

EXECUTIVE SUMMARY

In the 21st century, U.S. businesses will likely face stiffer competition, both from American and international sources, than at any point in history. Regional leaders who understand this also understand the importance of identifying industries in which their region has a competitive edge, and which will lend their region greater chances of success in the new economic landscape. In light of these challenges, the purpose of this report is to help the Workforce Board of Northern Cook County ensure that its resources are aligned so that its key industries have access to the right types of workers, and that these workers have received the right education/training and therefore have the right skills to contribute to the economy.

It is well known that the U.S. is experiencing unprecedented levels of unemployment. Not as highly publicized, perhaps, is the fact that many businesses are actively looking for new talent to hire—yet they are simply unable to find it. According to a 2011 Manpower survey, 52% of U.S. employers who responded have trouble filling key positions within their organizations, a jump from 14% in 2010.¹ This startling increase is remarkable considering that as of June 2011, 13.9 million people (or 9.1% of the civilian labor force) were unemployed.²

These figures point to a growing national problem: the skills and experience of the existing labor force do not match the needs of businesses seeking to hire. A large part of the explanation for this problem is that younger generations are not trained for the right fields or that their training does not prepare them for the work they eventually will have to perform. Older workers, for any number of reasons, lack

opportunities for or cannot avail themselves of the training necessary for advancement into those difficult-to-fill positions.

Economic data available for Northern Cook County show that it is no exception to this trend. It is imperative that local businesses, educational institutions, and workforce developers collaborate to find and implement solutions. Aligning a region's resources toward the right types of industries is a multi-step process that requires inputs from multiple data sources and guidance from the region's leading thinkers.

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The workforce analysis undertaken here begins with analysis of the region's target industries. The consulting team conducts this analysis with consideration to factors such as size, past and projected growth, the comparative advantage of the industries in the region, and the local integration or clustering effects of those industries.

From there, we analyze the key occupations within those industries. This involves consideration of the number of jobs, the wages paid for those jobs, and the amount of education/training/experience required for candidates seeking to land those jobs. Feedback from local stakeholders is critical to success in finding target industries and analyzing their key occupations. For this report, the consulting team gathered information from employers, educators, and various local representatives throughout the process of completing these two stages of the career audit process.

After identifying the key occupations, we compare the job titles to the number of graduates or “completers” from local educational institutions and thus are able to determine the level of educational attention and investment that is currently being placed on preparing workers for these occupations. From these target occupations, we also are able to determine the knowledge, skills, and abilities (KSAs) that are most important to those occupations.

1 Manpower: 2011 Talent Shortage Survey, <http://manpowergroup.com/investors/releasedetail.cfm?releaseid=579117>. May 2011.

2 Bureau of Labor Statistics, “Employment Situation Summary” June 3, 2011.

Through this process, the consulting team has developed a short list of target industries, key occupations, career pathways, and educational programs that will be critical for Workforce Board of Northern Cook County in whatever initiatives that it undertakes in the future. Before delving into this information, we would like to present some potential applications that will help guide the development of these initiatives. These potential next steps are outlined in detail in Chapter 5.

APPLICATIONS

- Host an innovation session with thought leaders to prioritize top initiatives;
- Increase awareness of WIB services among businesses, economic development and local officials;
- Link workforce and economic development;
- Build a leading-edge career guidance system for North Cook County;
- Establish a P-20 Council;
- Work with educators to build career pathways to middle-skill jobs;
- Work with employers to define career pathways in a specified cluster;
- Target young adults to increase educational attainment;
- Develop a one-stop tool for recently unemployed and low-skill adults;
- Create a network to link education and workforce development;
- Create re-engagement networks for recently unemployed manufacturing workers.

TARGET INDUSTRY GROUPS

Using the process outlined above, the consulting team identified the following potential target industry groups as the most appropriate for the region. More information on these can be found in Appendices B and C.

TARGET OCCUPATIONS

The consulting team compiled a list of 95 occupations that are most critical to the function and long-term sustainability of these industries. Nearly half of these occupations are in professional and technical services (27 in professional services, 20 in technical services). Meanwhile, the three manufacturing industry groups mentioned above were collapsed into one category because key occupations such as industrial machinery mechanics and industrial production managers intersect all three of these groups. These occupations are listed in Chapter 4 within each of the occupational group profiles.

These data, coupled with occupational demand data, indicated that in general, there seems to be an adequate supply of workers needed in local industries. However, it is difficult to apply this information with certainty because it is difficult to determine how many graduates will leave the area post-graduation, and oftentimes employers have demand for workers that is chronically undersupplied and therefore does not register in employment estimates or projections. Additionally, if employment within these industries changes, due either to business expansion or retraction, these higher educational institutions should respond by either increasing or decreasing output accordingly. All of these points highlight the importance of local knowledge of employers' needs above and beyond the data presented in this report.

According to the data analyzed in this report, the consulting team did develop a short list of educational programs not offered within the Northern Cook County area but which could be added to better serve the target industries:

- Professional and Technical Services;
- Electrical & Electronic Equipment Manufacturing;
- Chemical & Plastics Manufacturing;
- Food Manufacturing;
- Healthcare; and
- Transportation, Distribution, and Logistics (TDL)

EDUCATIONAL PROGRAMS & GAP ANALYSIS

To determine the level of student interest and public investment in the key educational programs, the consulting team analyzed educational completion data from multiple higher education institutions in Northern Cook County. These data, coupled with occupational demand data, indicated that in general, there is an adequate supply of workers needed in local industries. However, if employment within these industries changes, due either to business expansion or retraction, these higher educational institutions should respond by either increasing or decreasing output accordingly.

The following is a list of educational programs not offered within the Northern Cook County area but which could be added to better serve these industries:

- Legal Administrative Assistant;
- Engineering Technology, General;
- Clinical Laboratory Science/Medical Technology/Technologist;
- Dental Assisting/Assistant;
- Biomedical Technology/Technician;
- Industrial Mechanics and Maintenance Technology;
- Manufacturing Technology/Technician;
- Biological Technician/Biotechnology Laboratory Technicians;
- Transportation Management;
- Truck and Bus Driver/Commercial Vehicle Operation;
- Airframe Mechanics and Aircraft Maintenance Technology/Technician;
- Diesel Mechanics Technology/Technician;
- Logistics and Materials Management.

MOST CRITICAL KNOWLEDGE, SKILLS, AND ABILITIES (KSAs)

Each industry group requires its own unique set of professionals—from production workers and clerks to highly specialized scientists and engineers. All of these workers possess their own unique KSA profiles. These data are outlined in Chapter 4. However, to provide a broader view of the competency needs of the region, Table 1 displays which competencies most commonly occur among all of the occupations analyzed in this report. This table is effectively a list of skills that the workforce and education systems should focus on developing in students to prepare them for the critical, high-growth jobs in the NCC region. Definitions of all KSAs contained in this list and throughout the report can be found in Appendix A.

Table 1 verifies what has been regularly emphasized by government agencies and educational researchers alike—the most integral educational needs of the 21st century are related to interpersonal skills and proficiency in Science, Technology, Engineering, and Mathematics (STEM). This list also reveals that communications skills and thinking skills will be important for workers at all levels.

Table 1: Top KSAs for All Focus Occupations*

KNOWLEDGE	SKILLS	ABILITIES
Customer and Personal Service	Reading Comprehension	Oral Comprehension
Mathematics	Active Listening	Oral Expression
Clerical	Critical Thinking	Near Vision
Education and Training	Speaking	Written Comprehension
Computers and Electronics	Active Learning	Deductive Reasoning
Administration and Management	Writing	Problem Sensitivity
Mechanical	Social Perceptiveness	Information Ordering
Engineering and Technology	Time Management	

* These KSAs are top competencies for at least four focus occupational groups each. Oral comprehension was the most common of all top competencies; it is associated with all 17 selected occupational groups. See Chapters 3 and 4 for more on KSAs.

STAKEHOLDER FEEDBACK

Regional employers and educators in Northern Cook County were in agreement with the educational and KSA needs assessments determined by the consulting team. A few of the highlights from the employer and educator input sessions that were conducted are as follows:

- Higher education is viewed as one of the region's great strengths. However, education and training providers agreed that having employers in the classroom more often would help emphasize to students the importance of soft skills, postsecondary certifications, and career pathways.
- Employers across all targeted industry sectors reported that they rely more on technology, making it vital for workers to have strong computer skills to compete in the labor market. Everything from completing a job application to operating computer-controlled machinery requires individuals to be digitally literate.
- Finding workers with soft skills such as communication and etiquette that are critical to quality customer service is a challenge for employers.
- Employers cited the importance of work experience reporting that any exposure a jobseeker gets within an industry is valuable and leads to better employees and talent retention. The emerging workforce, however, is finding it more difficult to gain on-the-job experience due to a number of factors, including a lack of summer job opportunities and a tendency for more adults to settle for jobs that they are over-qualified for or would otherwise not take in a better economic climate.

team hopes that the information contained in this report can be used as a springboard toward even better strategic alignment of the region's key resources, and even greater collaboration among the region's stakeholders.

CONCLUSION

Though the road to continued prosperity is neither straight nor simple, when regional leaders are armed with the industrial and social assets that exist in Northern Cook County, the region is in a strong position to succeed. The consulting