DRAFT: Manufacturing: The Base for Economic Development in Region II A White Paper Dr. Mary Emery Senior Fellow, North Central Regional Center for Rural Development Heartland Center for Leadership Development 402 474 7667; <u>memery@heartlandcenter.info</u> Research funded by a Community Audit Grant from the Dept. of Labor

Manufacturing is the bedrock upon which economies can thrive. First, manufacturing is the engine that drives the economic development. For every manufacturing job, economists estimate at least three additional jobs are created. Second, manufacturing is the foundation for homeland security and military readiness. Within the manufacturing sector, small and medium-sized businesses are responsible for the greatest job growth. These smaller shops also have the flexibility to tool up for new parts and projects quickly and efficiently to respond to changes in the market or in the geopolitical sphere.

Small manufacturers are the key to addressing critical shortages and limited production capacity for aging weapon systems (A Governor's Guide to Trade and Global Competitiveness, 2002: 3). Within the defense industry's nine vital sectors, 90% of the firms DoD relies on are small manufacturers (A Governor's Guide to Trade and Global Competitiveness, 2002:3). Furthermore, despite a high level of stability within the defense industry, a number of bottlenecks in the supply system provide fodder for concern. In addition, DoD requires the capacity for surge production (13). Effective solutions to this bottleneck require the participation of small manufacturers and the development of flexible networks of small businesses. Among the challenges listed in the report, is the need to address the "aging workforce at key junctures in the supply base that threatens to exacerbate existing challenges through the loss of skilled personnel and tacit knowledge (page 5). "The graying of the workforce is cited by some as a major problem faced by specialized, defense-dependent small businesses. (page 15) In addition, many small manufacturers rely on outdated manufacturing processes and methods (12).

Both Idaho and Washington could increase their participation in this sector by providing support to the existing manufacturers. Currently, Idaho receives less than .1% of contracts (2001) and less than .1% of subcontracts (2002). Washington received 1.8% in contracts and 10.7% in subcontracts (2002) (page 11). Recommendations:

Manufacturers in rural areas face additional challenges as participation in networks becomes more critical to maintaining a competitive edge. "Networks are essential because they are the links to potential sources of capital, new employees, strategic alliance partners, and service providers...they also allow entrepreneurs to share information and assessments of markets and technology as well as lesson learned from their own entrepreneurial experience (Entrepreneurship: A Candidate's Guide, 2002, page 16) According to the Guide, several factors contribute to the emergence and success of these clusters are the number of entrepreneurs in an area, the willingness to open themselves for information sharing and networking, and local institutional support (page 16&17).

"Very small companies, those with less than 20 employees, make up two-thirds of all US exporting firms....Yet, small and medium-sized companies are uniquely challenged in export markets" (A Governor's Guide to Trade and Global Competitiveness, 2002, page 12). Barriers to exporting:

- Apathy and ignorance
- Inability to judge risk and export readiness
- Lack of time and resources to "hunt down" information and explore new markets
- Weak U.S. private sector export networks
- Lack of good export financing and insurance options; and
- Pricing and competitiveness problems
- (A Governor's Guide to Trade and Global Competitiveness, 2002, page 12).

Manufacturing in North Central Idaho and Southeastern Washington

In order to learn more about manufacturing businesses in our region, the Audit undertook at survey of manufacturing establishments. The project administered an in-person survey with 142 of 143 manufacturers identified in the region. The survey population was determined in three ways. First, we used the Inland Empire Directory of Manufacturers. We identified all the firms listed in the directory in our region excluding those with a local or regional market including printers, ice makers, ice creamer makers, etc. Of the 142 interviews, we ended up with 114 useable interviews. A number of interviews were incomplete as the owner considered him(her)self self employed and did not respond to many of the questions.

Among the findings are:

The value of the data is somewhat limited as a large number of the family-run or single-proprietor businesses declined to respond to many of the questions, particularly those related to recruitment and retention of workers. In order to better understand the data we did collect, we separated out first, the family-run businesses and then, secondly, the large employers, but this sorting did not change the results significantly. What we did learn is that many of the smaller manufacturers focus primarily on the production of one to several products, and thus, are not well tuned into many of the business-related concerns we sought to learn more about.

Survey results also indicate that there is a significant relationship between those family- run businesses who are not interested in skills training and an negative or limited expectation of growth. Thus, it appears that for many small manufacturers, their internal focus on their production/family/community may limit their both their vision of opportunity and their actual opportunities for growth. Firms that rely on hiring from within the family or community and providing on their own job training are, therefore, less likely to answer the questions about potential growth positively.

In looking at the options for improving the outlook for small manufacturers, all reports agree that a focus on workforce training is critical. New and small manufacturers cannot survive without talented and skilled people in place (Guide, 2002, page 18). The results of the Regional Workforce Audit indicate that willingness to take advantage of training and technical assistance is significantly tied to the firms' outlook for a positive future.

Almost 90% of respondents indicated they anticipate growth over the next 1 to 5 years with half of the group anticipating growth of 20% or less. About one quarter predicted growth of 21 to 40% and less than ten percent indicated they plan to grow more than 41%.

Firms rated their needs as: 1) equipment, 2) trained workers and 3) capital. In relation to technical assistance, nearly 50% indicated that marketing was the area of greatest need.

Over 40 firms indicated that they would like to support education initiatives in the field. Among the types of activities firms would like to help with are: job shadowing, guest speaker/demonstration, advisory committee, and advisors to student clubs.

The most common recruitment strategy was through family and friends, then working with Job Service, followed by the newspaper, networking with other employers, temp agencies and last, the internet. The most common method of providing training was on-the job or in- house. The area where training was most needed was quality control/ISO certification.

We did not get a high response to the question regarding the impact of a skills gap or worker shortage on the bottom line. For those who did answer the question (less than 10%) approximately half indicated a negative impact resulting in an estimated regional total of \$500,000 to \$3 million dollar impact in the region for last year.

Recommendations:

The most overwhelming finding, that the majority of small firms lack information about business development opportunities and options, requires us to identify and provide some 'teachable moments. Several suggestions emerge from the data:

- Follow up to the survey by reaching out to employers and educating them on services, resources, and opportunities for growth
- Establish manufacturing clusters to better address training needs, equipment issues, and marketing
- Offer lean manufacturing as a strategy to help these businesses become more profitable, but also to educate them on the value of training and services.
- Offer family-focused business development workshops

In addition to the need to create awareness of opportunities and services, the survey results offer us some indication that the lack of skilled workers is having a negative impact on the region. Generally, the multiplier associated with manufacturing is over 3. Using the lower accepted value of 3, the potential total loss to the region from last manufacturing opportunities is estimated at \$1.5 to 9 million dollars representing 20 to 150 jobs. Given the fact that many employers do their own training for lack of additional resources, state investment in subsidizing incumbent worker training so that firms can take advantage of new production possibilities, markets, and technologies would appear to be a cost-effective and appropriate strategy to support regional economic development. With the increasingly fast pace of change in relation to manufacturing technology, the need to support incumbent worker training is even more important.

Sources:

Increase involvement of youth: Example, Manufacturing A Pathway Initiative: <u>http://www.mainescience.org/thisweek/2002/09-09/brainpower3.html</u>

National Coalition for Advanced Manufacturing. Contributions of and Issues Concerning Smalland Medium-Sized Manufacturers in the Defense Industrial Base. June 2202, <u>http://www.modforum.org/defensesmereport.doc</u>