CRITICAL SKILLS SHORTAGE INITIATIVE REPORT #1:
Results of Employer Focus Groups, Interviews, and Surveys in the Transportation, Warehousing & Logistics Industry

This project was commissioned by:

The Workforce Boards of Metropolitan Chicago

Prepared by

900 Victors Way, Suite 350
Ann Arbor, MI 48108
(734) 769-2900 (voice)
(734) 769-2950 (fax)
lagood@skilledwork.org
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.

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 (TWL). 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 first of the four reports. It summarizes the results of interviews, focus groups, and surveys with employers affiliated with the transportation, warehousing, and logistics industry (TWL) in greater Chicago.

The report provides:

- Descriptive information about participating firms (sub-sector, size, etc.);
- Information about the context in which these firms are making decisions about recruiting and retaining talent; and
- Information about their specific practices and needs as identified by industry representatives who participated in the project.

This report is not intended as a summary of employer perceptions of the entire TWL industry, nor does it definitively identify needs and challenges that should be addressed by the Boards. Rather, it addresses one aspect of a more comprehensive data collection effort.

Importantly, during our discussions and through surveys, respondents provided thoughtful, honest, and insightful observations on behalf of their firms and industries—many also provided access to their employees, tours of their facilities, or hosted coffee and refreshments. We thank them for their hospitality, insight, and for the work they do everyday.
The information included in this report will undoubtedly prove valuable to the Workforce Boards of Metro Chicago as they develop strategies to engage and support TWL firms in the region.
Summary Highlights

Key findings are as follows:

- While the project sought to gather intelligence on the umbrella industry comprising transportation, warehousing and logistics (TWL), most firms in specific industry sectors—rail, warehousing and intermodal, motor freight, and transportation services—saw themselves as having little in common with one another.
- Overall firms in the TWL industry are optimistic about the future.
- Key concerns of respondents representing major sectors in the TWL industry included:
  - All sectors: fuel prices
  - Rail: security (post 911), aging workforce, absence of a talent “pipeline,” and image issues
  - Warehousing and Intermodal Marketing/Brokering: technology, growth, changes in related transportation sectors, image issues
  - Motor Freight: growth, demand for drivers, security issues, and new federal regulations governing “Hours of Service”
  - Transportation Services: new technologies—cost, demands on workforce
- The most frequently cited shortage occupations across the industry included:
  - Skilled craftspeople
  - Truck drivers
  - Train or rail crews
  - Entrepreneurial sales or business development professionals (non-entry-level)
- Primary recruiting methods reported by firms included: referral, newspapers, the internet, and colleges, trade schools, apprenticeship programs, and high schools. The most effective recruiting methods cited were employee referral and the internet.
- Skills rated most important by TWL industry respondents included reading and communication skills. Those rated least important included math and management skills.

---

1 Intermodal refers to freight (or people) using more than one mode of transportation in a single journey. As used in this report, the firms refers to the use of rail and ground to move cartons from one location to another.
Important skills lacking among applicants and new hires include: workplace basics, communication skills, and computer or technology skills and aptitude.

Respondents cited the following as potential content areas where focused and sustained attention and effort could make a positive contribution to the economic health of TWL firms, sectors, and the industry as a whole:

♦ Workplace basics
♦ Information about jobs, careers, and wages in the industry
♦ Problem-solving, team, and technology skills
♦ Image (of the industry)
♦ Diversity in the industry’s workforce
Process, Results and Findings

While the overall numbers were small and the data collection labor intensive, the CSSI project engaged a diverse group of firms representing all the parts of the TWL sector the Workforce Boards sought to reach. Individuals in these firms allowed researchers brief entrée into their workplaces, sharing insights into their work and to the context in which it takes place, and the priorities and challenges faced by their firms and industries. The information they provided was rich, insightful, and in some cases, suggests potential policy and program responses for the Workforce Boards, schools, industry groups, and professional associations, as well as for their peers in the industry.

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

Twenty-seven individuals representing 22 transportation, warehousing, and logistics firms in the Chicago metropolitan area participated in structured interviews, mini-focus groups, and/or completed surveys during the six-week data collection effort associated with the project. Twenty-two of these individuals completed information cards or surveys that enabled comparison and analysis. The other six participated in oral conversation with their colleagues who completed the datasheets used to collect comparative information.

Although we had planned to convene focus groups with employers in the TWL industry, we opted not to do this for a number of reasons. First, our initial intelligence gathering revealed how little firms in different sectors within the industry thought they had in common with each other. Rail industry employers, for example, saw themselves as a unique group—they were puzzled when we spoke to them about attending industry-wide focus groups, preferring instead to engage in specific conversations about their firms or sectors. Second, the industry and professional associations we planned to partner with in an effort to pull together focus groups indicated that they, themselves, have trouble getting members together, since these firms are located all over the metropolitan area—and rarely near one another. Finally, in areas where firms did exist in close proximity to one another, they tended to either see themselves as competitors and were reluctant to meet together, or they were branches of firms headquartered elsewhere and reticent to address company policies over which they felt they had little influence.

2 In addition, two key professional associations in the industry convened major annual conferences—both outside of the state of Illinois—during the May 2004, the project’s primary data collection period. As a result, they were reticent to try to engage members in another set of activities in such a short time frame.
As a result, we used three alternative methods to gather intelligence on the TWL industry: 1) structured interviews at the workplace; 2) telephone interviews; and 3) electronic and paper surveys.

Most of the 22 TWL firms participating in the project and for which we acquired data were affiliated with one of the following sub-sectors:

- Motor freight—long-haul, short-haul or express delivery (27%)
- Rail—passenger and freight (27%)
- Intermodal Marketing/Brokering (18%)
- Distribution/Warehousing—durable and non-durable goods (14%)
- Transportation services—car or truck rental, towing, and service (9%)

Collectively, these firms employ over 15,200 people\(^3\) in the Chicago area. They ranged in size from 10 employees to over 3,000—firms in all size categories were represented.

- 23% employed over 1,000
- 14% employed 500-999
- 9% employed 250-499
- 18% employed 50-249
- 27% employed fewer than 50

Most of the individuals who participated in the project on behalf of their firms were Human Resource Directors, though a few were Chief Operations Officers, Chief Financial Officers, or Chief Executive Officers. In most cases, the firms’ primary locations were in Cook, DuPage, Kane, McHenry or Will Counties, though location was less relevant in the TWL industry than it might be in other industries. TWL firms are concentrated in areas with significant transportation infrastructure—air, rail, ports, and warehouse facilities. Many of the firms participating in the project reported multiple locations in the metro region, or had very small headquarters with larger distribution facilities elsewhere. TWL firms tended to attract employees from all over northern Illinois, Southern Wisconsin, and Eastern Indiana, and in the case of long-haul (rail and motor freight), from all over North America.

Forty-three percent of the TWL firms participating employed workers who were members of labor unions, while 57% of firms reported that they were “not a union shop.”

Firms were asked about the extent to which they use alternative labor—temporary staff, leased staff, contract workers, etc. Their responses follow:

---

\(^3\) This is probably a low estimate as we asked for employment numbers in the Chicago area, but some firms had multiple locations and knew only their own location’s numbers and the national numbers, but not the regional ones. We, therefore, used the single location numbers.
“We do not use alternative labor.” (43%)
“We use some alternative labor.” (38%)
“We use alternative labor seasonally.” (10%)
“We rely heavily on alternative labor.” (10%)

How did they participate?

The project engaged representatives of participating firms in three different types of activities: in-person, on-site interviews, telephone interviews and electronic surveys.\(^4\)

The in-person interviews focused on 3 questions:

1. How has your industry/firm changed during the past five years?
2. What are the current strategic challenges faced by your firm/industry today?
3. Can you describe the impact of changes/priorities on human resource strategies/practice?

Individuals were also either walked through the survey orally, or asked to complete it in writing. They were then asked to “name one thing that would dramatically improve their ability to attract and retain talent.”

Finally, employers were provided with surveys intended for high-performing employees (5-10) in the hard-to-fill occupations they had identified during the interview.

Most of the individuals participating in focus groups received a $3 Starbuck’s gift card in a thank-you note. Those who provided tours or longer interviews received a $5 Starbuck’s gift card.

What did they say?

Respondents discussed the recent hiring and growth trends, current challenges in their firms or sectors that impacted their human resource strategies and current and projected occupational and skill needs. Most respondents also offered suggestions for improving their industry’s ability to attract and retain talent.

Employment Growth

Firms were asked whether they currently employ more or fewer people than one year ago, and whether they planned to employ more or fewer in 2005. They responded as follows:

\(^4\) There were a few firms in the TWL industry that participated in manufacturing-industry focus groups. Their input has been integrated into this report.
Importantly, the primary conclusion to draw from this set of figures is that the participating firms seemed to be fairly optimistic about the future—57% expect to employ more people next year than they do today. What the figures do not reveal is whether these firms (or the TWL industry as a whole) will see an increase in hiring activity. The rail industry, for example, is experiencing high levels of hiring activity currently, and probably for the foreseeable future, because large numbers of employees are retiring and because the industry manifests high levels of turnover among new employees. But overall, rail industry respondents reported that they would employ a similar number of workers in 2005 as today, and fewer over time, even as they expect business to grow.

In another case, two intermodal marketing firms expect growth in business, but reductions in the number of staff because they are applying new technologies to specific labor-intensive aspects of their firms.

**Changes in Industries/Firms**

The one recent challenge firms across the TWL industry repeatedly identified was the high price of fuel. While prices have been gradually accelerating for some time in Illinois, as in many other states, firms indicated that it was approaching a threshold price—one that determines whether or not they could remain profitable under their current shipping and distribution contracts. Just as the word “outsourcing” generated considerable energy among the manufacturers participating in the project, the phrase “gas prices” animated nearly every respondent with whom we met.\(^5\)

With the exception of this one issue—fuel prices—the disparate parts of the industry identified few industry-wide changes or common challenges. Rather, different sectors described either different challenges or indicated that industry-wide issues manifest themselves uniquely in their firms and sectors.

Key priorities and challenges identified by specific sectors are described briefly below.

---

\(^5\) This was at least partially attributable to the then-current debate in the state legislature over Illinois’ fuel tax.
Respondents representing the rail industry (both freight and passenger) identified security as a key challenge—and an aspect of their business that had dramatically changed during the past several years (since 9/11). Specifically, rail industry executives reported struggling to:

- Manage the cost of additional security in stations and storage units;
- Recruit and retain talent capable of passing more rigorous stringent security screens and background checks\(^6\); and
- Plan and prepare for new screening processes for freight and baggage.

A second challenge reported by rail industry executives was the aging of the rail industry workforce. Three specific concerns were noted:

- Large numbers of employees retiring simultaneously during the next decade;
- Reluctance of workers nearing retirement to learn new technologies, skills or processes on the jobs; and
- The absence of an adequate “pipeline”—the industry has no obvious sources of new talent for the many thousands of jobs that will be available, even as the demands on the industry are expected to double by 2020.

In 2002, the Railroad Retirement Act lowered the age at which workers can receive full retirement benefits from 62 to 60 for individuals with 30 years of service. Because this industry maintains workforce that is much older than the US average,\(^7\) this two-year difference is significant.\(^8\)

Although large numbers of workers will retire in the next few years, their experience and historical memories are of great importance to their firms as new workers are recruited, and new technologies adopted.\(^9\) But most employers noted that the industry has evolved with very specific hierarchies—it lacks a flexible work culture. As a result, building different responsibilities and new approaches to work into existing contracts and job descriptions so that new workers can learn from their more experienced colleagues, and vice-versa, has been very difficult.

A third and related issue—the “talent pipeline” was cited for its importance and noted for its many facets. First, rail lacks the infrastructure of other transport

\(^6\) Credit checks, in particular, were identified as a recent addition to the standard battery of background checks in the rail industry.
\(^7\) 40% of rail workers are eligible to retire in the next ten years.
\(^8\) One firm participating in the project reported having just completed a survey that found 75% of workers were 53 years of age or older, and would be retiring at age 60—in seven years or less.
\(^9\) Most respondents admitted that rail had been “slow to the technology game,” but what many industries experienced in the late 90s is now coming to the rail industry—the business is changing, as are demands and requirements of existing jobs.
sectors (e.g. trucking, and air) including schools and training centers. The industry also lacks professional associations that focus on communications external to the industry and provide diverse ways for industry professionals to engage in broader stakeholder debates about the industry and its relevance to local economies, and to the nation’s economic health.\textsuperscript{10}

Second, while respondents indicated that the rail industry also suffers from an image problem—a dearth of positive communication about the industry or it career opportunities to prospective talent—they also reported that this image problem is at least in part self-created and probably deserved. First, rail has been very slow to adopt new technologies—one executive stated, “The rail industry has remained largely the same for 100 years. It’s just less attractive than other industries for younger, technology-savvy talent.” Perhaps more difficult, the rail industry lifestyle does not lend itself to family life—it can mean long periods of time away from home. For some individuals, this schedule is attractive—it provides time for leisure or even for running a small business during off-days. For many workers, however, this lifestyle is not attractive—and the modern labor market offers many other opportunities for individuals seeking jobs and careers.

One executive noted, “It’s ironic, since transportation is our business, but the ease of moving around today means that people are more mobile—we don’t have ‘railroad families’ or ‘railroad communities’ like we used to. No one brings their 18-year olds in for jobs anymore—the last 18-year olds that came en masse are now in their 50s.”

Finally, rail in particular, has experienced both a significant increase in demand (especially since September 11, 2001), and several serious system or service failures that have monopolized the short-term attention of senior leaders almost to the exclusion of the industry’s longer term challenges.

**Warehousing and Intermodal Marketing/ Brokering Firms**

The business of warehousing and intermodal transportation is largely about logistics—the art and science of transporting goods all over the world in containers that move easily from one mode of transportation to another. Respondents from these firms identified a number of common trends and challenges affecting their businesses, including:

- New technologies
- Growth
- Changes in other industries on which they depend (e.g. rail)

\textsuperscript{10} One respondent lamented the position of rail in public policy compared to that of air—arguing that far more public attention, subsidy, etc. is afforded the air industry than rail, but that rail is frequently put in the position of defending its relatively small level of public support (e.g. the attempted privatization of the *Acela* train serving East Coast commuters).
First, new technologies—from radio-frequency identification (RFID) tags, to geographic information systems (GIS), to remote control devices, to increasingly automated distribution processes and facilities—are both creating new business opportunities and changing the mix of occupations and skills needed within these firms. In general, respondents from these firms identified a need for fewer, but more skilled people both in warehousing facilities and in support functions (offices positions) over time. Two firms were in the midst of major restructuring initiatives intended to lend structure to what has been a very informal approach to recruiting, managing, and evaluating employees. Respondents from these firms reported that it was a sign of both a maturing of their firms, and a necessity as they automated different aspects of the distribution chain.

Second, warehousing and intermodal firms expressed optimism about the prospects for continued growth in their industry—managing logistics in an increasingly international marketplace poses expansion opportunities for many firms. Warehousing and distribution work cannot be sent off-shore—whether American exports or imports are higher, this industry is a direct beneficiary of international trade.

Third, these firms expressed concern about rail industry consolidation—they reported the increasing difficulty they have in negotiating both space and terms for rail transport—they complained that the rail infrastructure is not keeping pace with current and anticipated growth, causing delays and higher prices for firms moving freight. The intermodal firms, in particular, expressed frustration that other parts of the industry are becoming more niche-driven and competitive, but the rail industry remains inflexible—“It needs to catch up to the 21st century,” one executive reported.

Finally, these firms expressed concern about both the image of their industry, and the degree to which it lacks transparency—“It’s hard to get into because it requires broad industry knowledge and depends primarily on word-of-mouth for recruiting and OJT for training.” While there are exceptions, such as the logistics programs\(^{11}\) in a few Illinois colleges and universities, there are few obvious sources of new talent—most respondents confessed that even their own frequently college-bound children had little idea what they did for a living.

**Motor Freight**

Respondents from the motor freight industry expressed frustration about the price of fuel more vociferously than other TWL sectors. Long-haul firms in particular, having signed contracts for the delivery of freight when fuel prices were considerably lower, repeatedly pointed to the irony of “more less-profitable

---

\(^{11}\) Chicago Public Schools is currently planning a logistics curriculum intended for use in select high schools in Fall 2004.
business than ever.” Intermodal brokers and manufacturing firms contracting for distribution services, however, wonder if increasing fuel prices simply provide a useful cover for raising prices generally.

Both long and short haul firms (and their drivers) pointed to e-commerce (business-to-business and business-to-consumer) as having had an enormous positive impact on the growth of their industry and of their businesses. In addition, because the majority of internet-driven business requires point-to-point delivery, it has spawned much more sophisticated tracking, routing and transportation management technologies that have improved the productivity of all workers and firms in the motor freight industry, and created new niche markets as firms have wrestled with new, more efficient and flexible approaches to transport and delivery.

Industry executives reported a shortage of truck drivers—in all metropolitan locations, and for all types of delivery vehicles. They pointed to two factors, in addition to the obvious increasing demand for these workers, as partial explanations for their recruiting difficulties.

First, as in other TWL sectors, the need for security has generated more and more sophisticated background screening and protocols—fewer applicants are successfully passing through these security processes. In addition, insurance firms are increasing the minimum criteria drivers must meet for their firms to retain coverage. For example, it is increasingly common for insurance firms to require drivers to be 23 years of age, rather than 18 or 21. In addition, they must have 3 years of professional driving history with no moving violations (personal or professional), and 2 years of experience in the freight industry. These requirements reduce the pool of potential applicants, forcing firms to work harder to recruit drivers—and unanticipated fuel price increases make it difficult to raise wages in an effort to attract more qualified applicants.

Finally, new federal rules governing drivers’ “hours of service” were implemented in January 2004. The industry is still struggling to manage distribution when drivers are now mandated breaks after shorter periods of time behind the wheel—particularly as more stress on the road infrastructure causes delays both due to traffic and to necessary repair work. Other changes associated with the new rules are being implemented on a rolling basis and sectors and firms begin to interpret and operationalize the new regulations.

**Transportation Services**

While few firms representing transportation services participated in the project, they did identify managing new technologies—the costs of diagnostic

---

12 Motor carriers are subject to the following Hours of Service (HOS) rules as of January 2004: 1) drivers must have 10 consecutive hours off-duty (up from 8); and 2) drivers are limited to 14 hours of consecutive on-duty hours (down from 15). For information about additional rule changes, see www.trucking.org.
equipment, tools, towing and repair equipment, and the cost of training workers to use these tools—as a key challenge in their firms. New, more sophisticated equipment has raised the minimum skill requirements for nearly every job, and made it more difficult to retain young talent—“People realize after a short time that you have to specialize—it’s not just a matter of repairing cars, but specific types of cars, and it requires a lot of learning. Once they figure that out, they either commit to a career or leave.”

Jobs and Occupations in the Transportation, Warehousing and Logistics Industry

Employers were asked to identify “the job or occupation [they had] the most trouble filling or keeping filled, or where [they had] the most severe labor shortages.” Fourteen occupations were identified, ranging from trucker driver to switch operator to electrician to sales and business development professional.

The most frequently cited occupations included:

- Skilled Craftspeople (electricians, machinists, welders, etc.)
- Truck Drivers
- Train or rail crew (switchers, assistant conductors, operating engineers, etc.)
- Sales or business development professionals

Three respondents indicated that they had no shortages—one in intermodal marketing, one in warehousing, and one in transportation services. Several others reported shortages, but indicated that the current labor market is better for them than at any time during the past ten years—“more people are out of work and seeking alternatives.”

Respondents indicated that all of the jobs they had difficulty filling are full-time and provide benefits, though pay associated with these jobs varied significantly—in some cases, for the same job with a similar firm.

- Wages reported for skilled craftspeople ranged from $14 per hour to $22 per hour (to start); with $16 per hour the most frequently reported starting wage.
- Salaries reported for truck drivers ranged from $29K per year to $112K per year. In general, long haul drivers were reportedly paid $45K and up, whereas short-haul drivers earned less—up to $42K per year.14

Although respondents were asked to identify the one job or occupation they had the most trouble filling, about half identified more than one.

13 Many short-haul drivers are contractors—for Fed-Ex, for example. Their earnings can be much higher for short-haul delivery depending upon their hours and efficiency. On the other hand, there are also increasing numbers of contract drivers who are paying exorbitant fees to brokers for everything from contracting to insurance—they are struggling to make it.
Wages and salaries reported for positions associated with the rail industry varied enormously—from $14 per hour for a switch operator to $50K per year as an engineer. Wages and salaries for conductors and assistant conductors were not provided.

Salaries reported for sales and business development positions ranged from $35K per year to $50K per year plus commission.

**Recruiting and Tenure**

Respondents were asked about their recruiting methods. They indicated that the following methods were their primary ones in recruiting for hard-to-fill occupations:

- **Referral.** Although few firms had formal employee referral programs in place, they relied heavily on existing employees to share information about openings with friends and family members.

- **Newspaper.** Most firms reported some level of success with newspaper advertising, however, the rail industry in particular indicated that neighborhood newspapers (rather than large metro papers) and union newsletters were among their preferred method of advertising job openings.

- **Internet.** Most firms reported using their own web-sites, industry-wide web-sites ([www.rra.org](http://www.rra.org), [www.jobsinlogistics.com](http://www.jobsinlogistics.com), etc.), and larger electronic job banks (e.g. [www.monster.com](http://www.monster.com)) as a key recruiting tool.

- **Colleges, trade schools, apprenticeship programs, high schools.** While few firms claimed strong relationships with specific learning institutions, most reported using them as a source of new talent.\(^{15}\)

Employee referral and the Internet were cited as the most effective recruiting methods for hard-to-fill jobs across TWL sectors.

Respondents indicated that most jobs in shortage occupations require only a high school diploma, though truck drivers and skilled crafts require licensing and or certification. Sales jobs required a high school diploma, but firms preferred a 4-year college or university degree, and indicated that the latter was becoming an industry standard.

Firms reported that tenure in all of their shortage jobs was very long—once individuals have retained employment for six months. “If people don’t leave right away, they stay forever,” stated a Human Resources Manager from the motor freight sector. All of the firms responding to the question about tenure in

---

\(^{15}\) The Great Lakes Naval Training Center, in particular, was a popular venue for recruiting across the TWL industry—these recruits’ “top-notch skills” and “work ethic” were cited as the primary reasons. Other specific schools noted included: the University of Illinois, Northwestern, Daley College, Joliet Junior College, Moraine Valley Junior College, and several out-of-state trade schools, including training institutes for the airline industry.
their firms indicated that their jobs average tenures in excess of 18 months—one reported an average tenure of 15 years.

Respondents were asked to characterize their hiring difficulties for hard-to-fill occupations. The most common responses in key occupational shortage areas included:

- **Truck Drivers.** Respondents indicated that “word had gotten out,” and job-seekers knew there were shortages of drivers. Most reported having more applications than they could manage, but great difficulty identifying applicants who could pass the background and security screens. As a result, they are testing far more applicants than they would like in order to be able to recruit a few drivers—and are frustrated by the waste of time and resources.

- **Skilled Craftspeople.** Half of all respondents who expressed difficulty filling these positions (electricians, mechanics, welders, etc.) reported “I can’t find applicants, so I hire who I can get, even though they may not have the necessary skills.” The other half reported “I hire credentialed people who should have the skills, but they don’t.”

- **Rail (all positions).** Most respondents indicated that they had too many applicants to screen properly, and had a hard time distinguishing between applicants seeking a “paycheck” in a soft labor market and those with a genuine interest in a railroad career. Typically, once individuals with genuine interest were identified, the absence of specific skills became the challenge.

Respondents were asked about specific skills sets and their importance relative to hard-to-fill positions. The skills most frequently rated of great importance were reading skills and communication skills. The skills rated least important were math skills and management skills.

Respondents also (almost universally) identified the following skills as those most likely to be missing among new recruits in hard-to-fill positions:

- **Workplace basics**—arriving at work on-time, in uniform or appropriate dress, and well-rested or appropriately prepared, and behaving in appropriate ways on the job.

- **Communication skills**—the ability to communicate with peer, supervisors, and customers in a clear and appropriate manner.

---

16 Respondents who hired less frequently and boasted more experienced workers tended to voice this complaint more than others. We suspect that it stems, in part, from comparing the skills of individuals with a credential and 20 years of experience to those with the same credential, but far less experience.

17 We defined workplace basics as “the set of rules or expectations that most employers in most industries have in common.” Generally, this included timeliness, appropriate dress, and preparedness. It specifically did not include communication or team skills about which we inquired separately. We avoided the use of the phrase “soft skills” because employers tended to use the phrase for every skill that was not reading, math or technology.
» **Computer or technology skills or aptitude.** While most employers expressed a preference for specific technology skills, their primary concern was with employees’ comfort level with technology in general. In part, this is because many sectors in the TWL industry are only now introducing technology to the reported hard-to-fill positions—it was hard for a respondent to be specific about what kinds of technology they were using in key occupations. In addition, respondents foresee changes in technology applications in the short-term and frequently thereafter—they reported a need for people who can adapt to new technologies, not only just use today’s applications.

**What would help?**

Respondents were asked (both orally and in the surveys) to identify one thing that would dramatically improve their ability to hire and attract talent to shortage occupations. Surprisingly, few answered this question on the survey, though most interviewees were thoughtful in their responses. Their suggestions fell into five categories: 1) enhancing access to workplace basics; 2) providing better information about careers in the TWL industry to prospective employees; 3) creating ways to build problem-solving and team skills among technology savvy young people; 4) image-making (and re-making) around the TWL industry; and 5) diversifying the current TWL workforce by attracting more women and promoting more people of color.

**Wanted: Workplace basics**

While most respondents explained that there was no one answer to the problem, they articulated a need for “workplace basics” bootcamps or training for job seekers. Several pointed out that the inability to understand why adhering to schedules, for example, was important, and was not limited to the low-skilled or to any particular groups—one employer lamented that recent college graduates have the *least* understanding of workplace basics, “They’ve been in a world where if they could pass the tests, they didn’t have to show up for class. They don’t get that there are business consequences to not showing up in my warehouse.” The intermodal marketers/brokers identified this issue as a concern, and two had strategies to help address it—they reported specific efforts to design jobs (and work) so that new recruits could see how all the disparate parts of the firm’s operation fit together. As employees begin to understand the different aspects of the business, they get to know more people and take more responsibility for assisting the whole enterprise.

---

18 Respondents indicated that communication skills were not the same as English skills. They were concerned less about what language was used in the workplace than about whether effective communication was occurring.
**Wanted: Better, more current, and more accessible information about job opportunities and wages in the TWL industry**

Firms in TWL sectors that offer many entry-level positions expressed frustration that so few organizations and interest groups appeared to be working on their behalf or even treating their industry fairly relative to other industries. Career counselors, high school counselors, parents, job-placement organizations were cited as intermediaries who market “either college or nearly every career but the ones we offer” to job seekers, or refer the job seekers with no other choices to our industry—and we can’t hire most of them. They were clear that the answer lies not just in marketing, but in providing information that can help job seekers make choices that meet their needs, too—information about wages, for example, in combination with information about the realities of a life on the road, on board, or in a warehouse. Because much of the industry is “invisible” to consumers and citizens, TWL firms have a great need for intermediaries communicating on their behalf.

**Wanted: Problem solvers who can use technology and work in teams**

About half of the respondents raised problem-solving as an important skill set, and lamented its absence among too many current applicants and new recruits. Applicants who are good problem-solvers, and can use technology and work in teams would command a premium in many firms represented in this project. While many expressed confusion about the absence of these skills—“I thought that’s what schools were teaching nowadays, but I guess not”—others indicated that they understood they were not recruiting the cream of the crop, but that they felt more students at all levels should have these skill sets.

**Wanted: Image-makers and educators who can reach new sources of talent**

Respondents indicated that the TWL industry as a whole suffers from two different image problems:

- The poor image of some of its most high demand sectors (rail, trucking, warehousing, etc.) and
- The absence of any kind of image associated with some of its most innovative sectors (e.g. logistics).

Identifying new ways combat poor TWL images and build positive ones—particularly among young people or career changers—was of great interest to employer respondents.
**Wanted: Women and minorities seeking advancement**

Finally, two respondents indicated a need to find ways to recruit more diverse workers. While racial diversity has been a characteristic of the industry for some time, at least among entry and mid-level employees, firms reported having had less success in promoting diverse employees to higher-level positions, or in attracting women for positions other than office work. They are seeking new strategies for increasing the diversity of their employees.

**Conclusion**

While solutions to complex workforce issues are not simple or inexpensive, many firms participating in the project provided valuable context and guidance for developing policy and program recommendations for improving the current state of affairs—for firms and workers. Most also understood that they need to be engaged in operationalizing potential solutions. For this, we thank them and look forward to developing responses to critical needs in partnership.