at the

needs of manufacturers in Northwest Lower Michigan. Further study is needed to pinpoint and define needs and to develop measurable goals to meet needs. For example, two issue areas that require closer inspection are infrastructure needs and training program availability/accessibly. Needs within these issues areas may differ depending on location and/or manufacturing subsector. In order to

make headway on any of these issues, it may be prudent for manufacturers to first identify the reasons for the lack of participation in B-B networks, as a way to overcome the independence, in the negative sense, that is preventing them from, as one respondent put it, "benchmarking and working with others to solve problems."