CRITICAL SKILLS SHORTAGE INITIATIVE REPORT #4:

Results of Employee Surveys and Focus Groups in the Manufacturing Industry

This project was commissioned by:

The Workforce Boards of Metropolitan Chicago

Prepared by

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Background

This report is a product of the Critical Skills Shortage Initiative (CSSI), a project undertaken by the Workforce Boards of Metropolitan Chicago, in partnership with the State of Illinois, designed to assess the occupation and skill needs of firms in industries critical to the economic health of the Chicago metropolitan region.

The Workforce Boards of Metropolitan Chicago is a collaboration of nine Workforce Boards providing policy expertise and investing in services in 11 northern Illinois counties—Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Livingston, Lake, McHenry, and Will. The Boards identified three priority industries around which to focus their CSSI work in early 2004—Healthcare, Manufacturing, and the umbrella industry comprising Transportation, Warehousing and Logistics (TWL).

Corporation for a Skilled Workforce (CSW) was commissioned to gather qualitative intelligence from firms and employees in the latter two industries—manufacturing and transportation, warehousing, and logistics. Between April 2004 and June 2004, CSW, in partnership with the Workforce Boards, convened focus groups and conducted interviews and surveys with firms and workers in these industries.

The results and findings from this intelligence gathering effort are described in a collection of four reports: two summarizing findings from employers in each of the two industries; and two summarizing findings from employees in each of the two industries. This is the fourth of these reports. It summarizes the results of interviews, focus groups, and surveys with employees working for firms in a variety of manufacturing industries in the metropolitan Chicago region.

The report provides:

- Demographic information about the individuals who participated in the CSSI intelligence gathering efforts in the manufacturing industry;
- Information about the educational achievement, employment status, and needs of respondents as well as their perceptions of the needs of their peers and their firms; and
- Summaries of observations made and insights generated in focus groups and conversations with manufacturing industry employees who participated in this effort.

This report is not intended as a summary of employee perceptions of the entire manufacturing industry, nor does it definitively identify needs and challenges that should be addressed by the Workforce Boards. Rather, it addresses one aspect of a more comprehensive data collection effort. Importantly, participating individuals provided thoughtful, honest, and insightful observations during our discussions and through the surveys. For this, we thank them.

This information will undoubtedly prove valuable to the Workforce Boards of Metro Chicago as they develop strategies to engage and support manufacturing firms in the region.

Summary Highlights

Key findings are as follows:

- Participants had more difficulty identifying short-term job or career goals ("next steps") than long-term aspirations (e.g., owning a business). Only a few reported actively preparing for their next job or career step. Many more expected "something to come up."
- Demands on individuals' time, limited access to help or advice, and cost were identified by respondents as key barriers to career advancement. Reluctance to advance on the job was also an obvious barrier.
- Individuals expressed a strong desire for "secure work," though the meaning of "secure" varied for different individuals.
- Individuals expressed a high degree of uncertainty about their economic futures and had varying negative and positive reactions to it.
- Individuals expressed (unprompted) high levels of job satisfaction: 73% seek to keep their current jobs; 66% refer friends and family to open positions at their firms; and 56% want their next job to be with their current employer.
- Half of respondents are relatively new to their employer or to the manufacturing industry.
- Nearly half of respondents maintain a higher level of educational achievement than is required for their job.
- Respondents identified complex skill needs on behalf of the firms and peers, including: technology and computer skills, communication and people skills, adaptability skills, and good safety habits. Only two of these skill sets—computer skills and possibly safety habits—lend themselves to traditional training programs and are easily and objectively assessed.

Process, Results and Findings

While the overall numbers were small and the data collection labor intensive, the CSSI project engaged a diverse group of individuals representing many parts of the manufacturing sector the Workforce Boards sought to reach. These individuals allowed researchers brief entrée into their personal and professional lives, their workplaces, and their industry. The information they provided was rich, insightful, and in many cases, actionable.

Who participated in focus groups, interviews, and completed surveys?

Eighty-three individuals who live and work in the greater Chicago metropolitan area participated in structured interviews, mini-focus groups, and surveys during the six-week data collection effort. Seventy-five of these individuals completed information cards or surveys that enabled comparison and analysis. The other eight participated in oral conversation, but opted not to provide personal information on the datasheets we asked participants to complete.

We convened three mini-focus groups of employees working for firms affiliated with the manufacturing industry—one occurred at the workplace, one in a bowling alley[1], and one in a restaurant during the lunch hour. In two cases, the employees participating in the groups worked for the same firms.

Originally, we had planned to ask employers who had participated in focus groups to nominate employees who could participate in subsequent focus groups. This proved very difficult. We were unable to generate enough employees in close geographic proximity to convene the planned 10 focus groups.[2] As a result, most of the data was collected through one-on-one or small group in-person interviews, telephone interviews, or through surveys.[3] However, the diverse methods used to generate employee input resulted in good

[1] Thanks to BCTGM Local #1for their generous invitation to attend a Saturday bowling league session to meet with, talk to and survey members—and the bowling was fun, too!

[2] There were a number of apparent barriers at play here: 1) many employers were reluctant to release employees during work time; many employers were reticent to encourage employees to attend focus groups with peers from other firms—fearing that they may find better opportunities elsewhere; and 3) many employers feared that their employees might contradict the information they provided in the employer focus groups. While there were numerous exceptions—employers who were very willing to support the project by sending employees to a focus group tended not to be in close geographic proximity or were unable to release employees at the same times because of different production schedules

[3] We were able to convene three groups—one with the help of a labor union (participants worked for many different firms, but all in the same industry), one at a workplace with the help of an employer (all participants worked for the same firm), and one in a restaurant—with an impromptu group of employees who worked for the same firm.

data.[4] Most participating employees identified their employers, and were generous with personal information on the condition of the anonymity the project promised.

Individuals participating in focus groups received a $20 Target gift card, while those completing the survey received either a $3 Starbuck's gift card or the equivalent in McDonald's or Dairy Queen gift certificates. Individuals participating in interviews and completing surveys received either a $20 Target card (for a longer interview), or a $5 Starbuck's card, for a shorter one.

The 75 individuals from whom we collected individual-level data were employed by at least 19 different firms. Most of these firms were affiliated with one of the following sub-sectors:[5]

- Food and kindred products (21%)
- Machinery (non-electrical) (5%)
- Electrical Machinery (10%)
- Rubber and Plastic Products (5%)
- Printing and Publishing (5%)
- Chemical Products (10%)
- Professional and Scientific Instruments (10%)
- Metals (5%)

The industry affiliations of individuals, however, were somewhat different.

- Chemical Products (19%)
- Rubber and Plastic Products (19%)
- Food and kindred products (17%)
- Professional and Scientific Instruments (15%)
- Electrical Machinery (11%)
- Machinery (non-electrical) (8%)
- Printing and Publishing (4%)
- Metals (1%)
- Other (7%)

[4] There are challenges inherent in generating good data from employee focus groups: 1) if employees work for the same firm, they often want to compare experiences—this can be a distraction from the subject of the focus group; 2) when employees are "sent" to focus groups, it can feel coercive—making employees reticent to talk openly; and 3) simply put, it can be difficult to express vulnerabilities or fears in a group—perhaps even more difficult when many of the participants work together every day. Individual interviews eliminated some of these challenges.

[5] 20% of these firms were either unidentifiable by industry, or affiliated with other sectors—for example, one individual reported working for an insurer of manufacturing plants.

Most respondents reported working for small- and medium-sized firms.[6]

- 18% worked for firms employing over 500
- 38% worked for firms employing 250-499
- 37% worked for firms employing 50-249
- 7% worked for firms employing under 50

These individuals reported holding 58 different positions, ranging from engineers and supervisors to operators and mechanics. The most frequently reported occupations included:

- Operators
- Team, Shift, Line or Pocket Leaders
- Technicians and mechanics
- Engineers (electrical and mechanical)

Respondents reported fairly lengthy tenures in their current jobs.

- 29% had held their jobs for more than 10 years
- 24% had held their jobs for 2-5 years
- 21% had held their jobs for 5-10 years
- 12% had held their jobs for less than 6 months
- 9% had held their jobs for 12-24 months
- 4% had held their jobs for 6-12 months

The respondents claimed residence in nine Chicago metropolitan counties—as well as western Ohio and southern Wisconsin—and were employed by firms based in six of the 11 metro counties. Nearly half (49%) of respondents reported living and working in different counties, over a third of these (36%) reported living and working in different states. Of the remaining 51%, the overwhelming majority reported living and working in Cook County, the largest and most populated county in the region (and in the state), or in McHenry County. [7]

[6] We know there are inconsistencies in the way employees responded to this question—some answered on behalf of only their division or branch, while others answered on behalf of the whole firm or corporation. We think that there was a bias toward larger firms because people answered with the number they knew—the corporate or holding company number rather than the number of employees in Illinois, for example. In addition, surveys from individuals who worked for the same employer had different responses to the question—again, we think employees estimated high rather than low.

[7] We had excellent participation from McHenry employees for several reasons: 1) the employer focus group in McHenry County was our largest one, and most participating employers agreed to survey their employees—and did; 2) the Chair of the local chapter of the Society for Human Resource Management (SHRM—one of the organizations we contacted for assistance with the project) had participated in the McHenry County focus group, where he met our researchers—he then disseminated the survey to his colleagues in the local SHRM Chapter; 3) key stakeholders in the project, including the WIB Chair and the CEO of the Economic Development organization in the County were

Reported County of Residence	Metro Counties	Reported County in Which Employed
1%	Boone	0%
27%	Cook	28%
4%	DuPage	0%
7%	Grundy	7%
1%	Kane	0%
1%	Kankakee	1%
8%	Lake	8%
20%	McHenry	40%
12%	Will	11%
17%	Out of state (WI & OH)	0%
	All counties	4%

Participating individuals reflected a range of age groups:

- 35% were between 45 and 54 years of age
- 25% were between 25 and 34 years of age
- 24% were between 35 and 44 years of age
- 12% were over 54 years of age
- 4% were between 16 and 24 years of age

They reflected less diversity than is characteristic of the greater metropolitan Chicago labor market[8]:

- 71% were Caucasian or White
- 19% were African American
- 5% were Latino
- 3% were mixed-race
- 3% either preferred not to respond or reported "other"

very engaged in the project, and helped disseminate the survey; and 4) finally, one of our researchers was raised in McHenry County—as a result, people were very willing to participate in the project. These factors inflated McHenry's representation in the project as a whole.

[8] Part of this may be explained by the participation of so many McHenry County residents—McHenry is among the less diverse counties in the region.

Finally, of the respondents that answered this question, 67% of participants were male and 33% were female (a few respondents preferred not to answer this question).

How did they participate?

The project engaged employees in two different types of activities: oral conversation in the form of interviews and focus groups; and written surveys, whether completed in person or on the internet.

In the focus groups, participants were asked to do word associations (as a warm-up exercise), complete surveys (independently), and then collectively discuss three questions:

1. What is the difference between a job and a career?
2. What is your next job or career challenge? What are you going to do next?
3. Keeping in mind your tentative plans, are you confident in your current skill set? Why or why not?

The word association exercise—intended as an ice-breaker—generated similar responses in all three focus groups. Participants were asked what words came to mind when they thought about their jobs. The first suggestions were lighthearted: "paycheck!" and "alarm clock", for example.

As participants began to feel comfortable and focused on the subject matter, one negative word generated a plethora of others. In one case, the word "competition" prompted many words suggesting fear—"lay-off" and a plethora of other euphemisms ("rightsizing," etc.), "hard work", and "dangerous" among them.

All three groups finished the exercise with words describing the specific tasks or work they did as part of their jobs. This exercise was not used in individual interviews.

What did they say?

Jobs vs. Careers

The three questions regarding job vs. career, next job, and confidence with skills were asked in all three focus groups and in many of the interviews, depending upon the time constraints of participants. Participants were generally reticent to engage on the job vs. career questions unless it was in relation to their children, family members or peers rather than themselves. Predictably, most wanted their children to have careers—with which they associated good pay, good benefits, good choices, professional networks, etc. "Jobs," they observed, "are about a paycheck. But "careers are about spending your time doing work you like." There were dissenters who looked more favorably upon jobs—"shift work is

predictable—you know when you're off, and when you're off, you can do what you want."

Next Job or Career Step

In response to questions about what they planned to do next (after leaving their current jobs), most respondents had trouble identifying their short-term plans, though they had clearer ideas about their long term objectives ("After this I'm retiring!" "Next, I'm working for myself", etc.). Only a few individuals reported that they were actively preparing for their next job or career move. Many more indicated that they expected "something to come up."

Whether in groups or as individuals, participants identified similar challenges that have the potential to "get in the way" of their aspirations or next steps. These included:

- **Time.** Participants almost universally reported feeling time-pressure—at work, at home, during their commute, etc. Many participants reported that their lives were "full"—their schedules left little room for planning their next steps.
- **Access to help.** In many of the one-on-one conversations, participants expressed difficulty knowing where to go for help in identifying their next job or career steps. Although most participants indicated that they understood the hierarchies in their firms, it wasn't always clear what people had to do to advance—several individuals reported that often the promotion comes first, and then the paperwork (formal application process) comes later. Others indicated that the best way to advance is through "connections," but that the economy had put many of their peers and friends out of work or reduced their influence in the workplace (shorter tenures with lower pay).
- **Reluctance (to advance).** Reluctance emerged out of conversations with three different groups of people. First, many older employees seemed to want to "keep a low profile" until retirement. They had experienced a great deal of change (and stress) in the last several years and did not want anymore exposure than necessary.[9] Second, some younger participants simply did not want additional responsibilities—they were actively avoiding advancement (some had families, others did not). Finally, a small but vocal group of young to mid-career professionals with degrees seemed to be holding out until the economy improves, at which point they planned to seek other opportunities outside of their firms. Many in this

[9] This seemed to be a skills issue in at least two cases—individuals who did not want to use computers, but knew that their jobs would eventually require this, were hoping for delays in the integration of new technologies that would enable them to "hold-out" until retirement or something else. Both individuals were in the food industry.

group were confident in their ability to advance, but were not sure they wanted to do so with their current employer.

- **Money.** Most participants reported that taking classes, getting a resume prepared, or taking time off of work for interviews or job search—obvious preparations for a new job—cost money. Others indicated that the relative rewards were not worth it—"We work really hard after work to learn skills, find a new job, go through the application process—all for a few more dollars a year? If I'm going to do that, it better be a big raise, and no one's giving raises these days." Few respondents were familiar with or had used the One-Stop Career Center system. And although most respondents who were asked knew the Illinois Department of Employment Security, they were under the impression that it was for Illinois residents who were receiving unemployment.

Skill Sets

The third question—about skill sets—did not particularly resonate with respondents, either in groups or one-on-one. Perhaps because respondents had less clear ideas about their short-term plans than their longer term goals, they had difficulty answering this question—if they weren't sure about next steps, then they couldn't be sure whether their current skill sets would prepare them well for those next steps.

Key Issues Raised

Two key themes emerged out of discussion,[10] whether one-on-one or focus groups—respondents expressed a strong desire for secure work and significant uncertainty about their economic and professional futures.

Secure work

While respondents expressed strong support for the idea of "secure work", the phrase implied different things for different respondents. For example, a few respondents expressed a fear of continued lay-offs and understood the difficulty of finding alternative employment. For them, secure work would relieve them of this fear. For many more, however, secure work was about "knowing what's going on." Several respondents expressed frustration at being reassigned to different positions with little or no notice; others relayed stories of what they perceived as false choices—keeping a job but taking a pay-cut, doing more work with no pay-increase, changing jobs or being let go, etc. Others expressed frustration at the pace of change ("how long will what I'm good at be valuable?") or the "surprise factor"[11]—a profitable product line is sold or shipped overseas,

[10] These issues were described in nearly identical ways by TWL and manufacturing employees.
[11] Employees who articulated this perspective suggested that improved intra-firm communication would help address the problem.

new equipment or processes are introduced without notice, etc. Still others expressed feeling like they are getting the "short straw"—"the company is always profitable but we're always belt-tightening." Several expressed irritation at the subject of "outsourcing." They felt it had become "cover" for unnecessary lay-offs, salary freezes, etc. Worryingly, many respondents perceived little connection between their performance and the professional opportunities that lay before them.

A few participants expressed more confidence—they considered themselves craftspeople, and presumed that if they maintain current skills in their areas of expertise, work (either with their current firms or elsewhere) will always follow. A few others expressed a different sentiment. For them, working for a "good company" is paramount, regardless of the job. They indicated a willingness to do "whatever it takes" to remain employed by their current firms.

Uncertainty about the future

Again, while most respondents expressed angst about their economic and professional futures, they expressed it in very different ways. There were three common storylines. First, older workers, or those who had been in their professions for some time, expressed angst in the short-term, but confidence in the long-term: "It'll come back. It always does. We just have to make it through the hard times. Learn to do things differently. Get better at what we do."

Others, younger workers or those with less invested in their current jobs or firms, felt like they needed to make a decision about whether to stay in the field (or in their profession) knowing that there would be much change ahead and that they would have to work hard to remain at the top of their game, or to establish themselves in another profession, another firm, or another field with better prospects for the future. For them, the question was whether they like their work, jobs, firms, or industries enough to stay, knowing that it would be harder than leaving. Interestingly, they talked less about money or pay, and more about their lifestyles.

The third group expressed angst about the future, and felt victimized by it. They just wanted to "get through"—some to retirement, some to the recovery. They were difficult to engage on the subject.

Finally, while job satisfaction was not a specific area of focus in the survey or in the interview protocol, it was frequently raised in discussion. Despite the angst and uncertainty expressed by respondents when asked about their careers and futures, the majority of respondents (largely unprompted) expressed moderate to high levels of satisfaction with their jobs or career overall, though lower than the respondents in the transportation industry. This may also be reflected in the survey—almost 73% of respondents reported that they currently 'have good jobs

they plan to keep', and 66% indicated that they actively refer friends or relatives to available jobs with their current employers.

Survey Findings

About half (46%) had not held previous jobs with their current employer or in the industry in which they now work. The other half (48%) had held previous jobs with their current employer or in the industry, and the remainder were unable to answer the questions either because their current job is or was their first job, or because they hold or have held multiple jobs simultaneously.

When asked how they found their current jobs, respondents replied as follows:

- Word of mouth or referral (49%)
- Newspaper (16%)
- Temp firm or staffing firm (17%)
- Internet or internal web-site/job board (11%)
- Illinois Department of Employment Security (IDES) (4%)
- Walk-in, help wanted sign, headhunter (3%)

The focus groups and interviews made apparent that distinguishing between these methods of access was rather arbitrary. For example, it was common for individuals to start as employees of a staffing firm and then apply to the company for a different job that they may have seen advertised on the firm's web-site or internal job board, and then get hired for this new job with the same firm for which they'd been working as temporary staff.

When asked where they thought their employers could recruit new talent, respondents offered the following:

- Referral or word of mouth (25%)
- Newspapers (24%)
- Internet (12%)
- College or high school placement office (9%)
- Competitors (7%)
- In-house/grow-your-own, job fair, community organizations and professional groups, and laid-off workers (3% each, 12% total)
- Search firm (1%)

One participant half-jokingly asked, "Since when is it hard to find people?" Another asked, "Why don't you try north of the border?" And a third responded, "Hiring in China seems to be working." Clearly, employees are anxious about their jobs and their futures.

When asked about their employment status, the overwhelming majority of participants (73%) indicated a strong desire to stay with their current firms—

affirming the moderate to high levels of job satisfaction expressed verbally during interviews and focus groups. Only one in fourteen employees reported "my job is okay, but if something better came along, I'd take it." And surprisingly, only 7% reported, "I have a good job, but I'm worried about lay-offs."[12]

Most respondents knew the specific minimum requirements associated with their jobs—only 4% of respondents were unable to answer. The most frequently cited minimum criteria was a high school diploma or GED (60%), followed by experience (35%), a two-year degree or license (21%), and a four-year degree (19%).

Respondents were also asked to identify the level of education that they had achieved. They reported:

- Some college or vocational training (32%)
- High school diploma/GED (28%)
- Four-year college or university degree (21%)
- Two-year/Associates degree (14%)

Interestingly, nearly half (48%) of respondents indicated having achieved a higher level of education than was required for their jobs. Most respondents in this category reported that that their jobs required a high school diploma or GED, but that they had completed some college or post-secondary vocational training. About one-third indicated that they had earned 2-year or 4-year degrees, and a few had done graduate work. Focus group participants and interviewees suggested that higher-than-required educational credentials can serve as a proxy—or even a replacement—for experience.

Forty-nine percent of respondents claimed educational achievement levels that matched those required by their jobs, and a few indicated that they had not achieved the minimum educational requirement associated with their jobs. Only a few responses were unable to be included in the analysis because one or both answers were missing.

Next jobs

When asked where respondents thought their next jobs were likely to be, 56% indicated that they were likely to take a new job with their current employer. Other responses to this question included:

[12] Three factors arising in discussions may explain this: 1) respondents felt like most of the lay-offs that were going to happen have already happened; 2) respondents lack confidence in the labor market in general, so they are assessing their jobs relative to what they believe is available in the market—compared to other available jobs, they prefer their own; and/or 3) much of the fear and uncertainty expressed by individuals is really a general fear of the unknown (decisions seem random, lack of connection between performance and reward, etc.) rather than the specific fear of job loss.

- "With a different employer in a different industry." (11%)
- "With a different employer in the same industry." (5%)
- "I have no idea." (28%)

Skills

Respondents were asked to rate the importance of a variety of skill sets to their jobs. These skill sets included: reading; math, good safety habits, communication skills, team skills, English language skills, computer skills, problem-solving skills, and management skills. Of these, the skill sets most consistently ranked low (of less importance to job) were: management, computer skills, and English (in order). The skill sets most consistently ranked high (of greater importance to job) were: communication, math skills, and reading skills.

Respondents were also asked two open-ended questions about skills, both of which generated surprisingly common responses that were easy to categorize. In response to the following question, "Thinking back to when you were first hired, what was the most important skill you learned on the job that you wish you had learned before you were hired?", participants most frequently reported the following (in descending order):

1. Technical and computer skills—"blue-print reading", "computer applications", verbal skills", "computer networking", "calibration", "technology", "programming", etc.
2. Communication, customer service, negotiation skills—"communication", "language skills" (English and non-English), "listening skills", etc.[13]
3. Team, people, and relationship skills—"people skills", "relationships and management", "leadership", "team work", etc.

Other skills cited more than once included: problem-solving, chemistry, and product knowledge. A few specific technical skills were also cited including: reading formulas, understanding FDA regulations, quality management, and knowledge of tools.

Respondents were also asked, again in an open-ended format, "When new people are hired for your position, what skill sets are generally missing? What do they most need to learn?" They responded most frequently (again in descending order):

1. Computer and technology skills AND communication and language skills (same scores for both skill sets)
2. Teamwork, problem-solving, common sense
3. Adaptability, multitasking

[13] This response is somewhat puzzling, given that so few respondents placed importance of computer skills relative to their own jobs—the same was true for employees in the transportation industry.

4. Good safety habits

Workplace basics, time management, quality control, and following instructions were also each mentioned more than once. Importantly, with the exception of computer skills, and possibly safety, none of these skill sets lend themselves easily to traditional training programs or assessment protocols.

Participants were asked to identify the most common reason their colleagues leave their jobs. They cited the following:

- They find better jobs outside the company (35%)
- Not enough pay (26%)
- They are not qualified to do the work (14%)
- Benefits are inadequate (13%)
- They get promoted within the company (7%)
- Working conditions are unpleasant (4%)
- The work is too hard (1%)

Finally, participants were asked to identify what they would do if they had an opportunity to improve their skills at little or not cost to themselves. They responded as follows:

- Enroll in training directly related to my current job (42%)
- Enroll in a course for personal fulfillment (24%)
- Enroll in training for a new position (23%)
- Work toward a diploma, degree, or certificate (13%)
- I would not enroll in any course (7%)

Conclusion

The majority of the individuals who participated in our research were serious professionals who demonstrated knowledge of their industry and, for the most part, dedication to their jobs and to their employers. They were smart, hard-working, generous, willing to step-up to new challenges, and a pleasure to meet.