

SKILLS 2010



Cedar Rapids/Iowa City

Technology Corridor™ Report

Assessment of Employers' Skill and Employment Needs

Spring 2008

April 2008

We are fortunate because the Cedar Rapids/Iowa City Technology Corridor™ continues to prosper and receive national recognition for quality growth and economic success. The Skills 2010 Technology Corridor Report reflects industry's forecast for our region regarding future workforce needs and skill set demands. This comprehensive and timely study allows us to properly prepare and strategically plan for shifts in an increasingly knowledge-based economy.

The Skills 2006 report, undertaken by the Technology Corridor Committee, made five recommendations, the most innovative being for businesses to require assessments and/or certificates for hiring in the area of essential and technical skills. This led to the creation of the Skills Advantage program, a first in the nation regional employer-led skills certification. Currently, 93 Corridor-based companies use the assessment tools in their hiring processes and more than 1,500 individuals have used Skills Advantage testing, with more than 1,200 certificates awarded.

If we are going to continue shaping our region's future, we must take bold steps. This third report, Skills 2010, assumes a leadership role to determine replacement and new job growth projections by occupational categories and industry cluster sectors. This forward-looking report encompasses business needs and employee skills.

The report makes strong recommendations to continue investment in training to increase essential and technical skills, and suggests businesses build relationships with area schools to match skill requirements with curricula. Businesses are vigorously encouraged to develop internships and job shadowing experiences for high school and college students to educate our region's youth to the variety of employment opportunities here in the Technology Corridor.

We know the quality of life in the Cedar Rapids/Iowa City Technology Corridor™ is excellent, but could be even better. We must all invest in efforts to continue to improve economic opportunities in order to preserve the quality of life that acts as a magnet to attract workers to our area.

Advancing technology has changed the way we do business and it will accelerate our globalization process. If we expect the Cedar Rapids/Iowa City Technology Corridor™ to be the number one place to live, work and play in Iowa, if not the Midwest, we must be willing to critically review programming, develop even stronger partnerships, create more robust business relationships and further enhance the livability of our region.

Sincerely,



Jeff Disterhoft, co-chair
Technology Corridor Committee



Jim Tinker, co-chair
Technology Corridor Committee

Executive Summary

The Skills 2010 Study

In the past few years, we have seen considerable change in the economy in eastern Iowa, the state and the nation. As the economy continues to evolve, so do the workforce needs of area employers. For the region to be successful in economic development efforts, it is important to obtain workforce needs information from area employers. It is for this reason the Technology Corridor Committee sponsored the Skills 2010 survey.

The Technology Corridor Committee, consisting of representatives from the Iowa City Area Development Group and Priority One, along with Kirkwood Community College and other regional economic development partners, collaborated to develop the Skills 2010 study, which updates the Corridor's ongoing workforce needs. This important study provides current information about employment trends and employee training needs for continued success among Corridor employers.

The Skills 2010 report builds on the Corridor's continued efforts to identify and develop the finest workforce tools to build the greatest business success. In addition, the Skills 2010 report will reflect the successes of the recommendations outlined in the Skills 2006 report and build on the first Skills 2000 report.

Previous Research Studies

In 1998, the Skills 2000 survey was conducted by a commission of local executives with a primary focus on determining future employment and workforce skill needs. In this initial study, 33 large employers participated, predominately located on the north end of the Cedar Rapids/Iowa City Technology Corridor™. The Skills 2006 survey provided a reassessment of the original report but expanded the scope and size of the project. The most substantial differences between the Skills 2000 and Skills 2006 studies included the number of employers surveyed and the expansion of the geographic region.

Research Methods

The Skills 2010 study is modeled on the Skills 2006 study to provide the region with data to identify differences and trends regarding workforce issues. The study uses a mixed methods research design involving both quantitative and qualitative measures. In partnership with economic development partners, 12 industry sectors were identified, which represents two more than the Skills 2006 study. This decision incorporates the evolution of targeted industry sector research as well as acknowledges the growth and expansion of the region's employer base.

Employers were chosen based on industry sector, size of organization and geographic location within the Corridor, all in an attempt to provide an equal representation of organizations in the sample. Following this method, 286 employers were invited to participate in the study.

The Skills 2010 study is a two-part survey. The first part asks employers to identify their current employment levels as well as anticipated replacement and new job growth from 2008 to 2010 by Standard Occupational Classifications. Employers are also asked to indicate minimum educational levels desired for replacement and new job projections.

The second part of the survey asks employers to determine satisfaction levels and skill needs of their job applicants and incumbent workers. Questions to identify investment in training programs, training program trends, as well as work-based learning opportunities, are also included.

Of the 286 surveyed companies, 84 completed the employee projections of the survey and 148 completed the skills and training information.

Goals of the Study

1. Determine replacement and new job growth projections by occupational categories and industry cluster sectors for the next three years.
2. Identify educational levels desired.
3. Determine if any skill gaps exist.
4. Identify whether organizations are investing in training and what methods are being used.
5. Determine workforce factors impeding growth.
6. Identify utilization of internship and job shadowing programs.

Employer Workforce Needs: 2008–2010

The projections of the 84 employers who participated in this part of the survey identified 5,117 new and 11,355 replacement workers—a total of 16,472—will be needed in the next three years. Currently, the respondent employer's represent 25 percent of the region's workforce based on Iowa Workforce Development's employment statistics as of January 2008. The projection for replacement workers is defined as normal turnover and retirements.

Employee Skills Profile Needs: 2008–2010

Overall, the theme among employer respondents is related to missing skill profiles among job applicants and existing workers in the region. The highlights include:

- > Seventy-three percent indicated critical skills were missing from their applicant pools.
- > Fifty-nine percent of the respondents indicated skills were missing from their incumbent worker pool.
- > Employers identify technical and essential foundational and soft skills as lacking in both applicant pool and among their existing workers.
- > Seventy-three percent of all replacement and new jobs as a percentage of the total will require education beyond a high school diploma.
- > Of the employers surveyed, 60 percent provide work-based learning opportunities for both college and high school students, with only 16 percent offering internships for high school students.
- > Almost all of the employers surveyed provide training for their employees. Forty-eight percent indicated using online training tools.

Recommendations

1. Continue to promote and reinforce with Corridor employers the importance of foundational skills for future and incumbent employees by requiring or recommending the Skills Advantage Work Ready Certificate.
2. Direct Corridor employers to require or recommend the Skills Advantage Core+ certificate and personality tests.
3. Encourage high schools and post-secondary institutions to adapt curriculum and graduation requirements to focus on gaps in foundational skills.
4. Elevate the need to establish or maintain work-based linkages such as internships and job shadowing.
5. Promote the importance of a seamless system delivery between K-12 and regional higher education institutions.
6. Expand efforts to inform high school and college students about employment/career opportunities within the Corridor.
7. Develop a systematic approach to identify and recruit new employees to Iowa from outside the state and region.
8. Provide wage and benefit data to our existing companies on a regular basis, to aid them in their recruitment and retention work.
9. Encourage and assist area employers to create a workplace culture that embraces a diversified workforce.

Conclusion

Increased global competition will continue to affect the type of work being done in American workplaces, creating new high-skilled jobs and lessening demand for unskilled workers. The impact will continue to grow as more of the economy is involved in producing exports or competing with imports. Contributing factors to economic expansion internationally include new technologies, increased trade, multinational brands and companies, and international finance. While the Internet and other new technologies have created a more open market for promoting products and services, the same international market, open for all to explore, is also creating new workforce challenges.

All of these influences create critical dynamics for employers in our region. Responding to rapid workplace change in relationship to the number of educated and skilled workers to fill current and future workforce needs is imperative. The Skills 2010 survey results and recommendations will continue to provide the region with critical direction to meet the changing dynamics of an international economy's impact on workplace requirements.

Skills 2010—The Full Report

Study Design and Research Methods

To respond to ongoing workforce issues identified by employers in the region, the Skills 2010 study used a combination of quantitative and qualitative research questions to obtain a better understanding of critical workforce issues.

Purposeful sampling techniques were used to select small, medium and large employers from 12 industry clusters in Kirkwood Community College's seven-county service area. These sectors were chosen based on the business attraction and retention efforts of the economic development organizations, as well as other large sectors that represent significant segments of our regional economy.

The industry sectors used for the study are as follows:

- advanced manufacturing
- bioprocessing/biotechnology
- consumer products
- education
- government
- health care
- information solutions
- logistics/distribution
- other selected industries
- packaging/plastics
- printing
- trades

The survey consisted of two primary components. The first component asked employers to provide current employment figures, projections for replacement positions, including normal turnover and anticipated retirements, and new job growth. Of the 286 employers invited to participate, 84 returned the survey, providing a 29 percent return rate. The second element of the survey asked employers a series of questions regarding training trends, missing skill profiles and utilization of work-based learning programs. Independent contractors were hired to conduct phone and face-to-face interviews of the 148 employers who agreed to provide information. This was a 51 percent response rate.

Part I—Employer Workforce Needs

Table I: Summary of Workforce Needs by Industry Cluster

CLASSIFICATION	Current Employees	Pct of Current	Replacement Employees	Pct of Replacement	New Employees	Pct of New	New and Replacement	Pct New and Replacement
Advanced Manufacturing	20,117	35%	1,824	16%	1,860	36%	3,684	22%
Bioprocessing/Biotechnology	129	0%	10	0%	9	0%	19	0%
Consumer Products	459	1%	96	1%	149	3%	245	1%
Education	20,672	36%	4,310	38%	1,613	32%	5,923	36%
Government	1,177	2%	215	2%	55	1%	270	2%
Health Care	3,958	7%	1,722	15%	130	3%	1,852	11%
Information Solutions	5,891	10%	1,692	15%	558	11%	2,250	14%
Logistics/Distribution	1,391	2%	418	4%	245	5%	663	4%
Packaging/Plastics	644	1%	256	2%	127	2%	383	2%
Printing	455	1%	302	3%	78	2%	380	2%
Trades	649	1%	78	1%	200	4%	278	2%
Other	1,895	3%	432	4%	93	2%	525	3%
GRAND TOTAL	57,437	100%	11,355	100%	5,117	100%	16,472	100%

Table I summarizes anticipated job openings in each of the industry sectors through the year 2010. The table shows base employment, anticipated new jobs and anticipated replacement jobs. The total number of current employees provided by the sample was 57,437, which represents 25 percent of the labor force in the seven-county region. The growth in new jobs is projected to be 5,177, or 31 percent of the total new and replacement positions for the employers surveyed. The employers also report a total anticipated need for replacement workers at 11,355, or 69 percent of the total projected new and replacement positions. The employers were asked to define projection for replacement workers by including their normal turnover statistics combined with anticipated retirements. When new and replacement workers are aggregated, 16,472 workers will be needed over the next three years in the region.

TABLE II: Summary of Workforce Needs by Occupational Categories

CLASSIFICATION	Current Employees	Pct of Current	Replacement Employees	Pct of Replacement	New Employees	Pct of New	New and Replacement	Pct New and Replacement
Clerical	9,255	16%	1,908	17%	647	13%	2,555	16%
Construction	1,354	2%	289	3%	221	4%	510	3%
Exec/Admin/Mgmt	4,250	7%	622	5%	325	6%	947	6%
Labor	717	1%	177	2%	43	1%	220	1%
Marketing/Sales	1,459	3%	375	3%	210	4%	585	4%
Precision	1,339	2%	252	2%	154	3%	406	2%
Production	8,667	15%	862	8%	789	15%	1,651	10%
Professional Specialties	24,523	43%	5,136	45%	2,382	47%	7,518	46%
Service	5,873	10%	1,734	15%	346	7%	2,080	13%
Grand Total	57,437	100%	11,355	100%	5,117	100%	16,472	100%

Table II represents a summary of workforce needs by Occupational Categories. Employers were asked to group their employee information by occupational classifications derived by using 23 major Standard Occupational Classifications developed by the United States Department of Labor Bureau of Labor Statistics (See Appendix II). The list was delimited to only those occupational classifications that are related to the industry sectors in the region.

Of the occupational classifications provided to the employers, the largest category of need identified is Professional

Specialties. The number of replacement jobs is 5,136 (45 percent) and the number of new jobs is 2,382 (47 percent) for a total of 7,518 (46 percent). The positions found in this category represent engineers, architects, educators, health care practitioners, financial specialists and legal positions. The second highest category reported is Clerical, which demonstrated a need of 1,908 (17 percent) replacement positions and 647 (13 percent) new jobs projected. The third highest category was Services, which reported a need of 1,734 (15 percent) replacement positions and 346 (7 percent) new positions for a total of 2,080 (13 percent). It should also be noted that production occupations showed the second highest level of new job growth.

Table III: Summary of Workforce Needs by Educational Level

EDUCATION LEVEL	Current Employees	Pct of Current	Replacement Employees	Pct of Replacement	New Employees	Pct of New	New and Replacement	Pct New and Replacement
High School	18,045	32%	3,065	27%	1,295	26%	4,359	27%
Associate's Degree	10,396	18%	2,655	24%	912	18%	3,567	22%
Bachelor's Degree	23,540	42%	4,336	39%	2,359	47%	6,696	41%
Masters Degree	4,504	8%	1,139	10%	489	10%	1,628	10%
Doctorate Degree	26	0%	4	0%	3	0%	7	0%
Grand Total	56,511	100%	11,199	100%	5,058	100%	16,257	100%

Seventy-three percent of all replacement and new jobs as a percentage of the total will require education beyond a high school diploma. In addition, 51 percent will require a four-year or graduate degree. An interesting finding to note is in the category of new jobs: 57 percent require a four-year degree or greater, and 75 percent of newly created jobs will require education beyond high school. It is clear from the survey responses that education is a high priority among area employers whether they are replacing or expanding positions.

Part II—Skill Profile Needs

EXISTING EMPLOYEE TRAINING PROGRAMS

Question One—How are your current employee training programs being met?

	Count	Percent
In-house	71	48%
External	11	7%
In-house & external	48	33%
Other	16	11%
No training provided	2	1%
Total	148	100%

Many of the respondents indicate they do provide training for their employees. A large percentage of employers offer in-house training with the second highest category representing a combination of in-house and external training programs. Only two of the employers indicate they do not provide training.

Question Two— Does your company use any online training programs?

	Count	Percent
Yes	71	48%
No	74	50%
Unknown	3	2%
Total	148	100%

The response to this question indicates an almost equal split between employers who use online training programs and those who do not.

Question Three— If you use online training programs, which ones?

	Count	Percent
Off-the-shelf	10	14%
Customized	31	44%
Combination off-the-shelf & customized	18	25%
Other	12	17%
Total	71	100%

Of the 71 employers who indicated they do provide online training programs, 44 percent use customized products. The next highest category use a combination of customized and off-the shelf products. The lowest category was off-the-shelf programs.

Question Four—What are the barriers to using online training?

	Count	Percent
Technology	26	35%
Cost	9	12%
No personnel to oversee	3	4%
Other	28	38%
Unknown	8	11%
Total	74	100%

In general, employers indicate barriers to be other issues outside of technology or cost, although technology continues to represent a barrier to area employers.

Question Five—What areas do you use online training?

	Count	Percent
Technical training	24	39%
Soft skills training	9	14%
Technical & soft skills	21	34%
Other	8	13%
Total	62	100%

Of the employers who provided responses to the types of online training programs, the largest response category was technical training followed by a combination of technical and soft skills training.

Question Six—If you do not use online training, what are the barriers?

	Count	Percent
Technology	5	10%
Cost	3	6%
No personnel to oversee	2	4%
Other	28	56%
None	12	24%
Total	50	100%

Overall, just under half of the employers who responded indicate they use online training programs. The largest categories of online training programs include technical and a combination of technical and soft skills. Of those who use online training programs, the responses are varied related to concerns and barriers of this type of training. Of those employers who reported they do not use online training programs, the responses are varied as well.

Question Seven—What skills are missing from your pool of applicants?

Of the responses received, 73 percent indicated critical skills were missing from their applicant pools, with 20 percent indicating no concerns and 7 percent not providing an answer. Of those indicating they were missing critical skills, 53 percent of the comments focused on essential foundational and soft skills and 47 percent were in the technical skills area.

Technical: computer applications, industry experience and math

Essential

Foundational: GED/HS diploma/appropriate education/training programs, grammar/spelling and problem solving

Soft: communication, customer service and work ethic

Question Eight—What skills are missing from your current workforce?

Overall, 59 percent of the respondents indicated skills were missing from their incumbent worker pool, with another 36 percent of the respondents indicating no concerns and 5 percent indicating they were unable to answer the question. Of those who did list concerns, the list was equally split regarding skills lacking in technical and essentials areas. The largest categories shared by respondents are listed as follows:

Technical: computer applications, technology and skills related to specific industry

Essential

Foundational: conflict resolution and writing

Soft: communication, work ethic and customer service

Question Nine—What are the top three workforce factors impeding your ability to grow or expand in this region?

1. Lack of skilled or qualified candidates.
2. Small labor pool and low unemployment in the region.
3. Wage and benefits are a concern as it relates to the cost of doing business.

In the study, two questions were asked regarding over-arching workforce issues and business growth in the region. Of the three most important factors identified by area employers, two are related to the importance of an available, productive and educated workforce. The last factor identified is one that is indicative of the economic climate employers are currently competing in on a regional, state, national and international level.

Question Ten—Are you currently utilizing internships?

	Count	Percent
Yes	86	60%
No	57	40%
Total	143	100%

Question Eleven—Will you be using college or high school interns and how many?

	Count	Percent
College	58	84%
High School	11	16%
Total	69	100%

Overall, 60 percent of employers indicated offering work-based learning programs as a part of their workforce strategies. Only 16 percent of respondents offer opportunities for high school students. Most offer internships only for college students.

Question Twelve—Are there any other comments you would like to share regarding workforce needs in this region?

The final question allowed participants to share more open-ended comments regarding workforce needs in the region. Many of the same issues which surfaced regarding workforce issues impeding growth also surfaced in this question, with the exception of the role of Kirkwood Community College as a community resource for employers and workers alike.

Overall, employers are concerned about:

1. A skilled and qualified candidate pool to hire from.
2. A tight labor market and low unemployment in the region.

Skills 2010 Human Resources Advisory Panel

The Iowa City Area Development Group and Priority One convene a group of human resource professionals in the region regularly. This group provided direction to the project directors to shape the research methods and surveys.

Skills 2010 Research Team and Project Directors

Dee Baird, Kirkwood Community College
Kari Lammer, Priority One
Joe Raso, Iowa City Area Development Group
Mark Seckman, Priority One
Jodie Stoessel, Kirkwood Community College
DaLayne Williamson, Iowa City Area Development Group

A Special Note of Thanks

RuffaloCODY was hired to conduct the employer phone interviews as they did in the Skills 2006 study. In partnership with Kirkwood Community College, RuffaloCODY provides these services at a significantly reduced price. It is through the generosity of this partnership that the study is able to be done on a regular basis. On behalf of the project team, we wish to thank the leadership team at RuffaloCODY and their employees for their continued support.

Skills 2010 Participating Companies and Organizations

2nd Story Software, Inc	Cedar Valley Farms
ACT	Center Point-Urbana Community School District
Actera Group	Centro, Inc
ADM	City of Cedar Rapids
Advanced Millwork	City of Coralville
AEGON USA	City of Hiawatha
American Color Graphics	City of Iowa City
American Profol	City of Marion
Applied Tech Products	City of Monticello
Arcadian Engineering Solutions	CIVCO
ATP	Clear Creek Amana Community School District
AW Welt Ambrisco	Clifton Gunderson
Barnes Manufacturing	Cole's Quality Foods
Benco Manufacturing	College Community School District
Benton County Board of Supervisors	Communications Data Service, Inc
Business Radio Sales & Service, Inc	CompleWare
Cargill	Cooper Tire
CarPac Publishing Company	Corrflex Display & Packaging
Cedar County Board of Supervisors	Cottage Grove
Cedar Graphics	Crescent Electric Supply Company
Cedar Manor	DC Taylor
Cedar Rapids Community School District	Destinations Unlimited/Carlson Wagonlit
Cedarapids, Inc	DKM Manufacturing
Cedar River Paper, a Weyerhaeuser Business	

Energy Manufacturing, Inc
Epley Marketing Services, Inc
F&M Bank
Freedom Security Bank
Five Rivers Carpenters
Foundation 2
Four Oaks
Frank N Magid Associates, Inc
Frontier Natural Products
Garling Construction
Gazette Communications, Inc
GE Capital
GEICO
Genecor, A Danisco Division
Geonetric, LLC
Georgia Pacific
Goodwill Industries
Graham Packaging
GSTC Logistics
Hawkeye Foodservice Distribution
Highway Equipment Company
Higley Mansion Care Center
HJ Heinz
Holden's Foundation Seed
Holmes Murphy & Associates, Inc
Horizons Family Services
Hospers & Brothers Printers
Hunter Specialties, Inc
IBEW Local Union #405
Innovative Software Engineering
Integrated DNA Technologies
Intermec Technologies
Iowa City Community School District
Iowa City Press Citizen
Iowa City Telecommunications Corporation
Iowa Glass
Iowa Renewable Energy
Iowa State Bank & Trust
JM Swank
Jones Regional Medical Center
J-TEC Associates, Inc.
Julin Printing Company
Keystone Assisted Living
Kirkwood Community College
Klein Tools

KZIA
Linn Area Credit Union
Linn County REC
Linn County Board of Supervisors
Linn-Mar Community Schools
LL Pelling
LMS North America (formerly CADSI)
Mercer Administration
Mercy Iowa City
Mercy Medical Center
Millhiser-Smith Agency, Inc
Millstream Brewing Company
MMS Consultants
Modine Manufacturing
Network Microdesign Corporation
Nordstrom Direct
Northwestern Mutual
Oaknoll Retirement Residence
Oral-B
ORBIS
Patient Education Institute, Inc
Physicians Clinic of Iowa
Pickwick
Plastic Products Company, Inc
Plumbers & Pipefitters Local 125
PMX Industries, Inc
Point Builders
Principal Financial
Quaker Oats
RM Boggs
Roberts Dairy Company
Rockwell Collins
Rohrback Associates
RR Donnelley
RuffaloCODY, LLC
Ryan Companies
Saxton
Schenker Logistics
Schneider Electric
Shive-Hattery
South Slope Cooperative
St. Luke's Hospital
Sunopta
Systems Unlimited, Inc
Tanager Place

The University of Iowa
The Weitz Company
Toyota Financial Services
True North Companies
Twin City Optical
United Fire Group
United Natural Foods (Blooming Prairie)
Universal Engineering
University of Iowa Hospitals and Clinics
US Corrugated
Vector Corporation
Veterans Medical Center

Viraquest
Virginia Gay Hospital
Wabash Transformer, Inc
Washington Community School District
West Music
West Ridge Care Center
Whirlpool Corporation, Amana Division
Wolfe Eye Clinic
Worley Warehousing
Xethanol BioFuels, LLC
Yellow Book
Yeoman & Company

Appendix I: Employment Data Summary Table

	Current Employees	Pct of Current	Replacement Employees	Pct of Replacement	New Employees	Pct of New	New and Replacement	Pct New and Replacement
Clerical								
Advanced Manufacturing	1,063	11%	110	6%	104	16%	214	8%
Bioprocessing/Biotechnology	7	0%	1	0%	1	0%	2	0%
Consumer Products	40	0%	10	1%	5	1%	15	1%
Education	5,031	54%	902	47%	325	50%	1,227	48%
Government	206	2%	47	2%	8	1%	55	2%
Health Care	613	7%	190	10%	17	3%	207	8%
Information Solutions	1,941	21%	546	29%	135	21%	681	27%
Logistics/Distribution	143	2%	31	2%	13	2%	44	2%
Packaging/Plastics	21	0%	4	0%	2	0%	6	0%
Printing	120	1%	57	3%	28	4%	85	3%
Trades	3	0%	1	0%	0	0%	1	0%
Other	67	1%	9	0%	9	1%	18	1%
Total	9,255	100%	1,908	100%	647	100%	2,555	100%

Construction

Advanced Manufacturing	17	1%	6	2%	3	1%	9	2%
Bioprocessing/Biotechnology	0	0%	0	0%	0	0%	0	0%
Consumer Products	0	0%	0	0%	0	0%	0	0%
Education	403	30%	117	40%	0	0%	117	23%
Government	66	5%	17	6%	1	0%	18	4%
Health Care	73	5%	31	11%	2	1%	33	6%
Information Solutions	0	0%	0	0%	0	0%	0	0%
Logistics/Distribution	43	3%	26	9%	10	5%	36	7%
Packaging/Plastics	0	0%	0	0%	0	0%	0	0%
Printing	0	0%	0	0%	0	0%	0	0%
Trades	635	47%	75	26%	200	90%	275	54%
Other	117	9%	17	6%	5	2%	22	4%
Total	1,354	100%	289	100%	221	100%	510	100%

Exec/Admin/Mngmt

Advanced Manufacturing	1,736	41%	117	19%	110	34%	227	24%
Bioprocessing/Biotechnology	21	0%	3	0%	0	0%	3	0%
Consumer Products	58	1%	13	2%	8	2%	21	2%
Education	976	23%	139	22%	50	15%	189	20%
Government	76	2%	29	5%	3	1%	32	3%
Health Care	209	5%	43	7%	13	4%	56	6%
Information Solutions	868	20%	227	36%	84	26%	311	33%
Logistics/Distribution	128	3%	19	3%	20	6%	39	4%
Packaging/Plastics	45	1%	0	0%	1	0%	1	0%
Printing	43	1%	19	3%	29	9%	48	5%
Trades	4	0%	1	0%	0	0%	1	0%
Other	86	2%	12	2%	7	2%	19	2%
Total	4,250	100%	622	100%	325	100%	947	100%

	Current Employees	Pct of Current	Replacement Employees	Pct of Replacement	New Employees	Pct of New	New and Replacement	Pct New and Replacement
Labor								
Advanced Manufacturing	32	4%	3	2%	4	9%	7	3%
Bioprocessing/Biotechnology	0	0%	0	0%	0	0%	0	0%
Consumer Products	91	13%	4	2%	1	2%	5	2%
Education	201	28%	8	5%	7	16%	15	7%
Government	91	13%	4	2%	8	19%	12	5%
Health Care	49	7%	21	12%	2	5%	23	10%
Information Solutions	1	0%	0	0%	0	0%	0	0%
Logistics/Distribution	17	2%	3	2%	1	2%	4	2%
Packaging/Plastics	34	5%	13	7%	9	21%	22	10%
Printing	144	20%	114	64%	8	19%	122	55%
Trades	0	0%	0	0%	0	0%	0	0%
Other	57	8%	7	4%	3	7%	10	5%
Total	717	100%	177	100%	43	100%	220	100%

Marketing/Sales

Advanced Manufacturing	627	43%	103	27%	100	48%	203	35%
Bioprocessing/Biotechnology	0	0%	0	0%	1	0%	1	0%
Consumer Products	31	2%	5	1%	6	3%	11	2%
Education	21	1%	2	1%	2	1%	4	1%
Government	0	0%	0	0%	0	0%	0	0%
Health Care	15	1%	6	2%	3	1%	9	2%
Information Solutions	281	19%	83	22%	20	10%	103	18%
Logistics/Distribution	469	32%	169	45%	74	35%	243	42%
Packaging/Plastics	4	0%	0	0%	0	0%	0	0%
Printing	2	0%	0	0%	1	0%	1	0%
Trades	0	0%	0	0%	0	0%	0	0%
Other	9	1%	7	2%	3	1%	10	2%
Total	1,459	100%	375	100%	210	100%	585	100%

Precision

Advanced Manufacturing	249	19%	40	16%	11	7%	51	13%
Bioprocessing/Biotechnology	16	1%	4	2%	0	0%	4	1%
Consumer Products	14	1%	2	1%	4	3%	6	1%
Education	416	31%	54	21%	54	35%	108	27%
Government	57	4%	11	4%	2	1%	13	3%
Health Care	32	2%	11	4%	1	1%	12	3%
Information Solutions	46	3%	5	2%	1	1%	6	1%
Logistics/Distribution	409	31%	101	40%	66	43%	167	41%
Packaging/Plastics	65	5%	19	8%	3	2%	22	5%
Printing	23	2%	5	2%	10	6%	15	4%
Trades	0	0%	0	0%	0	0%	0	0%
Other	12	1%	0	0%	2	1%	2	0%
Total	1,339	100%	252	100%	154	100%	406	100%

	Current Employees	Pct of Current	Replacement Employees	Pct of Replacement	New Employees	Pct of New	New and Replacement	Pct New and Replacement
Production								
Advanced Manufacturing	7,590	88%	396	46%	520	66%	916	55%
Bioprocessing/Biotechnology	62	1%	2	0%	4	1%	6	0%
Consumer Products	180	2%	50	6%	116	15%	166	10%
Education	5	0%	3	0%	2	0%	5	0%
Government	19	0%	5	1%	0	0%	5	0%
Health Care	0	0%	0	0%	0	0%	0	0%
Information Solutions	118	1%	41	5%	0	0%	41	2%
Logistics/Distribution	96	1%	39	5%	35	4%	74	4%
Packaging/Plastics	473	5%	219	25%	110	14%	329	20%
Printing	121	1%	107	12%	2	0%	109	7%
Trades	0	0%	0	0%	0	0%	0	0%
Other	3	0%	0	0%	0	0%	0	0%
Total	8,667	100%	862	100%	789	100%	1,651	100%

Professional Specialties

Advanced Manufacturing	8,800	36%	1,048	20%	1,006	42%	2,054	27%
Bioprocessing/Biotechnology	23	0%	0	0%	2	0%	2	0%
Consumer Products	27	0%	6	0%	6	0%	12	0%
Education	10,326	42%	2,329	45%	990	42%	3,319	44%
Government	204	1%	28	1%	5	0%	33	0%
Health Care	2,254	9%	1,076	21%	86	4%	1,162	15%
Information Solutions	2,457	10%	572	11%	245	10%	817	11%
Logistics/Distribution	69	0%	23	0%	22	1%	45	1%
Packaging/Plastics	0	0%	0	0%	2	0%	2	0%
Printing	2	0%	0	0%	0	0%	0	0%
Trades	7	0%	1	0%	0	0%	1	0%
Other	354	1%	53	1%	18	1%	71	1%
Total	24,523	100%	5,136	100%	2,382	100%	7,518	100%

Service

Advanced Manufacturing	3	0%	1	0%	2	1%	3	0%
Bioprocessing/Biotechnology	0	0%	0	0%	1	0%	1	0%
Consumer Products	18	0%	6	0%	3	1%	9	0%
Education	3,293	56%	756	44%	183	53%	939	45%
Government	458	8%	74	4%	28	8%	102	5%
Health Care	713	12%	344	20%	6	2%	350	17%
Information Solutions	179	3%	218	13%	73	21%	291	14%
Logistics/Distribution	17	0%	7	0%	4	1%	11	1%
Packaging/Plastics	2	0%	1	0%	0	0%	1	0%
Printing	0	0%	0	0%	0	0%	0	0%
Trades	0	0%	0	0%	0	0%	0	0%
Other	1,190	20%	327	19%	46	13%	373	18%
Total	5,873	100%	1,734	100%	346	100%	2,080	100%

Appendix II: Standard Occupational Classifications

SKILLS 2010 STANDARD OCCUPATIONAL CLASSIFICATIONS

Executive, Administrative and Managerial Occupations

Executives

Advertising, Marketing, Public Relations and Sales Managers

Operations Specialties Managers—Administrative, CIS, Financial, HR Purchasing

Other Management Occupations

Professional Specialty Occupations

Business Operations Specialists

Financial Specialists

Computer and Mathematical

Architecture and Engineering

Life, Physical and Social Science

Community and Social Services

Legal

Education, Training and Library

Primary, Secondary and Other Education Teachers

Arts, Design, Entertainment, Sports and Media

Health Care Practitioners, Technologists and Technicians

Service Occupations

Health Care Support

Protective Service

Food Preparation and Serving

Building and Grounds Cleaning and Maintenance

Personal Care and Service—Entertainment, Transportation and Tourism, Child Care

Marketing and Sales Occupations

Supervisors, Sales Workers

Retail Sales Workers

Sales Representatives, Services

Sales Representatives, Wholesale and Manufacturing

Other Sales and Related Workers

Administrative Support and Clerical Occupations

Supervisors, Office and Administrative Support Workers

Communications and Equipment Operators

Financial Clerks

Information and Record Clerks:

Customer Service Representatives

Receptionists

Material Recording, Scheduling, Dispatching and Distributing Workers

Secretaries and Administrative Assistants
Other Office and Administrative Support Workers

Precision Production, Craft and Repair Occupations

Installations, Maintenance and Repair Supervisors and Workers
Electrical and Electronic Equipment Mechanics, Installers and Repairers
Vehicle and Mobile Equipment Mechanics, Installers and Repairers
Other Installers and Repairers:
Control and Valve
Industrial Machinery
Line
Precision Instrument and Equipment
Miscellaneous

Production Occupations

Supervisors, Production Workers
Assemblers and Fabricators
Food Processing Workers
Metal Workers and Plastic Workers
Printing Workers
Textile, Apparel and Furnishings Workers
Woodworkers
Plant and System Operators

Operators, Fabricators and Laborers Occupations

Transportation and Material Moving Occupations
Supervisors, Transportation and Material Moving Workers

Construction and Extraction Occupations

Construction and Extraction Supervisors
Brickmasons, Blockmasons and Stonemasons
Carpenters
Carpet, Floor and Tile Installers and Finishers
Cement Masons, Concrete Finishers and Terrazzo Workers
Construction Laborers
Construction Equipment Operators
Drywall Installers, Ceiling Tile Installers and Tapers
Electricians
Extraction Workers
Glaziers
Inspectors
Insulation Workers
Painters and Paperhangers
Pipelayers, Plumbers, Pipefitters and Steamfitters
Roofers
Sheet Metal Workers

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TECHNOLOGY CORRIDOR™
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Tom Aller
President
Interstate Power & Light Co.,
an Alliant Energy Co.

Steve Caves
Regional President
U.S. Bank NA

Jeffrey Disterhoft
President/CEO
University of Iowa Community Credit Union

Scott Fisher
Senior Vice President
Mercer Administration

Kelly Hayworth
City Administrator
City of Coralville

Mark Long
President
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Chuck Peters
President/CEO
Gazette Communications

Ronald R. Reed
President/CEO
Mercy Iowa City

Kyle Skogman
President
Skogman Homes

Jim Tinker
President Emeritus
Mercycare Service Corp.

Study Conducted by:

Kirkwood
COMMUNITY COLLEGE



Iowa City Area
Development
Group

