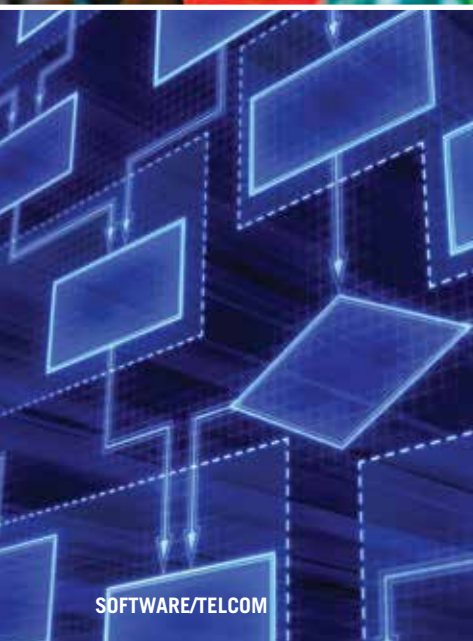




ADVANCED MANUFACTURING

Rochester Area Skill Needs Assessment and Business Climate Survey

September, 2013



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OPTICS/PHOTONICS/IMAGING



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CGR Rochester Business Journal RBJ

In partnership with
Center for
Governmental Research
and the
Rochester Business Journal

Rochester Area Skill Needs Assessment and Business Climate Survey

September, 2013

PURPOSE

The mission of the Monroe Community College (MCC) division of Economic Development and Innovative Workforce Services (EDIWS) is to:

- actively create and promote a robust applied-STEM, career and technical education, and middle-skills career pathway system;
- support investment in curricula and equipment for academic, career and technical education, and industry targeted programming;
- proactively address the shortage in educational pipeline (future workforce) and the skills gaps in the existing workforce; and to
- outreach to Rochester business and industry in an aggressive and pervasive way.

In support of this mission, the division for Economic Development and Innovative Workforce Services has spent the last year shifting its operational framework to a business to business (more commonly referred to as B2B) model. As part of that model, EDIWS has established a communication “channel” that can be characterized as both proactive and systemic in pursuing relationships with appropriate contacts within industry. This channel, referred to as the MCC Business and Industry Database, currently includes approximately 2,400 area businesses, and is made up of appropriate and qualified contacts at each targeted organization that have “opted-in” to receive select communications from the college including: grant participation; participating in credit and non-credit industry training opportunities; serving on advisory boards and focus groups; involvement in student work cooperatives; and staying informed of relevant industry career and technical programs available at the college from which to recruit their future workforce. The MCC Business and Industry Database opt-in list was used for the *Rochester Area Skill Needs Assessment and Business Climate Survey*.

The *Rochester Area Skill Needs Assessment and Business Climate Survey*, represents the first EDIWS initiative aimed at generating area labor market information. The data collected will inform training programs, like the new Accelerated Precision Tooling Certificate Program designed to double local output of entry level machinists, to address local worker pipeline deficits, and help put displaced workers back to work.

Respondents to the survey totaled 338 across the industry and local employment size spectrum. These firms represent about 86,000 workers. The questions asked covered the workforce skills needs and general questions about the business climate.

The *Rochester Area Skill Needs Assessment and Business Climate Survey* was conducted under the leadership of Monroe Community College’s division of Economic Development and Innovative Workforce Services, and in partnership with the Center for Governmental Research and the Rochester Business Journal.

MCC Accelerated Precision Tooling Certificate Program

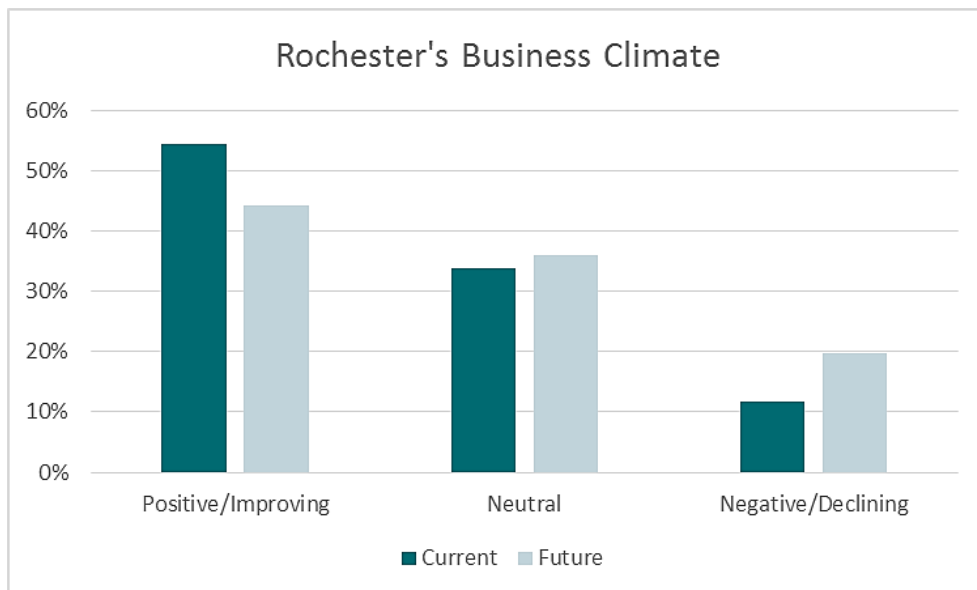
This strategic MCC initiative was developed in response to a skills shortage in the Advanced Manufacturing industry in the Finger Lakes Region. The certificate program is designed to prepare students for employment in the advanced manufacturing industry, in a shorter period of time.

The Accelerated Precision Tooling Certificate Program condenses the traditional one-year, 32-credit certificate program into 22-weeks. This is accomplished by increasing the number of hours per week that the students attend class. The program is conducted at the MCC Applied Technologies Center, MCC’s state-of-the-art facility for technical education and industry-based training, and taught by MCC faculty members.

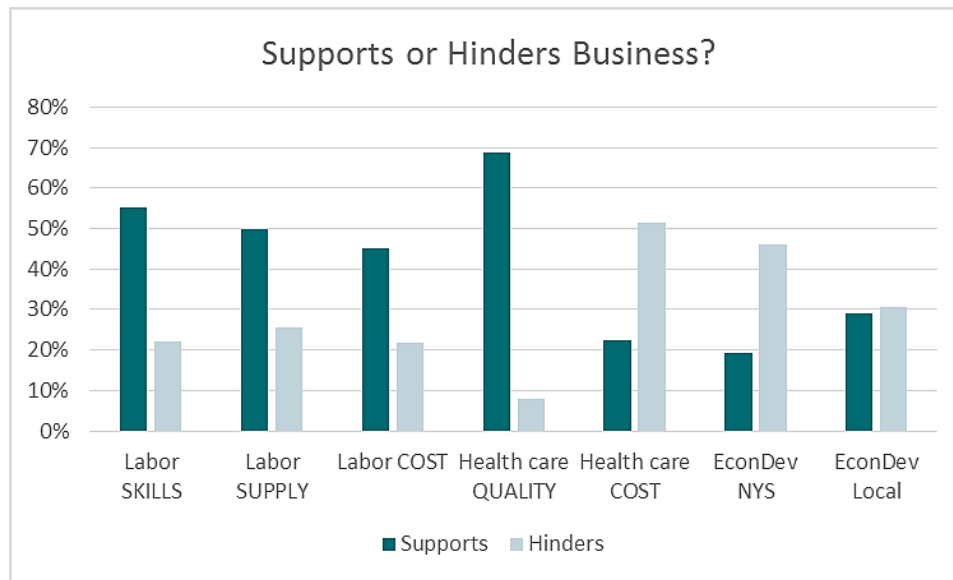
The accelerated program directly addresses employer needs within the advanced manufacturing industry sector in the Greater Rochester Area and Finger Lakes Region, by increasing the number of potential skilled graduates from 35 to 65 per year.

Business Climate

On balance, respondents were positive about the business climate in Rochester, although they appear concerned about the future.

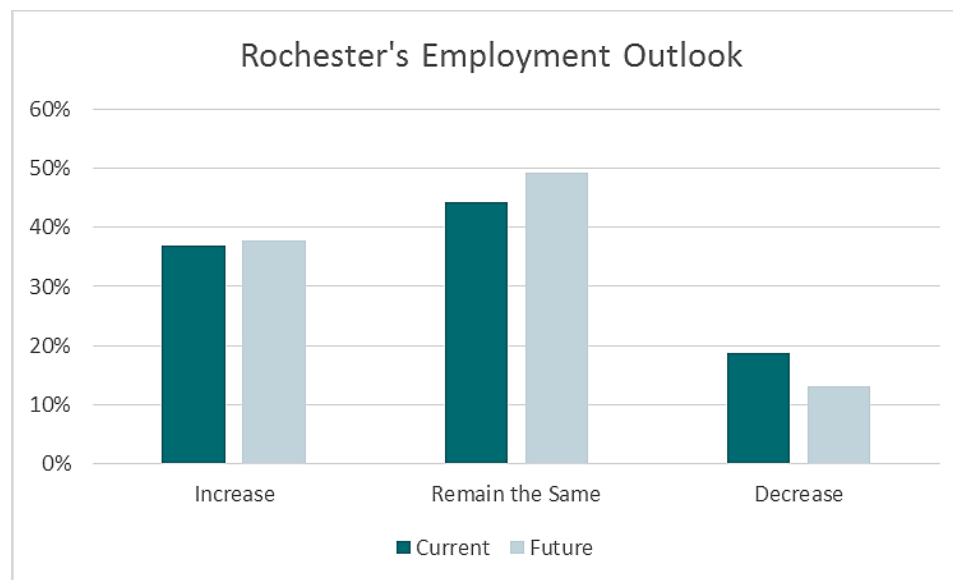


Elements of the local business climate receive mixed reviews.



As illustrated in the chart above, health care quality and health care cost receive opposing opinions—quality of health care supports but the cost hinders.

The employment outlook tips slightly in favor of expansion.



Persistently Unfilled Positions

Workforce and employment specialists often point to a “skills mismatch” when explaining the persistence of unemployment in the face of business concerns about scarce talent. Some questions in this survey were intended to assign a dimension to the problem of unfilled positions and to begin to characterize the missing skills.

A simplistic extrapolation from survey findings suggests that the number of unfilled positions is approximately 5% of the workforce region wide, roughly 23,000. As expected, a majority of these unfilled positions would be regarded as “middle skill;” positions that require some postsecondary education and training, but do not require a four year college degree.

The number of persistently unfilled positions as a share of the total varied consistently by firm size, however, with larger firms reporting a lower share of unfilled positions. See the report for a more extensive discussion of this issue. The next administration of this survey (planned for early October, 2013) will include questions intended to illuminate this important issue.

Policy Implications

Access to training is critical if the Finger Lakes economy is going to facilitate the re-entry of displaced workers and support business’ need to maintain a competitive workforce. Monroe Community College and its partner institutions in the Finger Lakes, Genesee Community College and Finger Lakes Community College, are essential economic development partners.

Acknowledgements

This survey was sponsored by Monroe Community College’s Economic Development and Innovative Workforce Services (EDIWS) division, under the leadership of the division vice president Todd Oldham. Members of the MCC staff and faculty contributed to this project. Special acknowledgement goes to Angel Andreu, Director of Institutional Research, and Kristin Sine-Kinz, Marketing Manager.

Project Director, Kent Gardner. Ph.D., Chief Economist and Research Officer for the Center for Governmental Research. Michael Silva, who supported Dr. Gardner with survey development, administration and analysis.

Paul Ericson, Editor and Vice President for the Rochester Business Journal, offered valuable advice on survey design and administration and facilitated access to RBJ’s survey pool.

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INTRODUCTION

The Middle-Skills Gap

There has been much written about what is termed the “middle-skills gap.” Although definitions vary, “middle-skills” are thought of as positions requiring some postsecondary education and training, but do not require a four year college degree.

A recent Harvard Business Review article¹ found nearly half of new job openings from 2010 through 2020 will be middle-skills positions in fields such as computer technology, nursing, and high-skill manufacturing. However, New York’s Forgotten Middle-Skill Jobs² report cautions sole dependence on the next generation to fill gaps, stating the following: “The fact is that nearly two-thirds of the people who will be in New York’s workforce in the year 2025 were already working adults in 2010—long past the traditional high school-to-college pipeline.”

Finger Lakes’ Middle-Skills Workers³

Economic Modeling Specialists International (hereafter EMSI) employs state and federal collection and reporting of jobs by industry together with a “mapping” of occupation to industry to estimate total jobs by occupation. These jobs are further classified according to the level of training required—from brief, on-the-job training to graduate studies. We have mapped the level of training into low, middle and high-skill according to the following:

Table 1: Level of training related to skill level

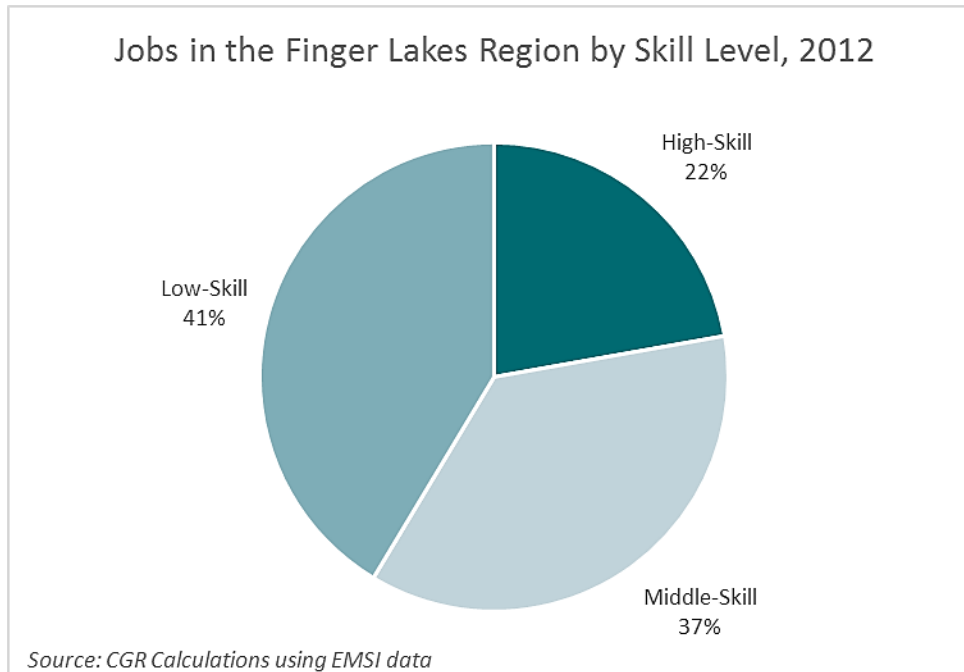
Level of Training	Skill Level
Short-term on-the-job training	Low-Skill
Work experience in a related occupation	Middle-Skills
Moderate-term on-the-job training	Middle-Skills
Postsecondary non-degree award	Middle-Skills
Associate's degree	Middle-Skills
Long-term on-the-job training	Middle-Skills
Bachelor's degree	High-Skills
Bachelor's or higher degree, plus work experience	High-Skills
Master's degree	High-Skills
First professional degree	High-Skills
Doctoral degree	High-Skills

¹ Who Can Fix the "Middle-Skills" Gap? by Thomas Kochan, David Finegold, and Paul Osterman. Harvard Business Review December 2012

² New York’s Forgotten Middle-Skill Jobs by National Skills Coalition, Washington, DC March 2011

³ Monroe Community College is a significant participant in the Finger Lakes Regional Economic Development Council, figures reported here are for the nine county Finger Lakes region: Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates counties.

The figure below portrays the share of jobs in the Finger Lakes by “low,” “middle” and “high” skill.



Over a third of the jobs in the Finger Lakes area are middle-skills jobs.

Table 2: Jobs in the Finger Lakes area by skill level, select years

	Number of Jobs (1000s)			Change in Jobs	
	2002	2012	2022	2001-2012	2012-2022
High-Skills	128	130	142	2%	9%
Middle-Skills	225	214	227	-5%	6%
Low-Skills	238	243	261	2%	7%

Source: CGR Calculations using EMSI data

EMSI’s occupational forecast over the next ten years indicates middle-skills jobs shrinking as a share of the total. EMSI does not forecast a rise in total employment, including the total number of middle-skills jobs.

Based on EMSI’s wage data, a middle-skills job pays on average \$43,000 a year. This is 167% of what an average low-skill job would pay and 58% of the average high-skill job. Middle-skills workers earn between \$14,000 and \$124,000 a year.

METHODOLOGY

For this survey, Monroe Community College employed the MCC Business and Industry opt-in database which was developed as part of the ongoing Business & Industry Communication Project. The survey was delivered to 2,348 business contacts, and the total distribution by REDC industry sectors is as follows:

Advanced Manufacturing	34%
Agriculture/Food	4%
Business Software/Telecom	2%
Healthcare/Life Sciences	12%
Optics, Photonics, Imaging	4%
Tourism	26%
Unknown	18%

The RBJ list was drawn from its database of print edition subscribers and others who have registered to receive the RBJ Daily Report or other e-newsletters. The database is dynamic, with some people joining or opting out daily. The survey list was filtered to exclude names on the MCC list.

Data Collection

Survey questions fell into the topics of business climate, skill needs, and training. Seventeen questions were asked in total. MCC collected the data via an online survey instrument. The survey instrument appears in the Appendix.

Respondent Profile

There were 338 respondents from across the size and industry spectrum. The majority of respondents came from small firms. CGR made every effort to check the veracity of the size claims but was unable to do so for every respondent.

Table 3: Survey respondents by self-reported size

Number Employed Locally	Respondents	
50 and under	197	58%
51 to 100	47	14%
101 to 500	59	17%
>500	31	9%
Unknown Size	4	1%
Total	338	100%

Manufacturers make up the largest share of respondents.

Table 4: Survey respondents by self-reported industry

Industry	Respondents	
Agriculture & Construction	20	6%
Manufacturing	106	31%
Trade, Transportation & Warehousing	26	8%
Professional and Business Services	74	22%
Educational and Health Services	32	9%
Leisure and Hospitality	22	7%
Other	58	17%
Total	338	100%

The 338 respondents represent about an estimated 86,000 workers. The majority of the workers are from the Trade, Transportation & Warehousing industry.

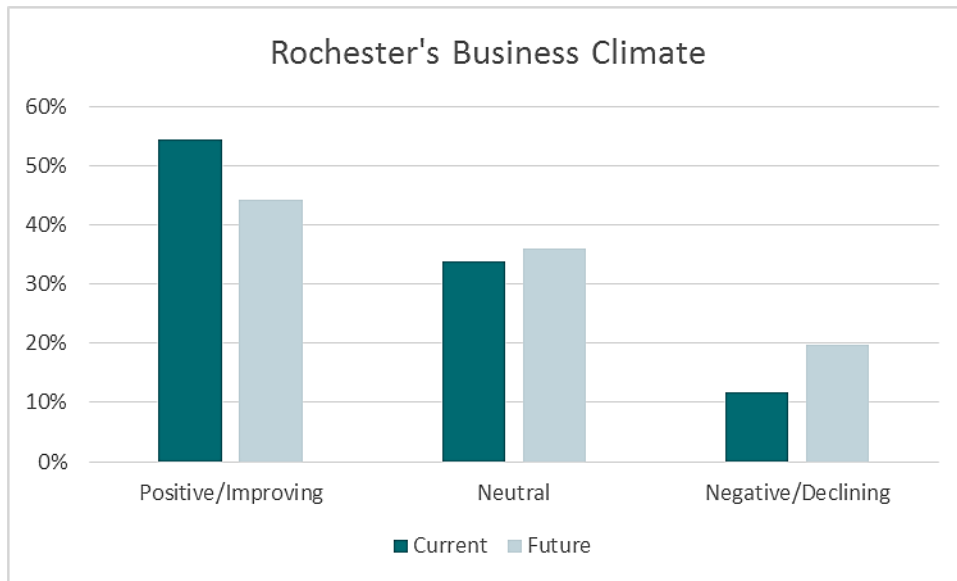
Table 5: Workforce represented by the survey

Industry	Workers	
Agriculture & Construction	1,600	2%
Manufacturing	12,400	14%
Trade, Transportation & Warehousing	39,700	46%
Professional and Business Services	17,400	20%
Educational and Health Services	7,000	8%
Leisure and Hospitality	1,000	1%
Other	6,800	8%
Total	85,900	100%

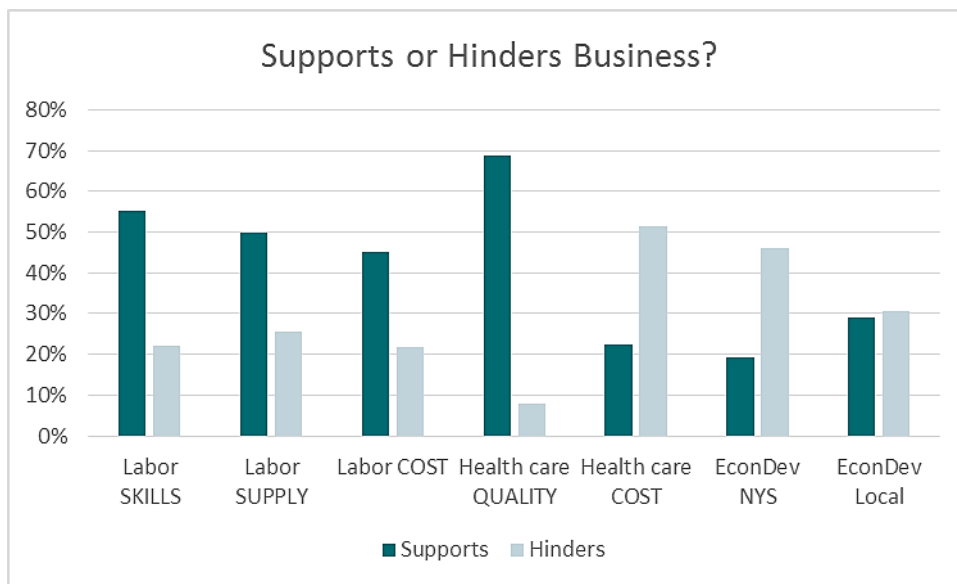
FINDINGS

Business Climate

When asked to rate the Rochester region as a place for their business to succeed, 54% were positive while only 12% were negative. Respondents were a bit less upbeat about the future: 44% expect the Rochester business climate to improve in the next few years while 20% expect decline.

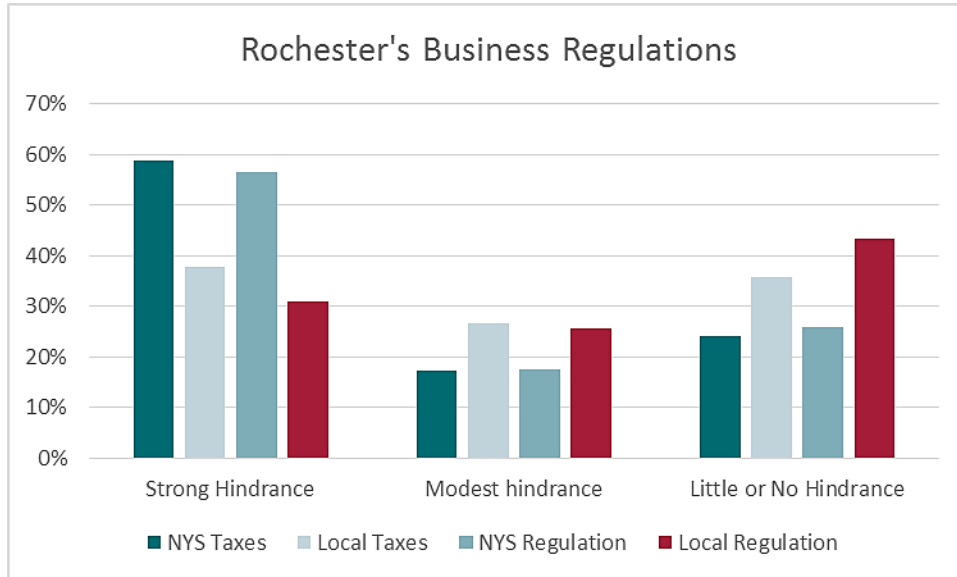


When asked about factors in Rochester that support or hinder business, health care won in both categories: health care quality was the most-cited positive; health care cost was the most-cited negative.



Respondents from the Manufacturing, Agriculture & Construction and Education & Health Services felt the local labor supply was not supporting their business success⁴.

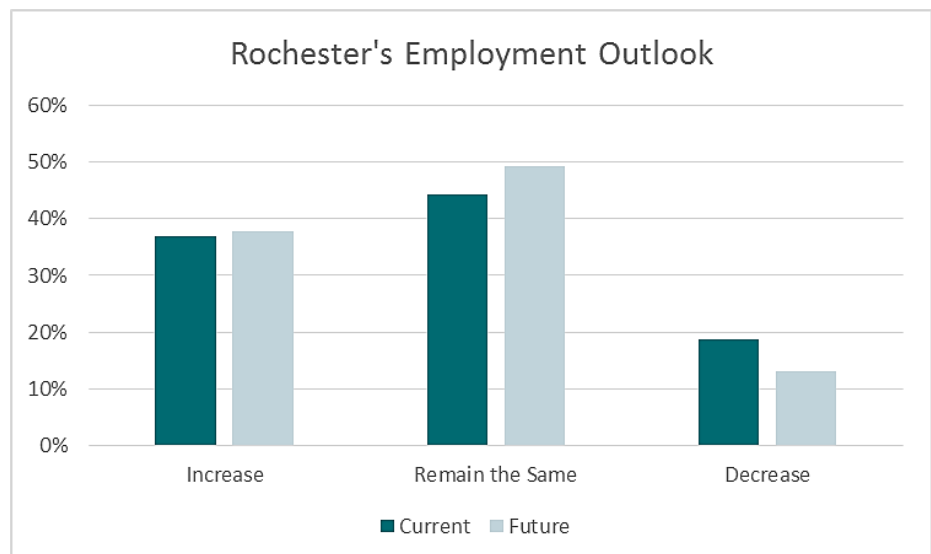
New York State taxes are viewed as the regulation that is the most hindering to area employees. The state level government is viewed as more of a hindrance than the local level.



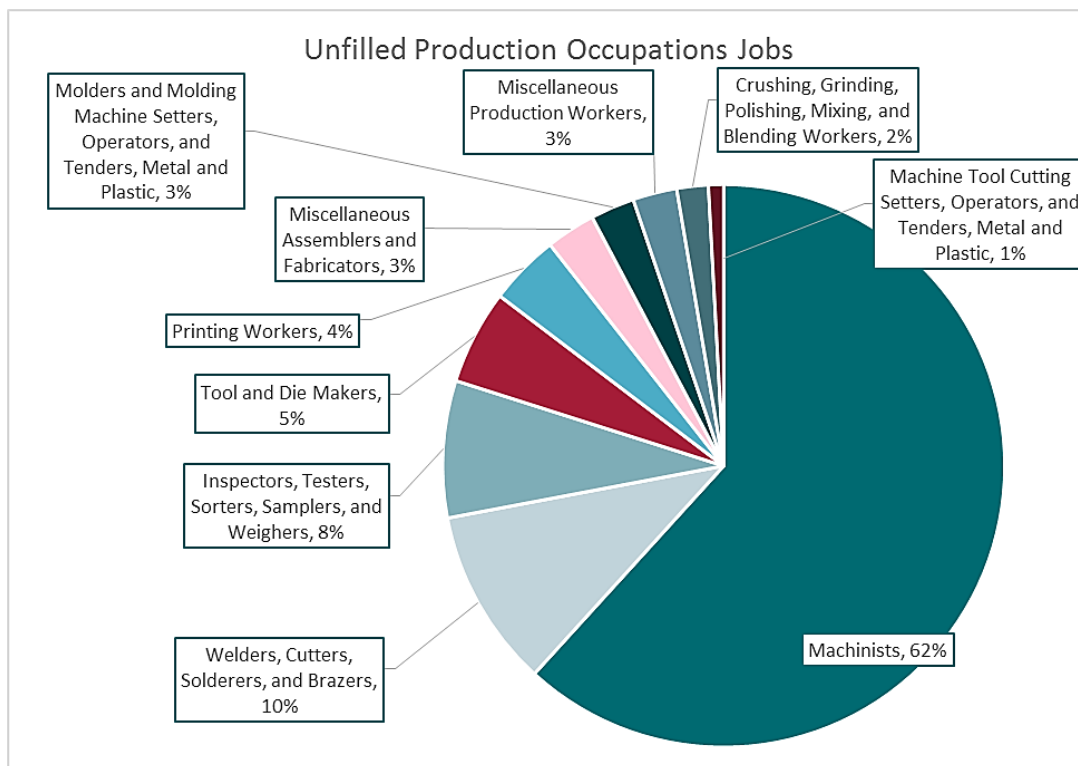
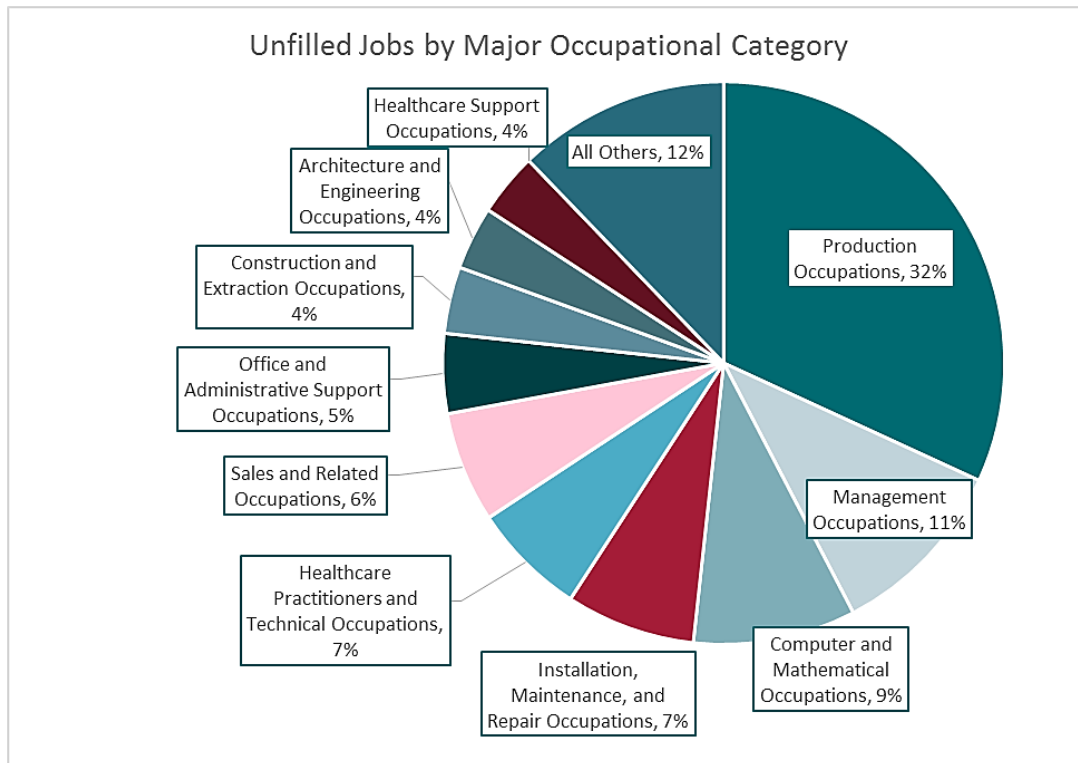
Employment

The region’s employment outlook could be summed up as cautiously optimistic. While most respondent firms intend to maintain current levels of employment, some intend to reduce their workforce in the future. This signals that the worst might be behind us.

However there does not seem to be an increase in the number of firms planning on hiring in the future.

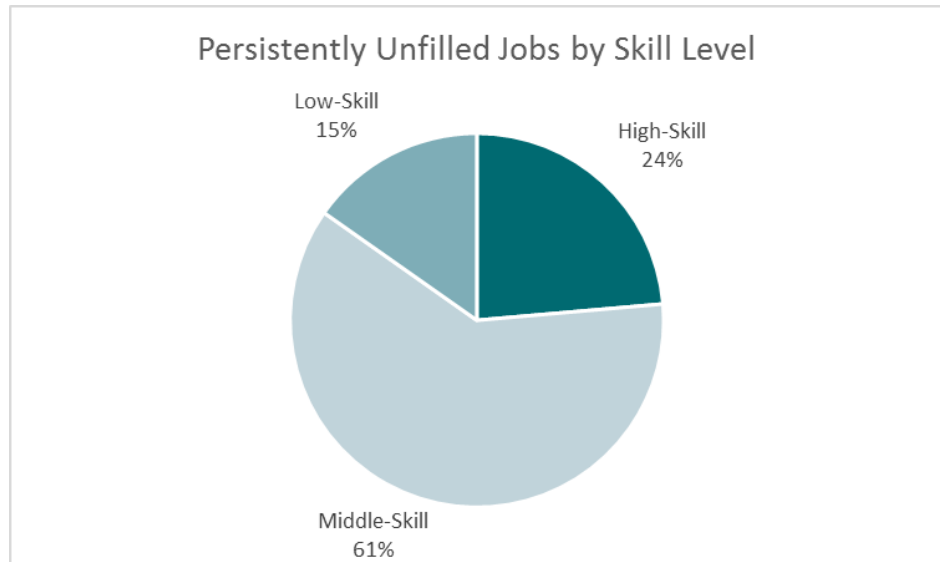


⁴ See tables in the appendix.

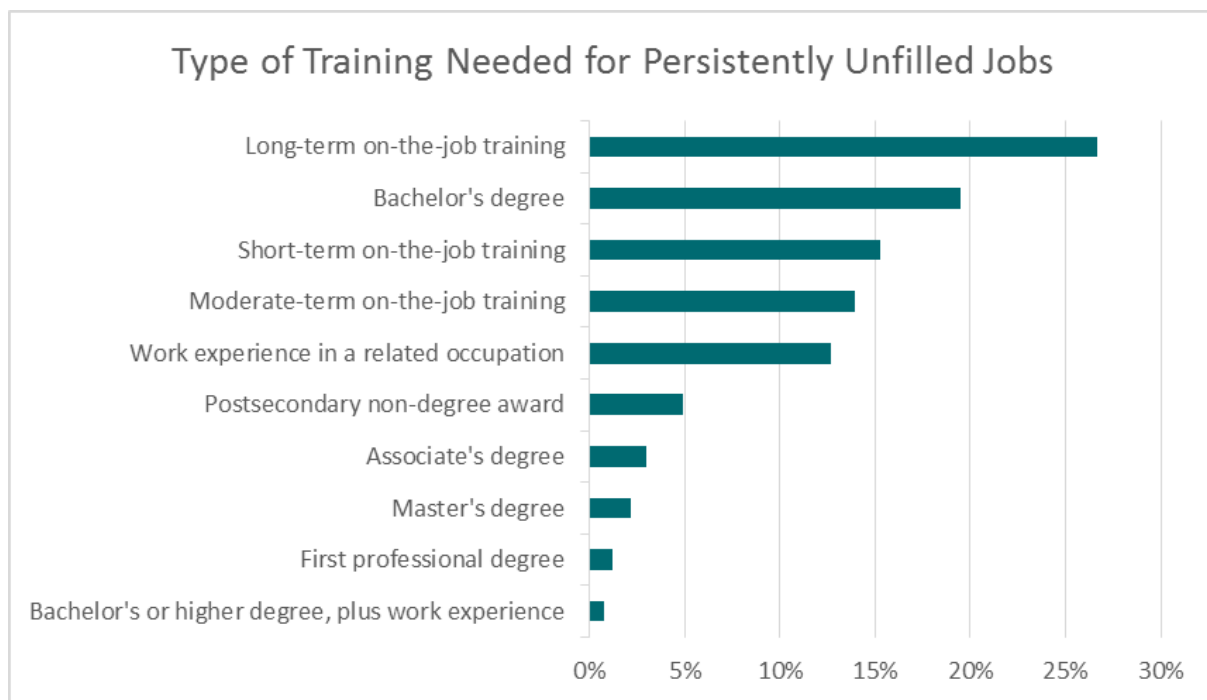


What level of training is required for unfilled positions?

The respondents indicated how many positions and identified up to five job positions. We weighted each job position by the share of the persistently unfilled jobs (i.e. if they said there were 10 persistently unfilled jobs and gave 5 positions, each position was counted as 2 persistently unfilled jobs). CGR matched these positions up with EMSI occupational data for the purpose of summarizing unfilled positions by the skill level. Most of the persistently unfilled positions are in occupations that could be considered middle-skills. However this estimation would once again be more reliable if the survey respondents were a representative cross-section of the economy.



Each occupation is also classified by the type of training required. As noted below, a plurality of these persistently unfilled jobs require long-term on the job training, with bachelor’s degree as the second most common training requirement.



When respondents were asked to “drill down” on skill needs for persistently unfilled positions, it was common to get highly specific work skills (i.e. Mechanical/Operational Skills Specific to Our Equipment). Matched with the prior observation that the occupations most cited require long term on-the-job training, this suggests that training providers like MCC can address the problem most productively by emphasizing contract training for specific firms or clusters and certificate programs that confer something less than an associate’s degree.

Another common theme in the survey is the lack of “basic employability” skills, e.g. work ethic, coming to work on time, etc. This kind of non-specific training may fill the “skills gap” that exists for those positions that are considered low skill or semi-skill, particularly many of the customer service/sales positions mentioned by respondents.

Why are positions unfilled?

In the wake of the Great Recession, persistently high unemployment is often attributed to a mismatch between the skills of job seekers and the needs of employers. What is implied here is that the economy is creating enough jobs to meet the needs of everyone seeking employment, if only we could match the unemployed to the jobs.

While the skills mismatch is certainly part of the explanation, other explanations are also likely.

- Let’s consider the health care sector: This sector has a large number of positions at the low skill/semi-skill level—e.g. home health aides—that seem to be in chronic short supply. High turnover is often attributed to the fact that the work is difficult, yet the pay is modest. In cases like these, positions do not remain unfilled due to a skills mismatch. Firms operate in a competitive environment and must manage the challenge of high turnover.
- The same phenomenon may apply to a share of the customer service/sales positions. Many of these positions are trained on the job and pay according to performance. With low skill & experience requirements and uncertain compensation, these positions are subject to high turnover. In cases like these, a skills mismatch may be part of the problem, but is probably not the primary cause.
- In other cases, the problem may involve a gap between what firms are able to pay and the wage workers need to receive to justify the skills investment. As an example, the entry-level machinist positions mentioned by survey respondents may pay too little to justify the expense of a training program.

The survey reveals that the share of positions unfilled is much higher among smaller firms than larger firms. While the survey is neither large enough nor detailed enough for these estimates to be precise, the number of persistently unfilled positions as a share of total employment falls dramatically as firm size rises—from 5% or higher for firms with under 100 employees to less than 1% for firms with 250 employees or more.

Perhaps larger firms are able to pay higher wages, recruit needed workers from a larger geographic area, and provide more on-the-job training aimed at filling skills gaps. Small machine shops, for example, face a robustly competitive global market and may be unable to compete at wages that are locally competitive. The shortage of capable workers may be largely a consequence of the pay scale that is affordable to firms.

In these cases, the skills mismatch is very real, but the cause may have more to do with a mismatch between the cost of training and the competitive ability of employers to pay market-clearing wages.

What's the policy response?

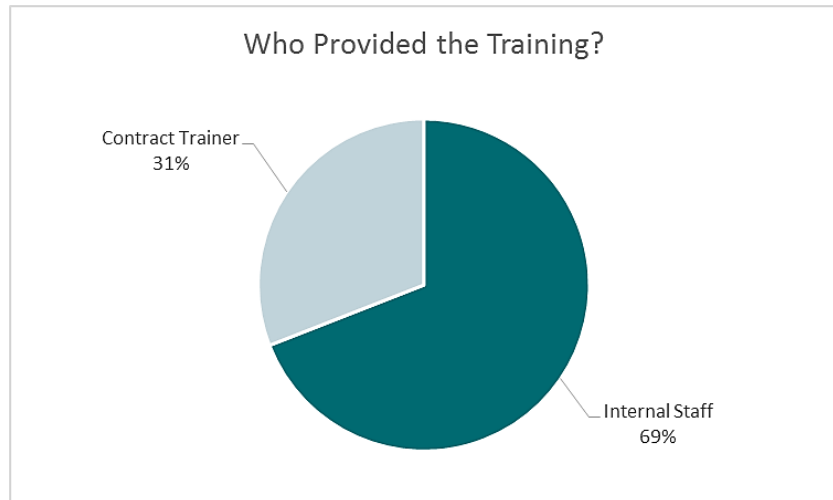
One goal of the survey is to determine what changes can be made in the workforce development system to address the need of firms for skilled workers and the need of the unemployed for jobs. The answer to this question will inform the Workforce Workgroup of the Finger Lakes Regional Economic Development Council.

- Given the large number of *low skill* jobs available in the marketplace, programs addressing basic workforce skills are important. Both formal programs and employment opportunities can help. Some firms in Rochester—Wegmans Food Markets is a prominent example—hire young workers in entry level positions and provide critical training that applies to all occupations.
- Some occupations are in low demand simply because potential entrants are unaware of the opportunity.
 - Public programs can coordinate internships/coops and apprenticeships that can expose inexperienced workers to new opportunities.
 - As MCC is pursuing with FLREDC support, training providers can play a critical information role, introducing young people to the broad array of possible occupations and the path to employment.
- Public programs can reduce the cost of training. Training providers (like MCC) can work with groups of employers to identify common skills needs, develop targeted training programs, and coordinate access to needed equipment and machinery.
- Training providers can also enter into agreements with individual firms to address very specific training needs. Assessing the need for custom training is another reason conducting future surveys.
- Finally, community colleges and other training providers must continuously identify opportunities to fill in the gaps between worker skills and employer needs. As the machinist example suggests, new training programs have to subject to a rigorous market assessment. Is the cost of the training appropriate for the wage expected when the program is completed? If the training required falls short of an associate's degree, how will this affect the reimbursement stream to the community college?

Employee Training

Who provides training?

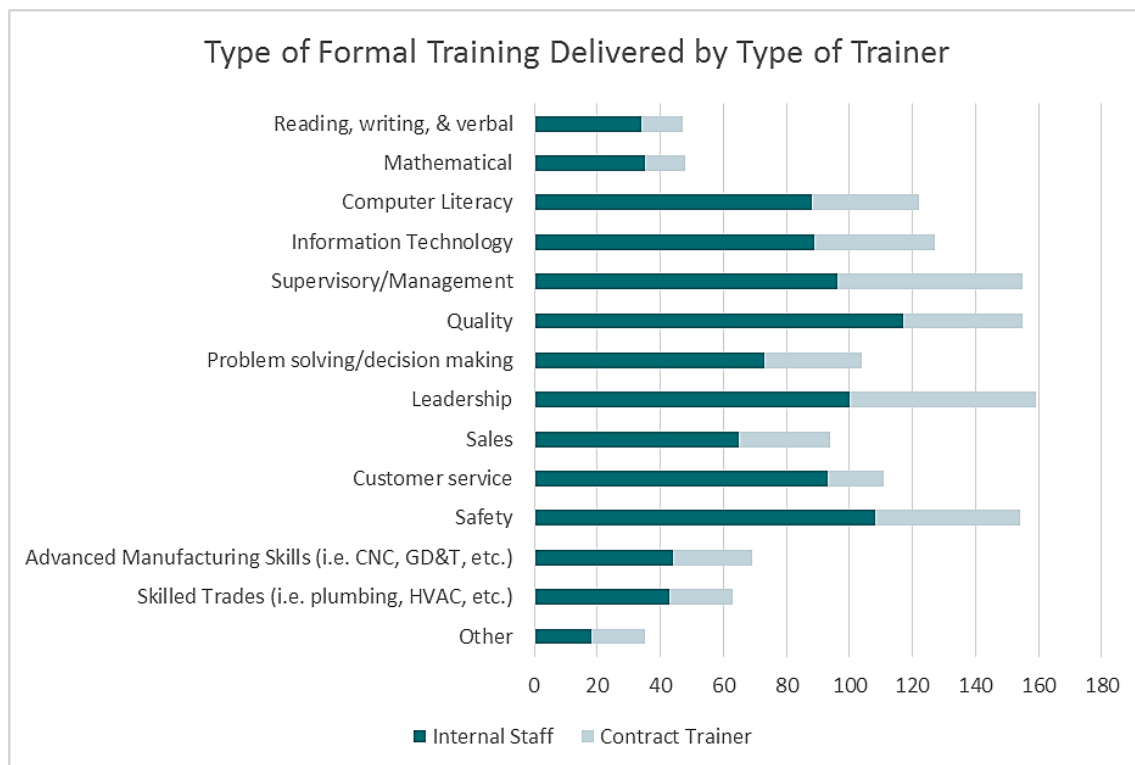
Nearly all companies provide some training. When they provide training, it is done primarily by internal staff.



What subject does the training cover?

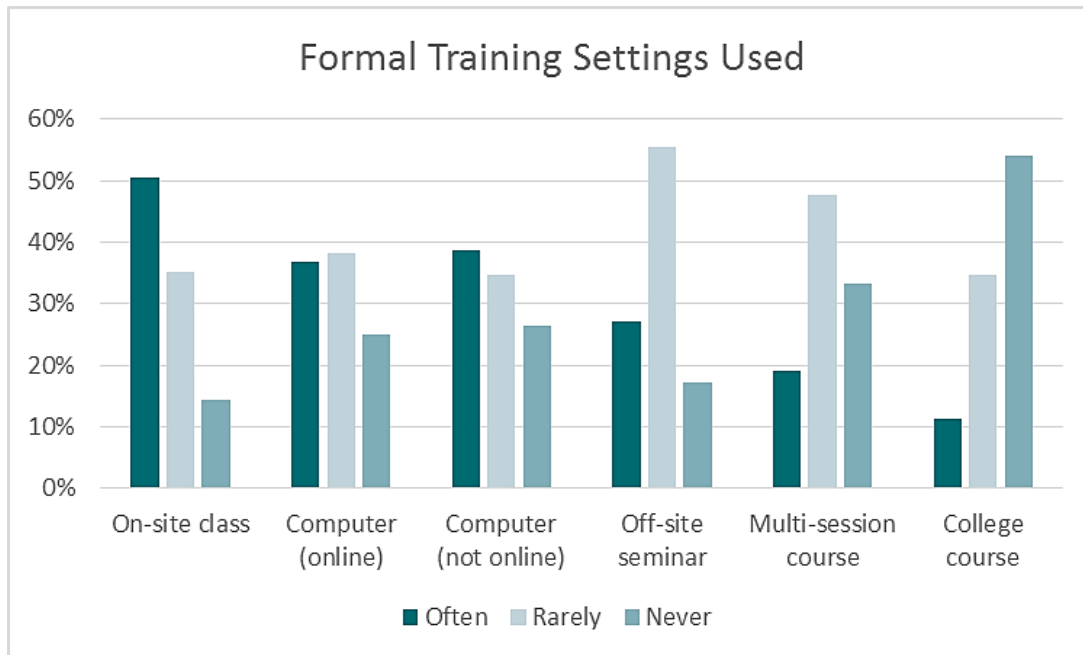
Leadership and supervisory/management training are the types most often offered.

If training is delivered by a contract trainer, the respondents indicate that the training matter is supervisory/management training. There is no subject area where contract trainers are used more than internal staff.

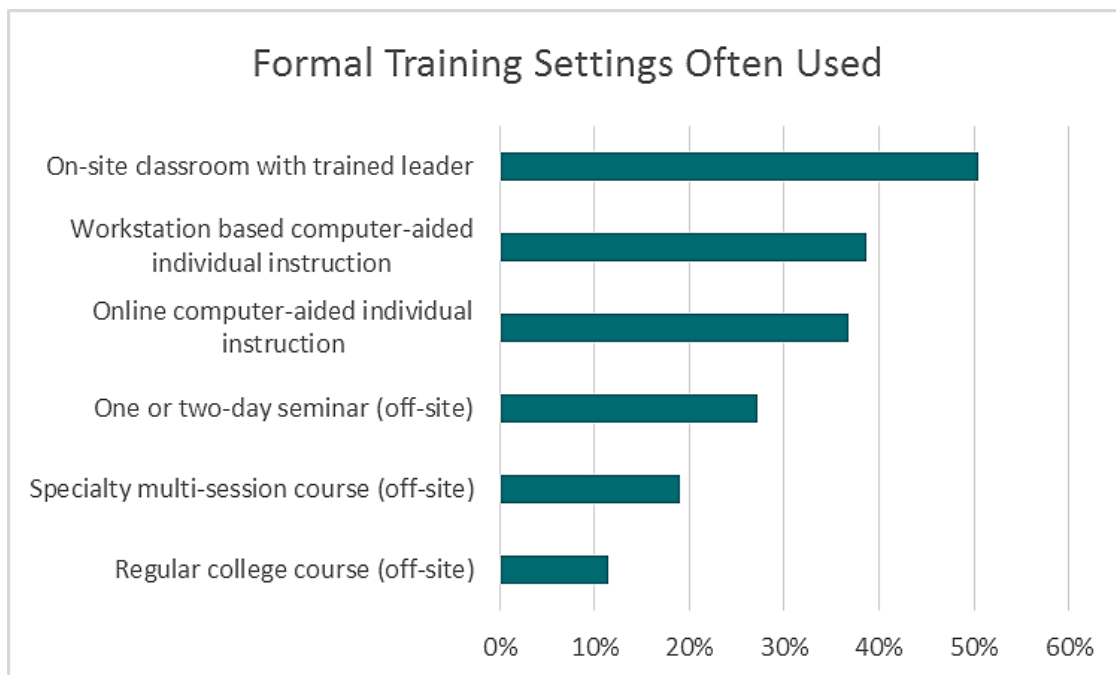


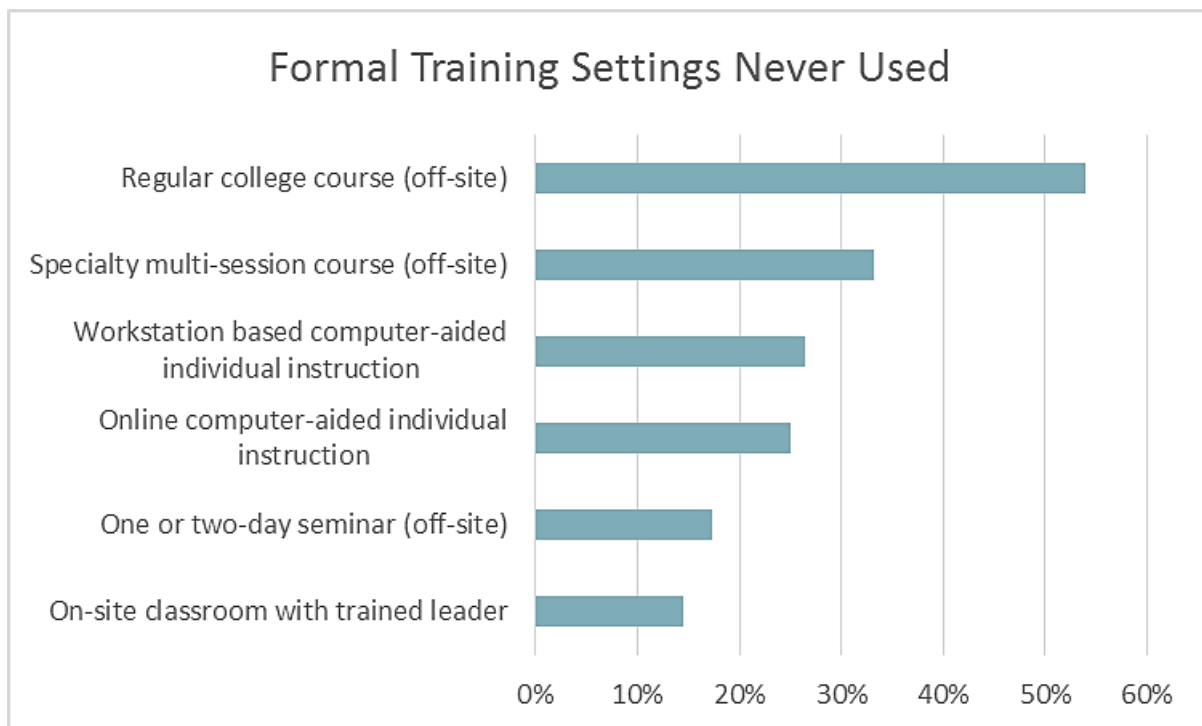
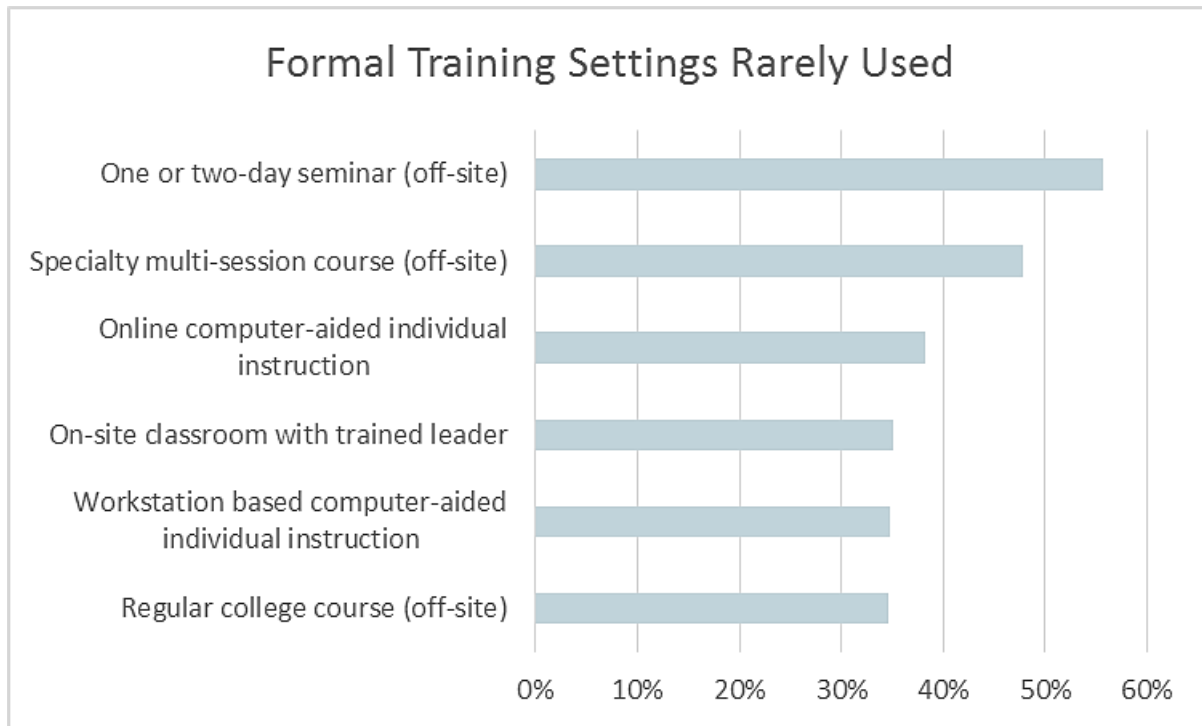
How is the training provided?

Respondents indicate that when they provide formal training it is usually done on-site with a trained leader. A regular college course is not the preferred setting.



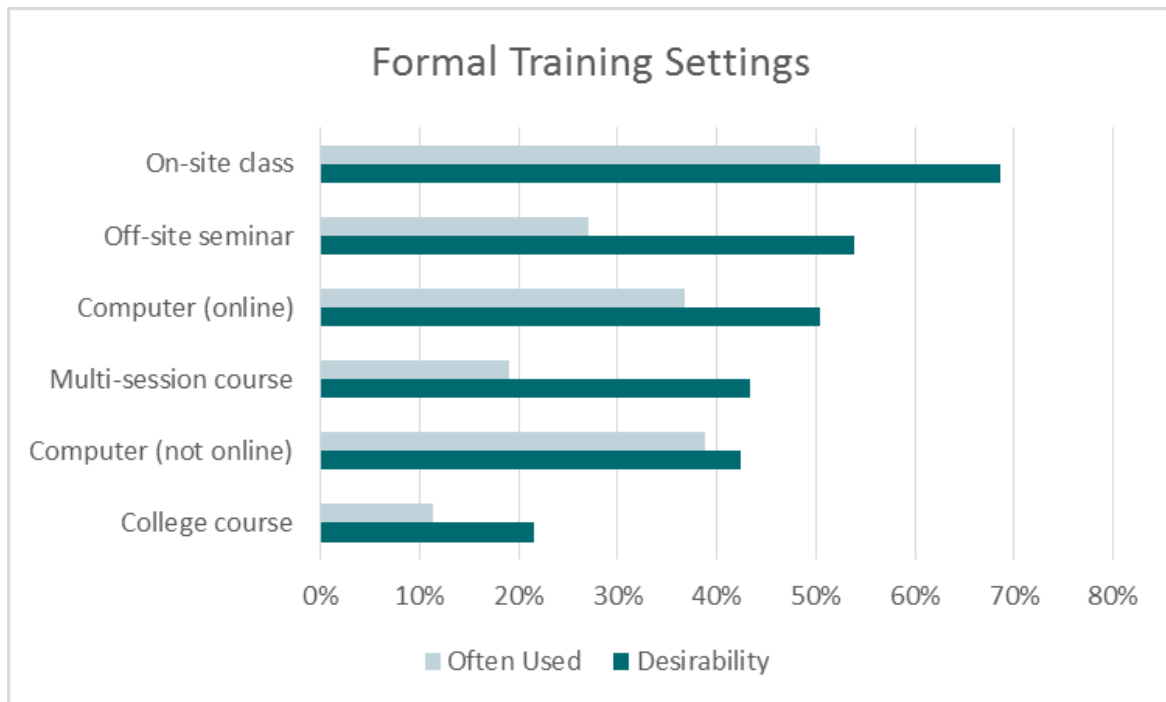
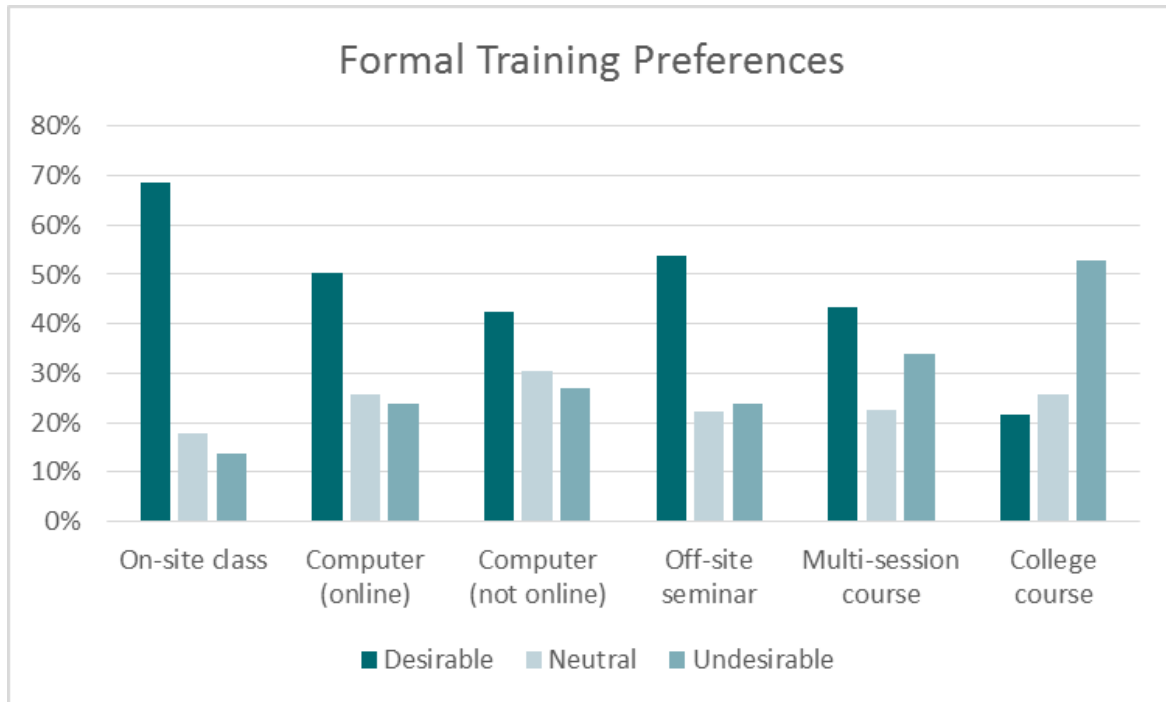
It is also noteworthy that the data suggests that training is an expense employers are trying to minimize. The most expensive option (regular college course) is the least often employed, while on-site training conducted by internal staff is the most used.



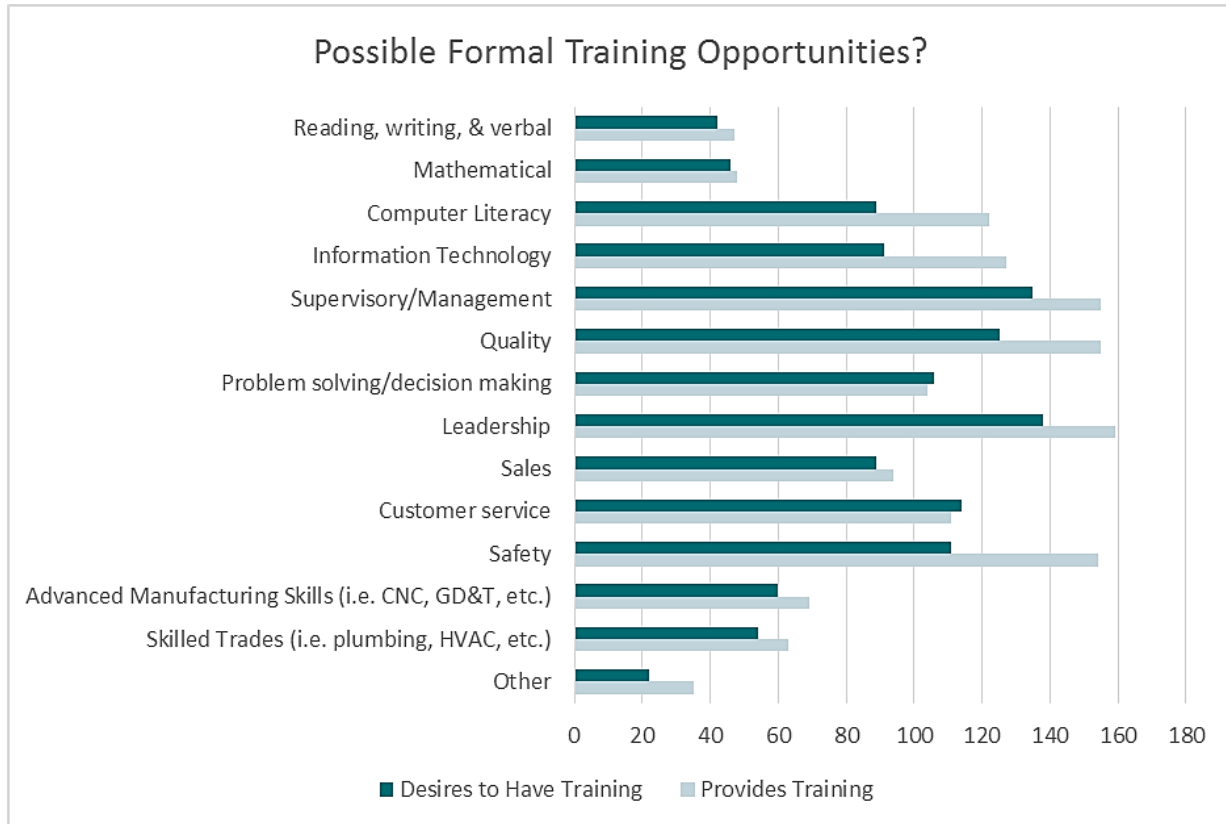


Training Preferences

The charts below illustrate respondent training preferences related to delivery and setting.



The survey asked respondents to anticipate future training needs and indicate what type of training they delivered in the past. The following chart juxtaposes the respondents anticipated training needs by topic against actual training provided. Respondents indicate that relative to past training needs, they anticipate fewer training demands in the future.



APPENDIX

Survey Result Tables

Question 1. How would you currently rate the Rochester region as a place for your business to succeed?

	Respondents	Positive	Neutral	Negative
Total	334	54%	34%	12%
Size Breakout				
50 and under	194	53%	32%	14%
51 to 100	47	55%	36%	9%
101 to 500	59	58%	39%	3%
>500	31	61%	29%	10%
Unknown Size	3	0%	33%	67%
Industry Breakout				
Ag & Const	20	35%	40%	25%
Manufacturing	105	59%	30%	10%
Trade, Transp & Whse	26	54%	38%	8%
Prof & Bus Svces	73	51%	37%	12%
Educ & Health Svces	32	75%	22%	3%
Leisure & Hospitality	22	55%	36%	9%
Other	56	46%	38%	16%

Question 2. As a place for your business to succeed, will the Rochester region improve or decline over the next few years?

	Respondents	Improve	Neutral	Decline
Total	334	44%	36%	20%
Size Breakout				
50 & under	194	44%	34%	22%
51 to 100	47	34%	49%	17%
101 to 500	59	51%	27%	22%
>500	31	52%	39%	10%
Unknown Size	3	0%	100%	0%
Industry Breakout				
Ag & Const	20	50%	25%	25%
Manufacturing	105	42%	36%	22%
Trade, Transp & Whse	26	35%	42%	23%
Prof & Bus Svces	73	53%	32%	15%
Educ & Health Svces	32	50%	41%	9%
Leisure & Hospitality	21	48%	24%	29%
Other	57	35%	44%	21%

Question 3a. Do these aspects of the Rochester region business environment support or hinder the success of your business? - Labor SKILLS

	Respondents	Support	Neutral	Hinder
Total	321	55%	23%	22%
Size Breakout				
50 & Under	186	54%	27%	19%
51 to 100	46	52%	20%	28%
101 to 500	57	51%	18%	32%
>500	29	72%	7%	21%
Unknown Size	3	67%	33%	0%
Industry Breakout				
Ag & Const	20	55%	10%	35%
Manufacturing	99	35%	28%	36%
Trade, Transp & Whse	26	62%	27%	12%
Prof & Bus Svces	69	62%	23%	14%
Educ & Health Svces	20	70%	15%	15%
Leisure & Hospitality	21	62%	14%	24%
Other	66	68%	21%	11%

Question 3b. Do these aspects of the Rochester region business environment support or hinder the success of your business? - Labor SUPPLY

	Respondents	Support	Neutral	Hinder
Total	333	50%	25%	26%
Size Breakout				
50 & Under	195	47%	30%	23%
51 to 100	46	48%	22%	30%
101 to 500	58	52%	17%	31%
>500	31	65%	10%	26%
Unknown Size	3	100%	0%	0%
Industry Breakout				
Ag & Const	20	45%	25%	30%
Manufacturing	106	35%	27%	38%
Trade, Transp & Whse	25	64%	20%	16%
Prof & Bus Svces	72	56%	25%	19%
Educ & Health Svces	22	41%	36%	23%
Leisure & Hospitality	22	68%	9%	23%
Other	66	61%	23%	17%

Question 3c. Do these aspects of the Rochester region business environment support or hinder the success of your business? - Labor COST

	Respondents	Support	Neutral	Hinder
Total	321	45%	33%	22%
Size Breakout				
50 & Under	186	38%	38%	24%
51 to 100	46	50%	28%	22%
101 to 500	57	51%	33%	16%
>500	29	66%	10%	24%
Unknown Size	3	100%	0%	0%
Industry Breakout				
Ag & Const	19	37%	26%	37%
Manufacturing	101	42%	35%	24%
Trade, Transp & Whse	25	32%	44%	24%
Prof & Bus Svces	70	50%	34%	16%
Educ & Health Svces	29	48%	38%	14%
Leisure & Hospitality	21	48%	24%	29%
Other	56	52%	27%	21%

Question 3d. Do these aspects of the Rochester region business environment support or hinder the success of your business? Local health care QUALITY

	Respondents	Support	Neutral	Hinder
Total	333	69%	23%	8%
Size Breakout				
50 & Under	194	66%	28%	5%
51 to 100	46	72%	22%	7%
101 to 500	59	66%	15%	19%
>500	31	84%	13%	3%
Unknown Size	3	67%	0%	33%
Industry Breakout				
Ag & Const	20	100%	0%	0%
Manufacturing	105	67%	20%	13%
Trade, Transp & Whse	26	80%	20%	0%
Prof & Bus Svces	71	100%	0%	0%
Educ & Health Svces	23	82%	14%	5%
Leisure & Hospitality	22	79%	11%	11%
Other	66	68%	26%	5%

Question 3e. Do these aspects of the Rochester region business environment support or hinder the success of your business? Local health care COST

	Respondents	Support	Neutral	Hinder
Total	332	22%	26%	52%
Size Breakout				
50 & Under	193	23%	25%	52%
51 to 100	47	21%	26%	53%
101 to 500	58	14%	28%	59%
>500	31	35%	32%	32%
Unknown Size	3	33%	33%	33%
Industry Breakout				
Ag & Const	19	26%	21%	53%
Manufacturing	105	17%	25%	58%
Trade, Transp & Whse	25	16%	16%	68%
Prof & Bus Svces	73	26%	29%	45%
Educ & Health Svces	32	25%	38%	38%
Leisure & Hospitality	21	24%	14%	62%
Other	57	26%	30%	44%

Question 3f. Do these aspects of the Rochester region business environment support or hinder the success of your business? Economic development policy/programs: STATE

	Respondents	Support	Neutral	Hinder
Total	335	19%	35%	46%
Size Breakout				
50 & Under	195	17%	33%	49%
51 to 100	47	19%	45%	36%
101 to 500	59	31%	25%	44%
>500	31	10%	48%	42%
Unknown Size	3	33%	0%	67%
Industry Breakout				
Ag & Const	20	15%	20%	65%
Manufacturing	106	20%	42%	39%
Trade, Transp & Whse	25	16%	20%	64%
Prof & Bus Svces	73	21%	37%	42%
Educ & Health Svces	32	25%	31%	44%
Leisure & Hospitality	22	18%	41%	41%
Other	57	18%	30%	53%

Question 3g. Do these aspects of the Rochester region business environment support or hinder the success of your business? Economic development policy/programs: LOCAL

	Respondents	Support	Neutral	Hinder
Total	327	29%	40%	31%
Size Breakout				
50 & Under	189	27%	40%	33%
51 to 100	46	24%	52%	24%
101 to 500	58	36%	38%	26%
>500	31	32%	35%	32%
Unknown Size	3	67%	0%	33%
Industry Breakout				
Ag & Const	20	25%	25%	50%
Manufacturing	103	27%	44%	29%
Trade, Transp & Whse	26	27%	54%	19%
Prof & Bus Svces	69	32%	35%	33%
Educ & Health Svces	31	39%	35%	26%
Leisure & Hospitality	21	24%	57%	19%
Other	57	28%	37%	35%

**Question 4a. How much do taxes & regulation hinder the competitiveness of your business?
NYS Taxes**

	Respondents	Strong Hindrance	Modest hindrance	Little or No Hindrance
Total	375	59%	17%	24%
Size Breakout				
50 & Under	222	59%	18%	24%
51 to 100	57	50%	21%	29%
101 to 500	58	56%	21%	23%
>500	36	64%	12%	24%
Unknown Size	2	53%	19%	28%
Industry Breakout				
Ag & Const	23	65%	17%	17%
Manufacturing	124	60%	17%	23%
Trade, Transp & Whse	31	55%	19%	26%
Prof & Bus Svces	82	61%	17%	22%
Educ & Health Svces	32	34%	28%	38%
Leisure & Hospitality	23	43%	22%	35%
Other	60	70%	10%	20%

Question 4b. How much do taxes & regulation hinder the competitiveness of your business?**Local Taxes**

	Respondents	Strong Hindrance	Modest hindrance	Little or No Hindrance
Total	407	38%	27%	36%
Size Breakout				
50 & Under	240	38%	27%	35%
51 to 100	57	37%	26%	37%
101 to 500	69	36%	26%	38%
>500	38	42%	24%	34%
Unknown Size	3	33%	33%	33%
Industry Breakout				
Ag & Const	24	58%	21%	21%
Manufacturing	137	35%	28%	37%
Trade, Transp & Whse	32	44%	25%	31%
Prof & Bus Svces	86	38%	26%	36%
Educ & Health Svces	30	33%	27%	40%
Leisure & Hospitality	25	32%	28%	40%
Other	73	37%	27%	36%

Question 4c. How much do taxes & regulation hinder the competitiveness of your business?**State Regulation**

	Respondents	Strong Hindrance	Modest hindrance	Little or No Hindrance
Total	382	57%	18%	26%
Size Breakout				
50 & Under	231	51%	20%	29%
51 to 100	56	52%	20%	29%
101 to 500	63	65%	13%	22%
>500	30	87%	3%	10%
Unknown Size	2	100%	0%	0%
Industry Breakout				
Ag & Const	23	74%	13%	13%
Manufacturing	121	55%	18%	26%
Trade, Transp & Whse	31	42%	26%	32%
Prof & Bus Svces	85	52%	19%	29%
Educ & Health Svces	33	73%	12%	15%
Leisure & Hospitality	27	44%	22%	33%
Other	62	63%	13%	24%

Question 4d. How much do taxes & regulation hinder the competitiveness of your business?
Local Regulation

	Respondents	Strong Hindrance	Modest hindrance	Little or No Hindrance
Total	400	31%	26%	43%
Size Breakout				
50 & Under	238	28%	28%	44%
51 to 100	57	33%	23%	44%
101 to 500	69	29%	26%	45%
>500	33	52%	12%	36%
Unknown Size	3	33%	33%	33%
Industry Breakout				
Ag & Const	29	38%	31%	31%
Manufacturing	127	28%	27%	46%
Trade, Transp & Whse	30	30%	30%	40%
Prof & Bus Svces	83	30%	24%	46%
Educ & Health Svces	34	32%	21%	47%
Leisure & Hospitality	22	45%	18%	36%
Other	75	31%	27%	43%

Question 5. During 2012, employment at your company

	Respondents	Increased	Remained the Same	Decreased
Total	330	37%	44%	19%
Size Breakout				
50 & Under	191	31%	35%	35%
51 to 100	47	47%	38%	15%
101 to 500	59	51%	42%	7%
>500	30	37%	27%	37%
Unknown Size	3	0%	33%	67%
Industry Breakout				
Ag & Const	20	30%	50%	20%
Manufacturing	104	51%	38%	12%
Trade, Transp & Whse	26	38%	31%	31%
Prof & Bus Svces	72	38%	43%	19%
Educ & Health Svces	31	32%	45%	23%
Leisure & Hospitality	20	10%	80%	10%
Other	57	25%	49%	26%

Question 6. Through the end of 2013, do you expect that employment at your company will...

	Respondents	Increase	Remained the Same	Decrease
Total	331	38%	49%	13%
Size Breakout				
50 & Under	192	39%	52%	9%
51 to 100	47	36%	51%	13%
101 to 500	59	41%	49%	10%
>500	30	33%	30%	37%
Unknown Size	3	0%	33%	67%
Industry Breakout				
Ag & Const	20	35%	50%	15%
Manufacturing	104	51%	40%	9%
Trade, Transp & Whse	26	42%	42%	15%
Prof & Bus Svces	73	36%	49%	15%
Educ & Health Svces	31	29%	58%	13%
Leisure & Hospitality	20	20%	65%	15%
Other	57	26%	58%	16%

Question 7. Does your firm have persistently unfilled positions?

	Respondents	0 to 3	3 to 5	More Than 5
Total	335	258	44	33
Size Breakout				
50 & Under	195	92%	5%	3%
51 to 100	47	79%	17%	4%
101 to 500	59	42%	37%	20%
>500	31	42%	13%	45%
Unknown Size	3	100%	0%	0%
Industry Breakout				
Ag & Const	20	15	4	1
Manufacturing	106	75	20	11
Trade, Transp & Whse	26	22	1	3
Prof & Bus Svces	74	64	3	7
Educ & Health Svces	31	20	4	7
Leisure & Hospitality	21	18	3	0
Other	57	44	9	4

Question 8. Have you provided any formal training in the past year or so?

	Respondents	Yes	No
Total	338	69%	31%
Size Breakout			
50 & Under	197	59%	41%
51 to 100	47	89%	11%
101 to 500	59	76%	24%
>500	31	87%	13%
Unknown Size	4	50%	50%
Industry Breakout			
Ag & Const	20	95%	5%
Manufacturing	106	70%	30%
Trade, Transp & Whse	26	65%	35%
Prof & Bus Svces	74	59%	41%
Educ & Health Svces	32	97%	3%
Leisure & Hospitality	22	55%	45%
Other	58	60%	40%

**Question 10a. How often did your organization use the following settings for formal training?
Onsite classroom with trained leader**

	Respondents	Often	Rarely	Never
Total	222	50%	35%	14%
Size Breakout				
50 & Under	109	39%	35%	26%
51 to 100	42	45%	52%	2%
101 to 500	44	64%	34%	2%
>500	27	81%	11%	7%
Unknown Size	0	N/A	N/A	N/A
Industry Breakout				
Ag & Const	18	67%	17%	17%
Manufacturing	72	46%	44%	10%
Trade, Transp & Whse	17	41%	35%	24%
Prof & Bus Svces	43	58%	21%	21%
Educ & Health Svces	29	62%	24%	14%
Leisure & Hospitality	11	9%	73%	18%
Other	32	50%	41%	9%

**Question 10b. How often did your organization use the following settings for formal training?
Individual instruction, computer-aided online**

	Respondents	Often	Rarely	Never
Total	204	37%	38%	25%
Size Breakout				
50 & Under	100	35%	35%	30%
51 to 100	38	29%	42%	29%
101 to 500	41	29%	49%	22%
>500	25	68%	28%	4%
Unknown Size	0	N/A	N/A	N/A
Industry Breakout				
Ag & Const	17	35%	35%	29%
Manufacturing	69	22%	45%	33%
Trade, Transp & Whse	15	60%	7%	33%
Prof & Bus Svces	36	44%	42%	14%
Educ & Health Svces	29	48%	34%	17%
Leisure & Hospitality	9	44%	22%	33%
Other	29	38%	45%	17%

**Question 10c. How often did your organization use the following settings for formal training?
Off site: One or two-day seminar**

	Respondents	Often	Rarely	Never
Total	214	27%	56%	17%
Size Breakout				
50 & Under	104	27%	47%	26%
51 to 100	40	20%	68%	13%
101 to 500	44	32%	61%	7%
>500	26	31%	62%	8%
Unknown Size	0	N/A	N/A	N/A
Industry Breakout				
Ag & Const	18	61%	33%	6%
Manufacturing	70	20%	64%	16%
Trade, Transp & Whse	17	18%	41%	41%
Prof & Bus Svces	41	32%	51%	17%
Educ & Health Svces	29	24%	66%	10%
Leisure & Hospitality	10	10%	50%	40%
Other	29	31%	55%	14%

**Question 10d. How often did your organization use the following settings for formal training?
Individual instruction, computer-aided: Workstation based**

	Respondents	Often	Rarely	Never
Total	204	39%	35%	26%
Size Breakout				
50 & Under	100	33%	33%	34%
51 to 100	39	49%	33%	18%
101 to 500	42	26%	45%	29%
>500	23	70%	26%	4%
Unknown Size	0	N/A	N/A	N/A
Industry Breakout				
Ag & Const	18	33%	44%	22%
Manufacturing	64	28%	44%	28%
Trade, Transp & Whse	15	47%	27%	27%
Prof & Bus Svces	39	51%	26%	23%
Educ & Health Svces	28	39%	25%	36%
Leisure & Hospitality	10	30%	40%	30%
Other	30	47%	33%	20%

**Question 10e. How often did your organization use the following settings for formal training?
Off site: Specialty multi-session course**

	Respondents	Often	Rarely	Never
Total	205	19%	48%	33%
Size Breakout				
50 & Under	99	18%	38%	43%
51 to 100	41	20%	51%	29%
101 to 500	42	24%	57%	19%
>500	23	13%	65%	22%
Unknown Size	0	N/A	N/A	N/A
Industry Breakout				
Ag & Const	18	50%	44%	6%
Manufacturing	66	14%	58%	29%
Trade, Transp & Whse	16	19%	31%	50%
Prof & Bus Svces	36	28%	28%	44%
Educ & Health Svces	28	7%	61%	32%
Leisure & Hospitality	11	18%	27%	55%
Other	30	13%	57%	30%

**Question 10f. How often did your organization use the following settings for formal training?
Off site: Regular college course**

	Respondents	Often	Rarely	Never
Total	202	11%	35%	54%
Size Breakout				
50 & Under	99	6%	29%	65%
51 to 100	40	5%	35%	60%
101 to 500	39	28%	38%	33%
>500	24	17%	50%	33%
Unknown Size	0	N/A	N/A	N/A
Industry Breakout				
Ag & Const	16	13%	25%	63%
Manufacturing	66	20%	36%	44%
Trade, Transp & Whse	15	0%	13%	87%
Prof & Bus Svces	37	5%	32%	62%
Educ & Health Svces	29	7%	45%	48%
Leisure & Hospitality	10	0%	40%	60%
Other	29	14%	38%	48%

Question 11. Do you plan to provide any formal training in the next year or so?

	Respondents	Yes	No
Total	338	68%	32%
Size Breakout			
50 & Under	197	57%	43%
51 to 100	47	91%	9%
101 to 500	59	83%	17%
>500	31	77%	23%
Unknown Size	4	50%	50%
Industry Breakout			
Ag & Const	20	85%	15%
Manufacturing	106	71%	29%
Trade, Transp & Whse	26	65%	35%
Prof & Bus Svces	74	65%	35%
Educ & Health Svces	32	88%	13%
Leisure & Hospitality	22	45%	55%
Other	58	62%	38%

Question 13a. What training setting or approach do you desire? Onsite classroom with trained leader

	Respondents	Desirable	Neutral	Undesirable
Total	220	69%	18%	14%
Size Breakout				
50 & Under	105	55%	24%	21%
51 to 100	43	70%	14%	16%
101 to 500	47	89%	9%	2%
>500	24	83%	17%	0%
Unknown Size	1	100%	0%	0%
Industry Breakout				
Ag & Const	17	41%	41%	18%
Manufacturing	74	74%	14%	12%
Trade, Transp & Whse	17	59%	18%	24%
Prof & Bus Svces	43	67%	16%	16%
Educ & Health Svces	27	74%	26%	0%
Leisure & Hospitality	8	75%	13%	13%
Other	34	71%	12%	18%

Question 13b. What training setting or approach do you desire? Onsite classroom with trained leader Individual instruction, computer-aided: Online

	Respondents	Desirable	Neutral	Undesirable
Total	214	50%	26%	24%
Size Breakout				
50 & Under	102	43%	32%	25%
51 to 100	42	57%	26%	17%
101 to 500	46	50%	20%	30%
>500	23	74%	9%	17%
Unknown Size	1	0%	0%	100%
Industry Breakout				
Ag & Const	14	29%	36%	36%
Manufacturing	74	36%	27%	36%
Trade, Transp & Whse	15	60%	27%	13%
Prof & Bus Svces	42	48%	31%	21%
Educ & Health Svces	28	68%	21%	11%
Leisure & Hospitality	8	75%	13%	13%
Other	33	70%	18%	12%

Question 13c. What training setting or approach do you desire Individual instruction, computer-aided: Workstation based

	Respondents	Desirable	Neutral	Undesirable
Total	196	42%	31%	27%
Size Breakout				
50 & Under	93	35%	38%	27%
51 to 100	39	56%	23%	21%
101 to 500	44	36%	23%	41%
>500	19	63%	26%	11%
Unknown Size	1	0%	100%	0%
Industry Breakout				
Ag & Const	14	36%	21%	43%
Manufacturing	67	39%	27%	34%
Trade, Transp & Whse	14	57%	21%	21%
Prof & Bus Svces	38	34%	39%	26%
Educ & Health Svces	26	46%	31%	23%
Leisure & Hospitality	8	50%	38%	13%
Other	29	52%	34%	14%

Question 13d. What training setting or approach do you desire: Off-site: One or two day seminars

	Respondents	Desirable	Neutral	Undesirable
Total	210	54%	22%	24%
Size Breakout				
50 & Under	99	52%	26%	22%
51 to 100	42	48%	26%	26%
101 to 500	46	61%	15%	24%
>500	22	59%	14%	27%
Unknown Size	1	100%	0%	0%
Industry Breakout				
Ag & Const	14	79%	14%	7%
Manufacturing	73	52%	29%	19%
Trade, Transp & Whse	17	41%	6%	53%
Prof & Bus Svces	44	59%	18%	23%
Educ & Health Svces	24	54%	17%	29%
Leisure & Hospitality	8	38%	25%	38%
Other	30	50%	30%	20%

Question 13e. What training setting or approach do you desire: Off-site: Specialty Multi-Session course

	Respondents	Desirable	Neutral	Undesirable
Total	203	43%	23%	34%
Size Breakout				
50 & Under	97	44%	22%	34%
51 to 100	42	40%	26%	33%
101 to 500	44	50%	23%	27%
>500	19	26%	21%	53%
Unknown Size	1	100%	0%	0%
Industry Breakout				
Ag & Const	15	53%	13%	33%
Manufacturing	69	51%	25%	25%
Trade, Transp & Whse	16	38%	0%	63%
Prof & Bus Svces	39	54%	21%	26%
Educ & Health Svces	24	17%	33%	50%
Leisure & Hospitality	9	33%	44%	22%
Other	31	35%	23%	42%

Question 13g. What training setting or approach do you desire: Off-site: Regular college course

	Respondents	Desirable	Neutral	Undesirable
Total	195	22%	26%	53%
Size Breakout				
50 & Under	94	18%	24%	57%
51 to 100	41	17%	32%	51%
101 to 500	41	37%	20%	44%
>500	18	17%	33%	50%
Unknown Size	1	0%	0%	100%
Industry Breakout				
Ag & Const	12	25%	0%	75%
Manufacturing	68	34%	25%	41%
Trade, Transp & Whse	15	13%	13%	73%
Prof & Bus Svces	39	18%	33%	49%
Educ & Health Svces	24	13%	25%	63%
Leisure & Hospitality	7	0%	43%	57%
Other	30	13%	30%	57%

Question 14. Are you completing this survey for your entire organization?

	Respondents	Yes	No
Total	333	83%	17%
Size Breakout			
50 & Under	195	89%	11%
51 to 100	47	91%	9%
101 to 500	59	66%	34%
>500	31	71%	29%
Unknown Size	1	0%	100%
Industry Breakout			
Ag & Const	20	90%	10%
Manufacturing	106	86%	14%
Trade, Transp & Whse	26	81%	19%
Prof & Bus Svces	73	81%	19%
Educ & Health Svces	31	77%	23%
Leisure & Hospitality	22	91%	9%
Other	55	80%	20%

SURVEY INSTRUMENT

Please see attached.



5. During 2012, employment at your company

- Increased greatly
 Increased
 Remained the same
 Decreased
 Decreased greatly

6. Through the end of 2013, do you expect that employment at your company will

- Increased greatly
 Increased
 Remained the same
 Decreased
 Decreased greatly

Some firms report a mismatch between workforce skills and available positions.

7. Does your firm have persistently unfilled positions?

- No unfilled needs
 1 to 3
 3 to 5
 5 to 10
 More than 10

List up to five positions that are important to your firm and are difficult for you to fill:

I. Job title/skill (add detail if necessary) _____

Select all relevant difficulties

- Reading/Writing/Verbal Skills
 Math/ Logical Reasoning
 Computer/Technical Skills
 Other _____

II. Job title/skill (add detail if necessary) _____

Select all relevant difficulties

- Reading/Writing/Verbal Skills
 Math/ Logical Reasoning
 Computer/Technical Skills
 Other _____

III. Job title/skill (add detail if necessary) _____

Select all relevant difficulties

- Reading/Writing/Verbal Skills
 Math/ Logical Reasoning
 Computer/Technical Skills
 Other _____

IV. Job title/skill (add detail if necessary) _____

Select all relevant difficulties

- Reading/Writing/Verbal Skills
 Math/ Logical Reasoning
 Computer/Technical Skills
 Other _____

V. Job title/skill (add detail if necessary) _____

Select all relevant difficulties

- Reading/Writing/Verbal Skills
 Math/ Logical Reasoning
 Computer/Technical Skills
 Other _____



8. Have you provided any formal training in the past year or so?

Yes

No



9. Select the type(s) of formal training provided, and how the training was delivered: by an Internal Staff or by a Contract Trainer.

	Training delivered by:	
	Internal Staff	Contract Trainer
Reading, writing, & verbal	<input type="checkbox"/>	<input type="checkbox"/>
Mathematical	<input type="checkbox"/>	<input type="checkbox"/>
Computer Literacy	<input type="checkbox"/>	<input type="checkbox"/>
Information Technology	<input type="checkbox"/>	<input type="checkbox"/>
Supervisory/Management	<input type="checkbox"/>	<input type="checkbox"/>
Quality	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving/decision making	<input type="checkbox"/>	<input type="checkbox"/>
Leadership	<input type="checkbox"/>	<input type="checkbox"/>
Sales	<input type="checkbox"/>	<input type="checkbox"/>
Customer service	<input type="checkbox"/>	<input type="checkbox"/>
Safety	<input type="checkbox"/>	<input type="checkbox"/>
Advanced Manufacturing Skills (i.e. CNC, GD&T, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Skilled Trades (i.e. plumbing, HVAC, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

10. How often did your organization use the following settings for formal training?

	Often	Rarely	Never
Onsite classroom with trained leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual instruction, computer-aided: Online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual instruction, computer-aided: Workstation based	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off site: One or two-day seminar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off site: Specialty multi-session course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off-site: Regular college course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Do you plan to provide any formal training in the next year or so?

Yes

No

12. Select the type of formal training you would like to provide in the next year or so.

Training Needed in the next year or so

	Yes	No
Reading, writing, & verbal	<input type="radio"/>	<input type="radio"/>
Mathematical	<input type="radio"/>	<input type="radio"/>
Computer Literacy	<input type="radio"/>	<input type="radio"/>
Information Technology	<input type="radio"/>	<input type="radio"/>
Supervisory/Management	<input type="radio"/>	<input type="radio"/>
Quality	<input type="radio"/>	<input type="radio"/>
Problem solving/decision making	<input type="radio"/>	<input type="radio"/>
Leadership	<input type="radio"/>	<input type="radio"/>
Sales	<input type="radio"/>	<input type="radio"/>
Customer service	<input type="radio"/>	<input type="radio"/>
Safety	<input type="radio"/>	<input type="radio"/>
Advanced Manufacturing Skills (i.e. CNC, GD&T, etc.)	<input type="radio"/>	<input type="radio"/>
Skilled Trades (i.e. plumbing, HVAC, etc.)	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>

13. What training setting or approach do you desire?

	Highly Desirable				Undesirable
Onsite classroom with trained leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual instruction, computer-aided: Online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual instruction, computer-aided: Workstation based	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off site: One or two-day seminar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off site: Specialty multi-session course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off-site: Regular college course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Are you completing this survey for your entire organization? Yes No

If No, identify the department or division for which you are reporting: _____

15. Which of the following best describes the work of your organization? (check one)
Other _____

16. How many are employed by your firm in Rochester?
 1 - 5 6 - 15 16 - 25 26 - 50 51 - 100 101 - 500 >500

Please provide your contact information if you would like to receive a copy of the report based on the results of this survey.

Name: _____
Title: _____
Firm: _____
Email: _____

17. Are you willing to be contacted for further information? Yes No

Economic Development & Innovative Workforce Services

MONROE COMMUNITY COLLEGE



Monroe Community College

**Economic & Workforce
Development Center**

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