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Awareness and Perception of Occupations in Manufacturing, Transportation/Warehousing/Logistics (TWL)

The Workforce Boards of Metropolitan Chicago set up thirteen focus groups that took place between May 20 and 27, 2004. Martha Reesman and Jan Urban-Lurain, from the Corporation for a Skilled Workforce, provided facilitation and the Boards provided note-taking staff. In all, 122 people from the metro Chicago area participated in conversations about employment and occupations in manufacturing and transportation/warehousing/logistics (TWL). See Attachment A for focus group schedules and the number of individuals that participated in each group.

The fifteen focus groups included three constituencies – high school students, community college students and job seekers.

- Ø High school students had the best attendance and participation among the three sets of focus groups. The five schools included an inner city Chicago public school, suburban comprehensive high schools, and alternative schools. Students, often accompanied by their teachers, formed the largest groups.
- Ø Participation by community college students was less than high school students in terms of the number of focus groups, or the number of participants within each group. Several of the area colleges were not in session, making recruitment of students more difficult. Students were primarily from suburban schools. Community college students, however, were the most focused and articulate about their career choices.
- Ø Participation by job seekers varied greatly as did the education level and employment history of the participants. Sessions with job seekers were held at urban and suburban one-stop centers. There was a wide range in education levels among the participants. The majority of the job seekers were over 30.

Protocol

The facilitators from Corporation for a Skilled Workforce followed structured protocols tailored to each constituency (Attachments B-D). The protocols included:

- Ø Introducing the project, workforce boards and facilitators;
- Ø Reviewing focus group ground rules;

- Ø Distributing participant data sheets to gather basic demographic information;
- Ø Reviewing career aspirations and access to information;
- Ø Discussing awareness and perceptions of manufacturing and TWL; and where applicable,
- Ø Discussing perceived barriers to career change.

At the conclusion of the focus group discussion, all participants were provided with information on manufacturing occupations and working in TWL (Attachments F & G).

Focus Group Participants

A total of 122 participants took part in the focus group discussions. Among them were 24 community college students, 64 high school students and 34 job seekers. Together, they represent a wide range in age, experience, education, and career interests.

Community College Participants

The vast majority of the community college participants were female, which was about 75% of the total participants. The average age was 29 (median was 25). The youngest participant was 19 years old while the oldest was 53. All of the participants had lived in the metro Chicago area for a while, ranging from 5 years to 43 years.

- Ø Participants varied a great deal in their most recent employment. Although the average length of employment was 3.7 years, the median was only 1 year. Two participants had especially long services with their employers before losing their jobs (24 and 18 years respectively). Most of the other participants who provided data were most recently employed for one to two years.
- Ø The amount of time participants spent in their last occupation was longer than with their most recent employer. The average and median years in an occupation was around 6 years. The longest was 18 years.
- Ø Participants represented a wide range of occupations from office clerk, to nurse's aide, to photographer. Most people were in jobs that did not require significant post-secondary training.
- Ø Most of the participants' desired occupations were different from their most recent occupations. For example, of the 8 participants who wanted occupations in health care, only two had most recently worked in the field (as nurse's aide). Another observation is that participants were relatively

specific in their desired occupations, e.g., teacher, driver, computer programmer.

High School Participants

The 64 high school participants were just about split in half as far as gender, with females accounting for 55%. The average and median age was 18. The youngest participants were 16 years old while the oldest were 23. There was one 9th grader, 8 – 10th graders, 12 – 11th graders and the rest were 12th graders. Many students had lived in the metro Chicago area for most of their lives. The median length was 17 years.

- Ø Most of the students had parents or guardians working in skilled trades (e.g., plumber, electrician, mechanic) or unskilled labor positions (e.g., assembly worker, laborer, machine operator). Some students had parents who were in professional or managerial positions.
- Ø The majority of the students planned to go to a 2-year (30%) or a 4-year (38%) college after high school. While 28% showed interest in finding a job right away, most of these students also indicated interest in attending a 2-year college. Just three students had plans to attend vocational or technical schools.
- Ø English was the top choice of students' favorite subject at school. It was followed by math, science and history.
- Description There was little relationship between a student's career aspirations and his or her parent or guardian's occupation. Most students did not seem committed to specific occupations, and many indicated more than one occupation interest. Individually, those occupational choices were often very different from each other. For example, one student indicated interest in either becoming a "doctor or a Marine"; another indicated interest in "computers or music"; two others chose "nursing or education" and "welding or computer".

One-Stop Participants (Job Seekers)

Among the job seekers who participated in the focus groups, women accounted for 15 of the 34 participants. The average and median age was about 38. The youngest participant was 20 years old while the oldest was 72. Most of the participants had lived in the metro Chicago area for a long time. The median length was 30 years and the longest was 52 years.

Ø Participants varied a great deal in the length of the most recent employment episode. The average was 5 years and the median was 3 years. Three participants had more than 15 years of service with their last

- employers before losing their jobs. Most of the other participants who provided data had been with their most recent employment between 3 and 5 years.
- Ø The amount of time participants had been in their last occupation was longer than their recent employment. The average years in an occupation was 9 years and the median was 6 years. The longest was 27 years.
- Ø Participants represented a wide range of occupations, from consultant, production manager, to packer and bartender. Almost half of all participants held jobs that were professional, managerial or skilled trades.
- Ø Most of the participants' desired occupations were very closely related to their experiences and training. Most people wanted to stay with the fields they knew: engineering, manufacturing, health care, or office/clerical, etc. For example, a college instructor wanted to pursue a job in education. A media manager wanted to be an advertising manager.

Focus Group Results

Participants of the focus groups tended to think about career choices through past experiences, those of their own and of others that they knew. Earlier work by the Hudson Institute on the critical skills shortage occupations, maintained the distinction between durable and nondurable manufacturing. However, participants in our focus groups simply did not think about the industry and careers within them with that distinction. Manufacturing was generally thought of as one sector. Participant's distinctions were more often by production output, such as automotive, pharmaceuticals, or food processing.

In addition, it became apparent that most of the participants did not have a great deal of knowledge about transportation/warehousing/logistics (TWL). Many knew about UPS and FedEx. Some knew about local warehousing and distribution centers (e.g., Wal-Mart, Kmart, Jelly Belly's). But few could acknowledge the range of occupations and the extent of technology employed in TWL.

In general, perceptions of manufacturing and TWL were unfavorable. Both sectors were thought to have many low-paying jobs that did not have career paths. The work environments were thought to be harsh and physically demanding.

Ø High School students often relied on the perceptions and experiences of teachers, parents and other adults for their information. One notable example was the partnership that the Wells Academy, in Chicago, had with Quaker Oats Corporation. Students in this group had learned a great deal from direct

- interaction with the Quaker Oats employees about careers, educational preparation, and the world of work.
- Ø High school students' responses about potential careers were wide-ranging and often inconsistent. For example, one student did not have a preference between a cashier at Target or a veterinarian. Some students were unable to name any career preferences or interests.
- Ø Community college students had already taken time to research their choices and to make a decision to go back to school to further their education. Most were able to talk about the factors that went into their research and decision-making process including talking with friends, looking on the Internet, and taking advantage of the counseling available through the school.
- Ø Job seekers were more reliant on their own past experiences. Several spoke about researching companies that had openings, rather than focusing on specific industries. This included looking for information about companies on the Internet, talking with people that they knew and even asking random people at a company location for information. Job seekers were often cynical about information that they received from companies during the interview process. Comments such as "they'll tell you what they want you to hear" were common.

Manufacturing Work is Perceived to be Hard and Unstable

When asked what they knew about manufacturing, participants from all of the groups used words such as "cyclical", lacking in "job security", "downsizing", "outsourcing", or "layoffs". Most people did not believe that becoming part of the manufacturing workforce today had real long-term viability. As one Kankakee county participant put it: "In this area, there are not jobs that are long-term jobs. We are still experiencing layoffs, and the existing employees who are still there have a minimum of 15 years experience".

Many people thought that the available jobs in manufacturing were low paying, unskilled and offered limited prospect for advancement. Students from the Streamwood/Elgin High School feared that manufacturing jobs were "repetitious and could get old". When asked to list some manufacturing occupations, the vast majority of the participants focused on occupations that were traditionally blue-collar (e.g., assembly line worker, machine operator, packer) and clerical (e.g., front office clerk, shipping/receiving clerk). An exception may be participants from the Greyslake Job Center, Zion High School and Elgin IETC. They were more aware of occupations that required professional degrees or advanced scientific training, e.g., engineers, designers, chemists and biochemists.

Manufacturing jobs were thought to demand difficult hours. Many people thought that manufacturing jobs required long hours, overtime and lacked

flexibility. One person from Cook County's South Suburban College said, "I stay away from manufacturing due to no sick days and no days off."

The work environment in manufacturing was thought to be physically uncomfortable and sometimes dangerous. For example, some people said that the work place was "hot in the summer and cold in the winter" and had "bad air quality". Some thought it was "noisy". There were also comments about assembly line work and forklift operations being dangerous.

In addition, many people saw manufacturing employers as having little commitment to their employees. One participant at Elgin Community College said, "[the employers] don't want to give assembly line workers anything back." A student from Cook County's Bloom High School said "[the manufacturing employers] always have an attitude that they can find somebody else if you quit, unless you are very good at what you do."

- Ø High School students could name some area manufacturers and often knew someone who is, or was, employed by one of the firms. They thought of manufacturers as often having well paying jobs, but that they were dirty and unstable. One student in the Elgin group was planning on becoming a machinist. No one had really thought about careers in TWL.
- Ø Community college students were generally in career-oriented programs not focused on manufacturing or TWL. Many were studying for a healthcare occupation of some type and did not see relevance to TWL industries.
- Ø Job seekers, in general, thought in terms of applying their skill sets to an occupation rather than looking for occupations in the specific industry. They looked for jobs that fit their skills and employers that they felt were stable and honorable. One attendee, a project manager, stated that certain skills were used in many sectors and that the job requirements were the focus. Many did not focus on the actual industry. This notion was echoed by most of the others as well.

TWL Jobs are Perceived as Plentiful but Unexciting

Most of the focus group participants were not familiar with work and opportunities in the TWL sector. Few people knew what logistics was or what kinds of jobs were available. In contrast, there was more knowledge and awareness about transportation and warehousing. Participants had no trouble listing a broad range of employers in the metro Chicago area, from Amtrak, UPS, to trucking companies and airlines, to Wal-Mart and Sears distribution centers. They just did not perceive this as being a sector.

One commonality among the focus groups was that very few people considered working in TWL as a relevant option. Everyone knew that drivers, loaders/unloaders and shipping/receiving clerks were important occupations in

the sector. Some people thought certain jobs in TWL paid well and had good benefits. A few even recognized that TWL was a growing sector of the economy: "Because of globalization, it is more important." Most, however, did not think TWL offered "good jobs" and found little excitement in employment in this sector. As one participant put it, "[they] have lots of jobs. Not good jobs. Just jobs."

These reactions are related to the perception that jobs in TWL were physically demanding, the work environment was uncomfortable and work hours were undesirable. One participant said, "UPS is a good employer. Benefits are good and these companies pay well." However, "it is backbreaking work." Others commented that most work at UPS was part-time and did not offer benefits. Some indicated dislike of working "outside." Some thought that in general, warehouses were dirty and could be dangerous. Occupations in TWL were thought to require undesirable work hours, from long-distance trucking to shift work in warehouses. With the exception of a few people who could see themselves becoming truck drivers, most people thought of TWL jobs as something they could do while looking for a better job. One participant from Kankakee Community College said, "I could work a TWL job while waiting to make or find my career." That was a common sentiment among the participants.

- Ø High school students often knew someone who had worked part-time for a company such as UPS. Several had relatives who were truck drivers. These were seen as hard jobs. Most of the students did not think about airlines and rail networks and had little knowledge of them. For example, when asked about career preparation for the airline industry, students in Zion HS thought that airline mechanics needed more education than pilots.
- Ø Several community college students knew people who had worked for a company in TWL, but did not think of it as a sector. Several participants from one community college were studying to receive truck driver certification; one of these individuals saw this as a positive career move while the other saw it as an expedient temporary job choice.
- Ø Job seekers also did not think about TWL as a sector. Several had worked in warehouses and saw those jobs as hard, underpaid and unstable. The exception to this was at the Daley One-stop, near Mid-Way Airport, where one participant knew about openings at ATA, which created a great deal of interest.

Knowledge of Industries is Based on Experiences

When asked of their knowledge of manufacturing and TWL, participants immediately drew on experiences of self, family members, or friends. Those experiences in turn seem to become the totality of the participants' view of the industry. For example, when asked if they thought factory jobs were secure, one

participant replied, "Flextronics is not." When asked if TWL offered good jobs, some of the responses were "My brother-in-law works for Metra and the only thing he does not like is the hours", or "I have a friend who works for Union Pacific – good job, good pay, good benefits, but lifestyle is difficult."

- Ø High school students mostly relied on their perception of comments by parents and other adults. A number of them already had jobs of their own. For example, one student at Wells Academy was working full-time at a chocolate manufacturer.
- Ø Community college students generally had been in the workplace prior to college. Most had been in low-skill, low-pay jobs that were not stable or fulfilling. Several had returned to school to get an education that would allow them to pursue a career with better pay and required more skills and knowledge. Several also talked about preparing for having multiple or contingency careers. One person talked about becoming certified to be a daycare provider as a first step, then becoming a teacher while also starting/operating a daycare franchise.
- Ø Job seekers, more often than not, relied on their own experiences. "I worked in..." was a common statement.

Career Decisions are Driven by Existing Skills and Strengths

Most participants stressed they wanted jobs where they could use their existing skills and/or education. When asked what kinds of jobs they would like to have, a common beginning of the responses from the adult focus group participants was, "I used to ... " or, "I have training in ...", or "I am skilled at ...". And most of the time the respondents would like to either do the same job again or find something in the same industry or a similar environment. For example, one participant at South Suburban College said that he "would take a management job with any company as long as I could use my training in marketing and management."

- Ø High school students again were driven by perceptions of adults and also the media. Several noted that careers in multi-media, music and forensics were areas of interest. A number of students expressed interest in careers as attorneys, and in business.
- Ø Community college students were more focused on moving into a specific career through their education. Comments such as "I used to be, but want to now..." were evident.
- Ø Job seekers, as noted earlier, were often bounded by past jobs and occupations.

Job-related Benefits is an Important Factor in Choice of Job

Across the populations represented by the focus groups, it was striking how many saw provision of benefits as a deciding factor in choosing among jobs. It was as important as pay levels and for many people, more important than location, work hours, or family/work balance. Job seekers at one-stop centers and students at the community colleges preferred jobs that were accessible through public transportation. Some in the focus groups also said that doing work that was enjoyable and working in a pleasant environment were important considerations. Some people wanted jobs that would help them achieve career goals. A few wanted to work in industries that offered some job stability and took into account the long-term outlook of a company.

High school students were the most likely of the three constituencies to say that the most important factor in their job decisions was to do work that they loved. For some, that meant, "Something you can do well; that you have a natural talent for." High level of job satisfaction and potential for advancement were as important as the "money". Many of the students' current career choices follow their interests and passion. Examples include art, design, music, "working with kids", or serving in the military or law enforcement. Few, if any, of the students' parents worked in the legal or health care professions, yet many students indicated interests in becoming a lawyer or doctor or nurse.

Participants were Ambivalent about Retraining

When asked if they would consider retraining to qualify for jobs in manufacturing or TWL, reactions from the focus group participants were indecisive at best. At the one-stop centers, some job seekers would consider retraining if it were a certainty that they could get a job with good pay and benefits. Some indicated willingness to retrain if employers offered it or covered the cost of it. One person at the Kankakee One-Stop Center was using WIA grant funds to become a heating and cooling technician. But for the most part, participants saw funding, time and family responsibility (e.g., childcare) as major obstacles to obtaining training on their own. Some people also felt that they were too old to go back to school.

One exception could be the group at Greyslake Job Center. The majority of the participants there had most recently worked in professional and managerial positions. Several participants had masters and doctorate degrees. They generally appreciated the need to learn about other industries and indicated willingness to retrain for new occupations. One person said, "Training is always good so you don't become a dinosaur."

At the same time, however, some people saw additional training as a detriment. They felt that their experience and education already made them over-qualified

in many situations. Additional education, without relevant experience, was seen as an additional barrier to re-employment.

The job seeker focus groups also included several people who had retired from the State of Illinois and local governments who were looking for different job opportunities. One man in Elgin, who had previously worked in government, had completed training in computers and was actively working as a consultant in this field. He was perhaps the most vocal advocate for training, but was in the minority.

At the community colleges, many participants talked about difficulty with financial aid and childcare. One person said that she had to find a job so that she could afford going to school. Some people said they were open to being retrained if "someone else" paid for it.

Job Searches Employ Traditional Methods

Newspaper ads and word of mouth are the most popular methods of finding out about job opportunities. Many people used the Internet and some even posted their resumes on job sites. However, few had any success finding a job that way, or for that matter, received any responses from employers.

Many felt that the Internet was impersonal and that resumes, instead of people, were making the first impression. Computerized resume scanning was seen as a barrier. People felt that they could not present themselves well through the Internet with their resumes. There was a sense of frustration shared by many that they did not know how to gain access to jobs posted on Internet websites.

- Ø High school students were very comfortable with the Internet and saw it as a useful tool.
- Ø Community college students were hoping that the colleges would help them network and gain information about openings rather than having to use the internet.
- Ø Job seekers used networks of colleagues, newspapers, and Internet to access information.

Family and Friends are Main Sources for Career Advice

When asked how they find information about certain jobs or employers, the vast majority of the people said they would talk to family members or friends who had related work experiences. As mentioned before, many high school students relied heavily on advice from their parents, but also used the Internet. Some would seek input from friends and family members. A few students said they got information from their schools. Several job seekers spoke about trying to talk to someone, other than the human resources department, to find out what the employer was "really like".

Focus Group Participants Viewed Job Markets Locally

People outside the metro Chicago area tend to think of it as one region. But many of the focus group participants took a much more local view of the job market. People who lived more than 15 miles outside Chicago did not really think of Chicago as part of their own job market. Some even wondered out loud, "Are we in metro Chicago?" Maybe it was because travel to the City could be very time consuming, unless there was a direct connection by train. People who had children also felt that long commutes would add too much to their challenges of balancing work and family responsibilities.

Conclusion

or participants in these focus groups, awareness and perception of industries and occupations were primarily experience-driven. They tended to draw on their own experience and those of others they know in forming opinions about employers and jobs.

Perceptions about manufacturing and TWL were similar in that many people associated both of these sectors with harsh or unpleasant work environments, extreme physical demands, and jobs that did not provide benefits or career paths. People did not think of either sector as being on the cutting edge of science and technology.

The focus group participants were generally aware of various manufacturers in their area. A common theme was that manufacturing was shrinking and employment was cyclical and unstable. Many people could cite layoffs that had taken place in their own region. Employers in manufacturing were perceived to have little commitment to the local workforce. Although pay levels were thought to be higher than average, many people would not pursue employment in manufacturing because of the perception of instability.

In TWL, transportation and warehousing were more tangible to the focus group participants than logistics. Most participants believed that TWL was a growing industry with more jobs available now. However, the only long-term career most could think of was commercial driver, which often did not fit their family situation or personal interests. Other jobs in this sector were thought to either be low paying, or if the pay was good, the work was backbreaking. The reaction from the participants might be best characterized as "Yes, there are jobs but they are not for me."

In terms of job searches, people still relied on newspaper ads and word of mouth. Some community college and high school students also received information from their schools. Most people knew that they could use the Internet to find information about occupations and industries. Few, however, had any success in finding jobs through web sites.

As they searched for employment, many people understandably wanted to find jobs that made use of their existing experiences and skills. Some were open to the possibility of retraining for other occupations but few were willing to make the investment on their own. Many only wanted training paid by employers or someone else (i.e., government). A few were training for (or would be interested in training) for trades. In addition to funding, many participants did not know how training would fit into their schedules and childcare arrangements.

Attachments

- A. Table: Focus Group Schedules and Participation
- B. One-Stop Focus Group Protocol
- C. Community College Focus Group Protocol
- D. High School Focus Group Protocol
- E. Participant Background Data Sheets
- F. Information on Occupations in Manufacturing (handed out to participants upon conclusion of focus group)
- G. Information on Occupations in Transportation/Warehousing/Logistics (handed out to participants upon conclusion of focus group)

Attachment A: Focus Group Schedules and Participation

Date	Lake County 5/20/04	Chicago 5/25/04	McHenry, DuPage, River Valley & Northern Cook County 5/26/04	South & West Cook County 5/26/04	Kankakee & Will County 5/27/04
Job Seeker	Greyslake Job Center 11 participants	Daley One- Stop 7 participants	Elgin IETC 4 participants	Harvey One- Stop 4 participants	Kankakee One- Stop 8 participants
High School	Zion Benton Township High School 15 participants	Wells Academy High School 16 participants	Streamwood/Elgin High School 8 participants	Bloom High School 15 participants	Premier Academy 19 participants
Community College			Elgin Community College 8 participants	South Suburban College 12 participants	Kankakee Community College 4 participants

Attachment B: One-Stop Focus Group Protocol

CSSI Job Seeker Focus Group Protocol

(Manufacturing & TWL)

Introduction of Project and Purpose

- 1. Good [morning/afternoon]. On behalf of the Workforce Investment Boards of Metro Chicago, welcome and thank you for being here. My name is [xxxx] and I will be facilitating today's group discussion. With me is [xxxx], who will be observing and taking notes.
- 2. My company, CSW, has been asked by the Workforce Boards to conduct a series of focus groups with job seekers, and students in Metro Chicago to gain some insights into the changes that are taking place in the workforce.
- 3. First, let me take a minute to explain a little about what workforce boards are and what they do. The Workforce Boards are community organizations representing businesses, educators and the general public. They work cooperatively with businesses on their workforce issues to help them stay competitive. In the current environment where major changes are occurring in our economic structure and demographics, the Workforce Boards try to stay on top of things by understanding the needs and intentions of businesses, as well as current and potential workers.

The current project, of which this focus group is a part, came out of the concern that these is a severe shortage of workers for some jobs in some industries here in the Chicago area. The industries we are going to talk about today are manufacturing and TWL (that is, Transportation, Warehousing and Logistics). We have invited you here to understand what perceptions you have about occupations in manufacturing and TWL and how you are going about making your career choices.

By Manufacturing, we are referring to durable and nondurable goods manufacturing. Nondurable manufacturing makes things that can be consumed just once, like toilet paper or food. Durable manufacturing makes things that can be used again and again, for at least one year. Examples of these are household appliances, or phones or cars.

The Transportation, Warehousing and Logistics industry helps raw materials and goods get from one place to another. This could include heavy trucking companies, delivery services and many other ways of transporting things such as rail or air.

Our discussion will last about 1 to 1½ hours. We will not take a formal break. Feel free to get up and stretch or use the bathroom when you need to. I just ask that you do that one at a time so that we could keep the conversation going. [bathroom directions]

Are there any questions about what I just talked about?

We have some ground rules for our discussion. They are: (1) no interruptions; let others finish. (2) there are no wrong answers; all points and experiences are valid. (3) be open-minded and respectful of each other.

Getting Engaged

Now let's make some name tents so we can refer to each other by name. By now some of you have completed the background information sheet. If you haven't, please do so now and hold it up so we can collect it from you.

* * * * * * * *

To get started, I'd like to ask you to act like "popcorns". We are not going to go around in a circle. Speak when you want to.

OPENING QUESTION: Please tell us your name and share with us what kind of job you would like to have and why you think that job is right for you.

Topic A. Job Seeking Behaviors

- QUESTION 1 When you apply for a job, what factors do you consider <u>most</u> important?
- QUESTION 2 How do you learn about a job opening?
 - a) How do you find more information about the opening?
- QUESTION 3 If you had a choice of jobs, how do you narrow down your choices?
 - a) Are there some people whose opinions you value?

Topic B. Awareness and Perception of Nondurable Manufacturing

- QUESTION 4 Can you name some <u>Nondurable Manufacturing</u> employers in your area?
 - a) What do they do?
 - b) What kinds of jobs do they offer?
 - c) Are they good employers?
 - (1) Why or why not?
 - d) Would you want to work for them?
 - (1) Why or why not?
- QUESTION 5 What do you know about the people working in <u>Nondurable Manufacturing</u>?
 - a) Are they happy?
 - (1) Why or why not?

- b) Do they make good money?
- c) What about the work hours?
- d) What do you know about the work conditions?
- e) How about job security?

QUESTION 6

What kinds of jobs exist in <u>Nondurable Manufacturing</u>? Let's start with titles of jobs that you know of. How about ...

- a) Machine operators/setters/tenders
- b) Inspectors/testers/samplers
- c) Assemblers
- d) Laborers
- e) Customer Service Representative
- f) Sales Representative

Topic C. Awareness and Perception of <u>Durable Manufacturing</u>

QUESTION 7 Can you name some Durable Manufacturing employers in your area?

- a) What do they do?
- b) What kinds of jobs do they offer?
- c) Are they good employers?
 - (1) Why or why not?
- d) Would you want to work for them?
 - (1) Why or why not?

QUESTION 8

What do you know about the people working in <u>Durable</u> Manufacturing?

- a) Are they happy?
 - (1) Why or why not?
- b) Do they make good money?
- c) What about the work hours?
- d) What do you know about the work conditions?
- e) How about job security?

QUESTION 9

What kinds of jobs exist in <u>Durable Manufacturing</u>? Let's start with titles of jobs that you know of. How about ...

- a) Engineers
- b) Machinists
- c) Inspectors/Testers/Samplers
- d) Welders/Cutters

- e) Machine Tool Operators/Tenders/Setters
- f) Assemblers
- g) Laborers/Movers

Topic D. Awareness and Perception of <u>TWL</u>

- QUESTION 10 Can you name some <u>Transportation</u>, <u>Warehouse & Logistics</u> employers in your area?
 - a) What do they do?
 - b) What kinds of jobs do they offer?
 - c) Are they good employers?
 - (1) Why or why not?
 - d) Would you want to work for them?
 - (1) Why or why not?
- QUESTION 11 What do you know about the people working in <u>TWL</u>?
 - a) Are they happy?
 - (1) Why or why not?
 - b) Do they make good money?
 - c) What about the work hours?
 - d) What do you know about the work conditions?
 - e) How about job security?
- QUESTION 12 What kinds of jobs exist in <u>TWL</u>? Let's start with titles of jobs that you know of. How about ...
 - a) Heavy Truck Drivers
 - b) Delivery Truck Drivers
 - c) Industrial/Tractor Drivers
 - d) Laborers/Movers
 - e) Clerical

Topic E. Perception of Barriers to Career Change

- QUESTION 13 Can you picture yourself working in manufacturing or TWL?
 - a) If yes, what kinds of jobs would you consider?
 - b) If not, why not?
- QUESTION 14 How would you feel about going through additional training to qualify for some of those jobs on that list?
 - a) What would get in the way of your getting this training?

b) What would need to happen first (what information do you need) before you can decide to go ahead with obtaining more training for these jobs?

Closing Remarks

I want to thank you very much for being here and for participating in this conversation. In addition to the gift card, we welcome you to take a copy of the occupation information sheets that we have prepared. Maybe you will find some interesting surprises in there. It also has phone numbers and contacts that can help you more if you are interested.

Thanks again.

Attachment C: Community College Focus Group Protocol

CSSI Community College Focus Group Protocol

(Manufacturing & TWL)

Introduction of Project and Purpose

- 1. Good [morning/afternoon]. On behalf of the Workforce Investment Boards of Metro Chicago, welcome and thank you for being here. My name is [xxxx] and I will be facilitating today's group discussion. With me is [xxxx], who will be observing and taking notes.
- 2. My company, CSW, has been asked by the Workforce Boards to conduct a series of focus groups with job seekers, and students in Metro Chicago to gain some insights into the changes that are taking place in the workforce.
- 3. First, let me take a minute to explain a little about what workforce boards are and what they do. The Workforce Boards are community organizations representing businesses, educators and the general public. They work cooperatively with businesses on their workforce issues to help them stay competitive. In the current environment where major changes are occurring in our economic structure and demographics, the Workforce Boards try to stay on top of things by understanding the needs and intentions of businesses, as well as current and potential workers.

The current project, of which this focus group is a part, came out of the concern that these is a severe shortage of workers for some jobs in some industries here in the Chicago area. The industries we are going to talk about today are manufacturing and TWL (that is, Transportation, Warehousing and Logistics). We have invited you here to understand what perceptions you have about occupations in manufacturing and TWL and how you are going about making your career choices.

By Manufacturing, we are referring to durable and nondurable goods manufacturing. Nondurable manufacturing makes things that can be consumed just once, like toilet paper or food. Durable manufacturing makes things that can be used again and again, for at least one year. Examples of these are household appliances, or phones or cars.

The Transportation, Warehousing and Logistics industry helps raw materials and goods get from one place to another. This could include heavy trucking companies, delivery services and many other ways of transporting things such as rail or air.

Our discussion will last about 1 to 1½ hours. We will not take a formal break. Feel free to get up and stretch or use the bathroom when you need to. I just ask that you do that one at a time so that we could keep the conversation going. [bathroom directions]

Are there any questions about what I just talked about?

We have some ground rules for our discussion. They are: (1) no interruptions; let others finish. (2) there are no wrong answers; all points and experiences are valid. (3) be open-minded and respectful of each other.

Getting Engaged

Now let's make some name tents so we can refer to each other by name. By now some of you have completed the background information sheet. If you haven't, please do so now and hold it up so we can collect it from you.

* * * * * * * *

To get started, I'd like to ask you to act like "popcorns". We are not going to go around in a circle. Speak when you want to.

OPENING QUESTION: Please tell us your name and share with us what kind of job you would like to have and why you think that job is right for you.

Topic A. Career Aspirations & Job Seeking Behaviors

- QUESTION 1 When you apply for a job, what factors do you consider most important?
- QUESTION 2 How do you learn about a job opening?
 - a) How do you find more information about the opening?
- QUESTION 3 If you had a choice of jobs, how do you narrow down your choices?
 - a) Are there some people whose opinions you value?

Topic B. Awareness and Perception of Nondurable Manufacturing

- QUESTION 4 Can you name some Nondurable Manufacturing employers in your area?
 - a) What do they do?
 - b) What kinds of jobs do they offer?
 - c) Are they good employers?
 - (1) Why or why not?
 - d) Would you want to work for them?
 - (1) Why or why not?
- QUESTION 5 What do you know about the people working in <u>Nondurable Manufacturing</u>?
 - a) Are they happy?
 - (1) Why or why not?
 - b) Do they make good money?
 - c) What about the work hours?

- d) What do you know about the work conditions?
- e) How about job security?

QUESTION 6 What kinds of jobs exist in <u>Nondurable Manufacturing</u>? Let's start with titles of jobs that you know of. How about ...

- a) Machine operators/setters/tenders
- b) Inspectors/testers/samplers
- c) Assemblers
- d) Laborers
- e) Customer Service Representative
- f) Sales Representative

Topic C. Awareness and Perception of <u>Durable Manufacturing</u>

QUESTION 7 Can you name some Durable Manufacturing employers in your area?

- a) What do they do?
- b) What kinds of jobs do they offer?
- c) Are they good employers?
 - (1) Why or why not?
- d) Would you want to work for them?
 - (1) Why or why not?

QUESTION 8 What do you know about the people working in <u>Durable Manufacturing</u>?

- a) Are they happy?
 - (1) Why or why not?
- b) Do they make good money?
- c) What about the work hours?
- d) What do you know about the work conditions?
- e) How about job security?

QUESTION 9 What kinds of jobs exist in <u>Durable Manufacturing</u>? Let's start with titles of jobs that you know of. How about ...

- a) Engineers
- b) Machinists
- c) Inspectors/Testers/Samplers
- d) Welders/Cutters
- e) Machine Tool Operators/Tenders/Setters
- f) Assemblers

g) Laborers/Movers

Topic D. Awareness and Perception of <u>TWL</u>

- QUESTION 10 Can you name some <u>Transportation</u>, <u>Warehouse & Logistics</u> employers in your area?
 - a) What do they do?
 - b) What kinds of jobs do they offer?
 - c) Are they good employers?
 - (1) Why or why not?
 - d) Would you want to work for them?
 - (1) Why or why not?
- QUESTION 11 What do you know about the people working in <u>TWL</u>?
 - a) Are they happy?
 - (1) Why or why not?
 - b) Do they make good money?
 - c) What about the work hours?
 - d) What do you know about the work conditions?
 - e) How about job security?
- QUESTION 12 What kinds of jobs exist in <u>TWL</u>? Let's start with titles of jobs that you know of. How about ...
 - a) Heavy Truck Drivers
 - b) Delivery Truck Drivers
 - c) Industrial/Tractor Drivers
 - d) Laborers/Movers
 - e) Clerical

Topic E. Perception of Barriers to Career Change

- QUESTION 13 Can you picture yourself working in manufacturing or TWL?
 - a) If yes, what kinds of jobs would you consider?
 - b) If not, why not?
- QUESTION 14 How would you feel about going through additional training to qualify for jobs that require specialized training?
 - a) What would get in the way of your getting this training?
 - b) What would need to happen first (what information do you need) before you can decide to go ahead with obtaining more training for these jobs?

Closing Remarks

I want to thank you very much for being here and for participating in this conversation. In addition to the gift card, we welcome you to take a copy of the occupation information sheets that we have prepared. Maybe you will find some interesting surprises in there. It also has phone numbers and contacts that can help you more if you are interested.

Thanks again.

Attachment D: High School Focus Group Protocol

CSSI High School Student Focus Group Protocol

(Manufacturing and TWL)

Introduction of Project and Purpose

- 1. Good [morning/afternoon]. On behalf of the Workforce Investment Boards of Metro Chicago, welcome and thank you for being here. My name is [xxxx] and I will be facilitating today's group discussion. With me is [xxxx], who will be observing and taking notes.
- 2. My company, CSW, has been asked by the Workforce Boards to conduct a series of focus groups with job seekers, and students in Metro Chicago to gain some insights into the changes that are taking place in the workforce.
- 3. First, let me take a minute to explain a little about what workforce boards are and what they do. The Workforce Boards are community organizations representing businesses, educators and the general public. They work cooperatively with businesses on their workforce issues to help them stay competitive. In the current environment where major changes are occurring in our economic structure and demographics, the Workforce Boards try to stay on top of things by understanding the needs and intentions of businesses, as well as current and potential workers.

The current project, of which this focus group is a part, came out of the concern that these is a severe shortage of workers for some jobs in some industries here in the Chicago area. The industries we are going to talk about today are manufacturing and TWL (that is, Transportation, Warehousing and Logistics). We have invited you here to understand what perceptions you have about occupations in manufacturing and TWL and how you are going about making your career choices.

By Manufacturing, we are referring to durable and nondurable goods manufacturing. Nondurable manufacturing makes things that can be consumed just once, like toilet paper or food. Durable manufacturing makes things that can be used again and again, for at least one year. Examples of these are household appliances, or phones or cars.

The Transportation, Warehousing and Logistics industry helps raw materials and goods get from one place to another. This could include heavy trucking companies, delivery services and many other ways of transporting things such as rail or air.

Our discussion will last about 1 to 1½ hours. We will not take a formal break. Feel free to get up and stretch or use the bathroom when you need to. I just ask that you do that one at a time so that we could keep the conversation going. [bathroom directions]

Are there any questions about what I just talked about?

We have some ground rules for our discussion. They are: (1) no interruptions; let others finish. (2) there are no wrong answers; all points and experiences are valid. (3) be open-minded and respectful of each other.

Getting Engaged

Now let's make some name tents so we can refer to each other by name. By now some of you have completed the background information sheet. If you haven't, please do so now and hold it up so we can collect it from you.

Focus Group Question

Topic A. Career Aspirations

QUESTION 1 What do you think would make a good career?

- a) You can give examples of good careers but also tell us <u>why</u> you think it is a good career.
- b) What would be a good career for you?
 - (1) Why?

QUESTION 2 What specific advice do you get on career choices from your family?

Topic B. Awareness and Perception of Nondurable Manufacturing

QUESTION 3 Can you name some <u>Nondurable Manufacturing</u> employers in your area?

- a) What do they do?
- b) What kinds of jobs do they offer?
- c) Are they good employers?
 - (1) Why or why not?
- d) Would you want to work for them?
 - (1) Why or why not?

QUESTION 4 What do you know about the people working in <u>Nondurable Manufacturing</u>?

- a) Are they happy?
 - (1) Why or why not?
- b) Do they make good money?
- c) What about the work hours?
- d) What do you know about the work conditions?
- e) How about job security?

QUESTION 5 What kinds of jobs exist in <u>Nondurable Manufacturing</u>? Let's start with titles of jobs that you know of. How about ...

- a) Machine operators/setters/tenders
- b) Inspectors/testers/samplers
- c) Assemblers
- d) Laborers
- e) Customer Service Representative
- f) Sales Representative

Topic C. Awareness and Perception of <u>Durable Manufacturing</u>

QUESTION 6 Can you name some <u>Durable Manufacturing</u> employers in your area?

- a) What do they do?
- b) What kinds of jobs do they offer?
- c) Are they good employers?
 - (1) Why or why not?
- d) Would you want to work for them?
 - (1) Why or why not?

QUESTION 7 What do you know about the people working in <u>Durable Manufacturing</u>?

- a) Are they happy?
 - (1) Why or why not?
- b) Do they make good money?
- c) What about the work hours?
- d) What do you know about the work conditions?
- e) How about job security?

QUESTION 8 What kinds of jobs exist in <u>Durable Manufacturing</u>? Let's start with titles of jobs that you know of. How about ...

- a) Engineers
- b) Machinists
- c) Inspectors/Testers/Samplers
- d) Welders/Cutters
- e) Machine Tool Operators/Tenders/Setters
- f) Assemblers
- g) Laborers/Movers

Topic D. Awareness and Perception of <u>Transportation, Warehouse & Logistics (TWL)</u>

- QUESTION 9 Can you name some <u>Transportation, Warehouse & Logistics</u> employers in your area?
 - a) What do they do?
 - b) What kinds of jobs do they offer?
 - c) Are they good employers?
 - (1) Why or why not?
 - d) Would you want to work for them?
 - (1) Why or why not?
- QUESTION 10 What do you know about the people working in TWL?
 - a) Are they happy?
 - (1) Why or why not?
 - b) Do they make good money?
 - c) What about the work hours?
 - d) What do you know about the work conditions?
 - e) How about job security?
- QUESTION 11 What kinds of jobs exist in <u>TWL</u>? Let's start with titles of jobs that you know of. How about ...
 - a) Heavy Truck Drivers
 - b) Delivery Truck Drivers
 - c) Industrial/Tractor Drivers
 - d) Laborers/Movers
 - e) Clerical

Topic E. Industry Perceptions

- QUESTION 12 What kinds of skills and knowledge do you think are necessary for careers in manufacturing or TWL? Why?
- QUESTION 13 What have you heard about the employment situation in manufacturing? TWL?
 - a) What are your sources for this information?
- QUESTION 14 What kinds of experiences have you had with local employers in health care?
 - a) As a worker? Related to someone who works there? Friends with someone who works there?

- b) What do you learn from those experiences?
- QUESTION 15 Could you see yourself working for one of them?
 - a) What could you picture yourself do?

Topic F. Access to Information

- QUESTION 16 If you wanted to look up more information about careers in manufacturing or TWL, where can you go? Who can you ask?
- QUESTION 17 Of all the people you know, who would you say have the most influence on your career decisions?

Closing Remarks

I want to thank you very much for being here and for participating in this conversation. In addition to the gift card, we welcome you to take a copy of the occupation information sheets that we have prepared. Maybe you will find some interesting surprises in there. It also has phone numbers and contacts that can help you more if you are interested.

Thanks again.

Attachment E: Participant Background Data Sheets

Participant Background Information (Community College)

	How many years have you have lived in N	Metro Chicago?
	YEARS	
	If you have worked before, please tell us a	about your most recent <u>or</u> current job.
	OCCUPATION:	Years with EMPLOYER:
		YEARS
		Years with OCCUPATION:
	INDUSTRY OF EMPLOYMENT:	YEARS
		Years in INDUSTRY:
		YEARS
١.	What is your area of concentration at the 0	College?
	What occupation would you like to find?	
	What industry would you like to work in?	
٠.	Your Gender: FEMALE	MALE
' .	Year of Birth :	
	10	

Participant Background Information (High School)

1.	How many years have you have lived in Metro Chicago?
	YEARS
2.	What are your parents' or guardians' occupations?
	PARENT/ GUARDIAN 1: PARENT/ GUARDIAN 2:
3.	What <u>industries</u> do your parents or guardian(s) work in?
	PARENT/ GUARDIAN 1: PARENT/ GUARDIAN 2:
4.	What are your current career choices?
5.	What will you most likely do after high school?
	ND A OB ATTEND ATTEND COMM. COLLEGE ATTEND VOC/TECH SCHOOL
6.	What are your favorite subjects at school?
7.	Your Grade:
8.	Your Gender: FEMALE MALE
9.	Year of Birth: 19

Participant Background Information (One-Stop)

How	many years have you have lived in Metro Chicago? YEARS
Wha	was your most recent occupation?
а	For how many years were you in this occupation?
	YEARS
b	For how many years did you work for your last employed
	YEARS
C.	What industry did you work in?
Wha	occupation are you looking for employment?
Wha	industry would you like to work in?
Your	Gender: FEMALE MALE
Year	of Birth: 19

Attachment F: Information on Occupations in Manufacturing

Information on Careers in Manufacturing

A virtual career information center can be found at the following website: www.khake.com. Specifically, a wealth of manufacturing information is available through http://www.khake.com/page40.html.

In the Chicago area, the Tooling and Manufacturing Association (TMA) has a helpful website. In addition to serving its employer membership, the TMA also offers free job referral services to residents and students. The Association is located at 1177 S. Dee Road, Park Ridge, IL 60068 and can be reached by phone at 847-825-1120.

Information below is excerpted from the TMA website. For more information, please visit http://www.tmanet.com.

* * * * *

The tooling and machining industry is the basis for all of the manufacturing industries, producing everything from the simplest stamping die or metal mold for plastics to the most sophisticated automatic production lines. Major customer industries include automotive, appliance, aerospace, business machines, electronics, agricultural implements, ordnance, transportation, environmental, nuclear, and construction equipment.

What kinds of jobs are there?

Journeyman tool and die makers, mold makers, and machinists are skilled professionals who work in high-tech environments. College credits earned in the four-year TMA Related Theory Apprentice Training are applicable to a two- or four-year degree. Manufacturing, management, sales, and engineering are also excellent career paths.

Is it for me?

The industry is well suited to people who like to work with their heads as well as their hands: interest and ability in mechanical things, good math skills, and understanding of spatial relationships are important prerequisites. Comprehensive language skills are also important.

Types of jobs available in manufacturing

- accounting
- administrative support
- assembler
- buyer
- chief financial officer
- CNC machine tool programmer
- CAD (computer assisted design) operator
- drafter

- computer programmer
- computer network administrator
- controller
- customer service
- sales
- design: automation equipment and machinery, product, mold, tool & die
- human resources
- engineering: applications, electrical, industrial, mechanical, sales, tool
- inspector
- quality control
- inventory control
- machinery builder or specialist
- machine tool set-up/operator
- machinist: manual or CNC, maintenance
- maintenance: machine, facility
- management: engineering, general, department, human resources, information technology, operations, office, plant, production, purchasing, sales, quality, research & development, traffic
- production scheduler
- systems analyst
- tooling technologist
- labor relations
- marketing & sales

If you answered yes to most of these questions, you should consider a career in precision metalworking.

What kind of training and education do I need?

The best way to learn all aspects of the trade is a formal apprenticeship that combines classroom instruction with hands-on job experience. The typical apprenticeship is four or five years. This includes practical experience and, for TMA students, four years of college credit classroom instruction.

How do I start?

Entry level positions in manufacturing can lead to apprentice training programs, in many cases paid for by the employer. TMA offers job referral. Many community colleges also offer technical courses and programs.

Good Labor Market

In the Chicago area alone, there are nearly 6,000 manufacturing companies employing more than 35,000 skilled manufacturing professionals in a variety of precision metalworking jobs. These professionals design and make tools, dies, molds, and machinery that drive the mass production process. They machine high-precision component parts so production workers can stamp, mold, fabricate, cast, forge, turn, bend, machine and grind precision parts by the millions for end-product manufacturers worldwide.

Apprentice Training - earn while you learn

Internships or apprenticeships usually require four to five years of hands-on and classroom training- no longer than it takes to go to college-and apprentices are earning while in training. Qualified employees of TMA member companies may be enrolled in the Related Theory Program offered at three Chicago area campuses in precision machining, tool and die making, and mold making. Classes include math, industrial blueprint reading, and machining. Graduates can articulate to the Bachelor of Manufacturing Technology & Management Program at the Illinois Institute of Technology or to other degree programs.

Recommendations for students

Plan for at least two years of high school math with algebra and geometry, and acquire good reading and communication skills. TMA also recommends that you study trigonometry, manufacturing technology (machine shop, metals, drafting), computer use, and physics and chemistry. Visit manufacturing facilities in your area and talk with industry representatives about their work and their training. If possible, work part-time at a manufacturing company while you are in school.

Job Referral Service

The Tooling & Manufacturing Association offers job referral for individuals seeking employment in the Chicago area at any level in the manufacturing industry. This is a job referral service; it does not quarantee employment.

High school students seeking part-time employment leading to apprenticeship should prepare a resume and contact the TMA Education department for an application form.

College students seeking internships or full-time employment after graduation should prepare a resume and contact the TMA Education Department.

Adults seeking full-time employment

Adults seeking full-time employment in technical areas must make an appointment with TMA and bring in a resume. Jobseekers will receive: evaluation of resume, distribution of resume to inquiring employers, a list of TMA member companies (with ZIP code sort for regional targeting).

TMA is located in Park Ridge near the Kennedy Expressway and is accessible by public transportation. Current employees of TMA member companies are not eligible for this service (except with permission of employer).

Adults seeking full-time employment - management & administrative:

Adults seeking full-time employment in management or executive positions, or in administration or engineering can send resumes to TMA with a one-paragraph summary outlining skills, accomplishments, and position desired.

Certification or community training programs:

TMA will promote program graduates as a group to the membership. Provide a brief description of the program including number of graduates, hours of study/course (e.g. 12 hours of shop math, 20 hours of blueprint reading), name of organization and contact person.

There is no charge for this service. Call the TMA Education Department at 847/825-1120 or bpahl@tmanet.com. Office hours are 8:00 am - 4:15 pm, Monday through Friday.

* * * * *

Attachment G: Information on Occupations in Transportation/Warehousing/Logistics