


**NORTH DAKOTA
EMPLOYER SURVEY: 2003**

FORWARD

Acknowledgments

We would like to thank the North Dakota Department of Commerce, especially Leigh Ann Huether for answering all our questions and keeping in contact with us. We would also like to express our appreciation to all people who completed the survey, and helped to make this assessment possible.

North Dakota State Data Center Authors

Dr. Richard Rathge, Director
Jordyn Nikle
Stephanie Noehl

North Dakota State Data Center
Department of Agribusiness and Applied Economics
North Dakota State University
IACC Building Room 424
Fargo, North Dakota 58105-5636
Ph. (701) 231-7980
URL. <http://www.ndsu.edu/sdc>

EXECUTIVE SUMMARY

The purpose of the North Dakota Employer Survey is to provide information regarding employers' attitudes and perceptions of labor issues concerning the growth and development of primary-sector businesses throughout North Dakota. Results of the survey are summarized below.

Survey Results

Current Labor Force

- Nearly 60 percent of organizations employ between one and nine part-time employees, while 30 percent employ between one and nine full-time employees.
- Approximately two-thirds of employers said that at least 75 percent of their employees commute less than 20 miles to get to work, while almost as many employers said between one to 24 percent of their employees commute 30 to 59 miles to work.
- Most employers rated their employees above average in the characteristics of trainability, overall quality, productivity, turnover, attitudes, and absenteeism.
- Nearly 88 percent of respondents indicated that at least one out of every five employees were 25 to 44 years old. Half of respondents indicated that at least one out of every five employees were 45 to 54 years of old. Approximately 36 percent of respondents said that at least one out of every five employees were younger than 25 years old.
- Approximately 69 percent of employers indicated they experienced turnover in the past year, with one-fifth having 10 percent turnover or more. Nearly 61 percent of respondents experiencing turnover indicated that at least 10 percent of the employees who left had been with the company less than two years. The majority of employers said employee's personal choice and personnel issues were among the top reasons for employee turnover.
- Approximately half of employers indicated their organizations are having difficulty finding qualified employees. Of those experiencing difficulty, 46.8 percent said the majority of jobs they have difficulty filling pay at least \$10 an hour. Approximately one-third of employers indicated that lack of applicants' previous experience and inadequate technical skills were to blame for the difficulty finding qualified employees.

Future Labor Force Needs

- Approximately half of employers indicated they do not anticipate having difficulty finding qualified employees over the next five years. However, this means that almost half of employers said they do anticipate difficulty.
- The majority of employers expect to hire, at most, nine employees in all the areas of their organization in the next three years. The most likely hires will be in the areas of managerial, clerical, technical, miscellaneous labor, and operators/assembly. Responses were quite similar for new hires expected in five years.
- While the majority of respondents do not require new employees to have Certification or a Graduate or Professional degree, a majority do require a Technical or Bachelor's degree.

Professional Skills Training

- ❑ Nearly 40 percent of respondents indicated that a majority of employees receive some type of skills training that is either required or recommended by their organization. Three-fourths of those organizations will pay for or provide at least 75 percent of skills training.
- ❑ One in five respondents reported they have a cooperative training arrangement. Of those who have an arrangement, 37 percent claimed that at least 75 percent of arrangements are with local colleges and universities.
- ❑ One-third of employers showed no interest in exploring cooperative training arrangements. Of the two-thirds that did show interest, student internships, custom training, professional skills training for employees, and student co-ops were favored by at least 20 percent of respondents.

TABLE OF CONTENTS

List of Figures iv

List of Tables v

List of Appendix Tables vi

Introduction vii-ix

 Study Objectives vii

 Methodology vii-ix

Survey Results 1-15

 Current Labor Force 2-8

 Future Labor Force Needs 9-12

 Professional Skills Training 13-15

Appendix Tables 16-27

Survey Instrument 28-30

LIST OF FIGURES

Figure 1. Map of North Dakota State Planning Regions	viii
Figure 2. Number of Employees by Work Status	2
Figure 3. Respondents' Ratings of the Quality of Their Employees' Characteristics	3
Figure 4. Proportion of Employee Turnover Experienced in the Past Year	5
Figure 5. Of Respondents Who Experienced Turnover, Proportion of Employees Who Left That Had Been With Company Less Than Two Years	5
Figure 6. Respondents' Primary Reasons for Employee Turnover	6
Figure 7. Respondents' Indications of Amount and Quality of Candidates to Fill a Job Opening	6
Figure 8. Whether Respondents' Organizations Are Having Difficulty Finding Qualified Employees	7
Figure 9. Proportion of Jobs (That Are Difficult to Fill) That Pay at Least \$10 Per Hour	7
Figure 10. Main Reasons Why Respondents' Organizations Are Having Difficulty Finding Qualified Employees (if Organization is Having Difficulty)	8
Figure 11. Whether Respondents Anticipate Having Difficulty Finding Qualified Employees Over the Next Five Years	9
Figure 12. Respondents' Anticipated Employee Turnover Within the Next Three and Five Years	9
Figure 13. Proportion of Staff Receiving Some Type of Skills Training Either Required or Recommended by Respondents' Organizations	13
Figure 14. Proportion of Skills Training That Respondents' Organizations Pay For or Provide (if Organization Requires or Recommends Skills Training)	13
Figure 15. Whether Respondents' Organizations Have a Cooperative Training Arrangement	14
Figure 16. If Respondents' Organizations Have a Cooperative Training Arrangement, Proportion of Those Arrangements With Local Colleges and Universities	14
Figure 17. Cooperative Training Arrangements Respondents' Organizations Would be Interested in Exploring	15

LIST OF TABLES

Table 1. Survey Distribution by North Dakota State Planning Region viii

Table 2. Survey Distribution by North Dakota State County ix

Table 3. Commuting Area From Which Employees Are Drawn 2

Table 4. Respondents' Ratings of the Quality of Their Employees' Characteristics 3

Table 5. Age Groups of Employees 4

Table 6. Number of New Employees Respondents' Organizations Expect to Hire in the Next
Three Years by Area of Employment 10

Table 7. Number of New Employees Respondents' Organizations Expect to Hire in the Next
Five Years by Area of Employment 11

Table 8. Respondents' Minimum Education Requirements for New Employees 12

LIST OF APPENDIX TABLES

Appendix Table 1.	Number of Employees by Work Status	17
Appendix Table 2.	Proportion of Employee Turnover Experienced in the Past Year	17
Appendix Table 3.	Of Respondents Who Experienced Turnover, Proportion of Employees Who Left That Had Been With Company Less Than Two Years	17
Appendix Table 4.	Respondents' Primary Reasons for Employee Turnover	18
Appendix Table 5.	Respondents' Indications of Amount and Quality of Candidates to Fill a Job Opening	18
Appendix Table 6.	Whether Respondents' Organizations Are Having Difficulty Finding Qualified Employees	19
Appendix Table 7.	Proportion of Jobs (That Are Difficult to Fill) That Pay at Least \$10 Per Hour	19
Appendix Table 8.	Main Reasons Why Respondents' Organizations Are Having Difficulty Finding Qualified Employees (if Organization is Having Difficulty)	20
Appendix Table 9.	Type of Technical Skills Applicants Need in Respondents' Organizations	21
Appendix Table 10.	Whether Respondents Anticipate Having Difficulty Finding Qualified Employees Over the Next Five Years	22
Appendix Table 11.	Respondents' Anticipated Employee Turnover Within the Next Three and Five Years	22
Appendix Table 12.	"Other" Areas in Which the Respondents' Organizations Expect to Hire New Employees in the Next <i>Three</i> Years	23
Appendix Table 13.	"Other" Areas in Which the Respondents' Organizations Expect to Hire New Employees in the Next <i>Five</i> Years	23
Appendix Table 14.	Proportion of Staff Receiving Some Type of Skills Training Either Required or Recommended by Respondents' Organizations	24
Appendix Table 15.	Proportion of Skills Training That Respondents' Organizations Pay For or Provide (if Organization Requires or Recommends Skills Training)	24
Appendix Table 16.	Whether Respondents' Organizations Have a Cooperative Training Arrangement	25
Appendix Table 17.	If Respondents' Organizations Have a Cooperative Training Arrangement, Proportion of Those Arrangements With Local Colleges and Universities	25
Appendix Table 18.	Cooperative Training Arrangements Respondents' Organizations Would be Interested in Exploring	26
Appendix Table 19.	Additional Comments	27
Appendix Table 20.	Additional Comments Regarding Specific Questions	27

INTRODUCTION

Study Objectives

This report is the first stage of a two-fold project. The goal of the North Dakota Employer Survey, and thus the first stage, is to understand the current and potential growth and demand for labor force in the state (of primary-sector certified businesses only). The goal of the second stage of the project is to compare the demand for labor to the labor force supply using data from the U.S. Census Bureau. From this, we will be able to assess any labor shortages that may exist in North Dakota.

Methodology

A survey of all primary-sector certified businesses reported by the North Dakota Department of Commerce was conducted during the months of June through October 2003 using a representative sample. The survey design and methodology received Institutional Review Board (IRB) approval for protection of human subjects. A list of primary-sector businesses was obtained from the North Dakota Department of Commerce website, within the business profiles. This website indicated this list was not all-inclusive and data collection is ongoing. The Department of Commerce also states that a company is classified as "primary-sector" if it meets the following guidelines (although the responses must apply to company locations in North Dakota): 1) The company must add value to the product, process, or service; **and** 2) The total percentage response for the market breakdown outside North Dakota and the percentage given for value stream must be equal to or greater than 75 percent; **or** 3) Gross sales outside North Dakota must be greater than or equal to \$500,000.

The survey instrument was designed to address employers' current labor force (such as employees' work status) and future labor force needs (such as employers' anticipation of the difficulty finding qualified employees over the next five years). Included in this latter section was an assessment of skills training needs and partnership arrangements. The one page scannable survey was mailed out to the entire list of 219 primary-sector businesses. The surveys were anonymous, however the county was coded in order to assess the distribution of responses. Three surveys were returned after data collection was terminated, and three surveys returned because businesses were no longer operating, therefore reducing the number from 219 to 213. Approximately three weeks after the initial survey mailing, a second wave of surveys was mailed in an effort to increase response rates. Data collection was terminated in mid-September 2003, with 139 completed surveys. The completed surveys were divided into the eight planning regions of North Dakota. Due the small sample size for each region, survey results were aggregated to the state level for analysis.

Data analysis was conducted in two parts. First, SPSS (Statistical Package for the Social Sciences) was used to calculate frequencies and means represented in the body of the report. These key findings are reported in bullet form at the top of each figure or table. The second part of the analysis was the organization of write-in responses by themes. The write-in items are represented in tabular form in appendix tables.

- Surveys were distributed to primary-sector certified businesses throughout North Dakota. Nearly two-thirds of businesses who received the survey instrument completed it and returned the survey for analysis (65.3 percent). The 139 returned surveys were grouped into eight planning regions. Within regions three, five, and eight more than 70 percent of businesses responded. Region I had the lowest response rate of 33.3 percent. Four respondents did not indicate which county they were located in and are thus referred to as unidentified in the following tables. Due to the small sample size for each region, survey results were aggregated to the state level for analysis (Figure 1, Tables 1 and 2).

Figure 1. Map of North Dakota State Planning Regions

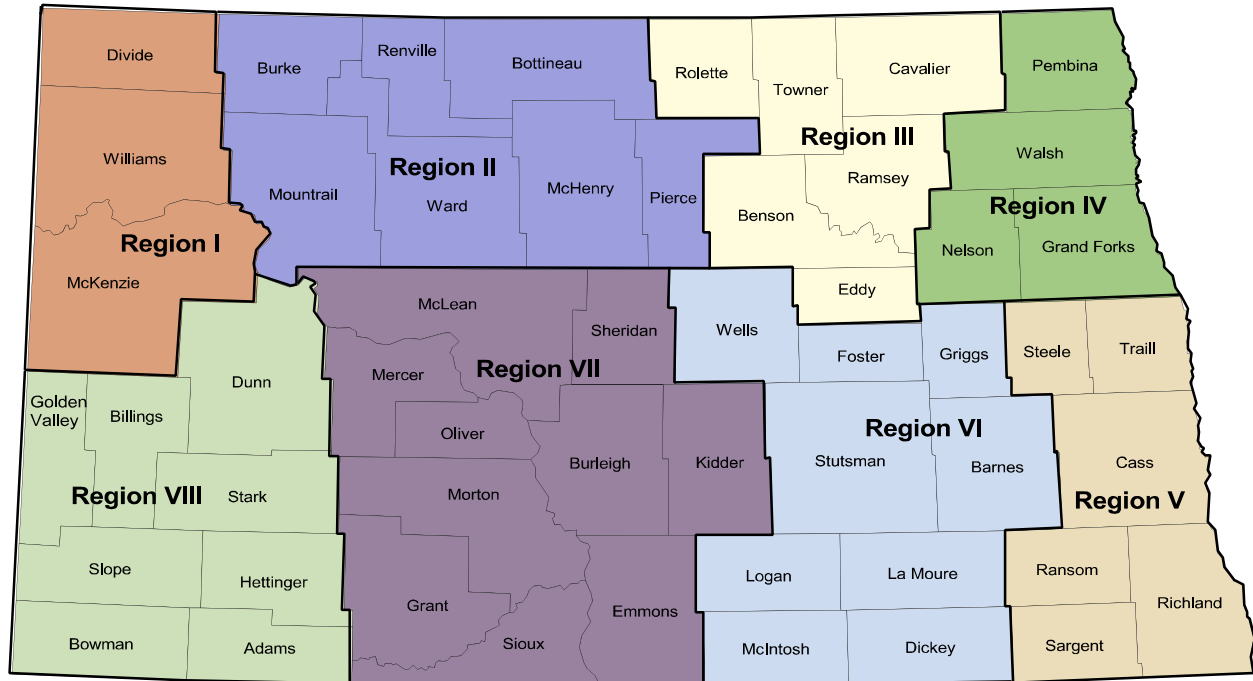


Table 1. Survey Distribution by North Dakota State Planning Region

North Dakota Planning Region	Surveys		
	Number Distributed	Number Received	Response Rate (Percent)
Region I	9	3	33.3
Region II	24	14	58.3
Region III	11	8	72.7
Region IV	23	11	47.8
Region V	84	59	70.2
Region VI	22	12	54.5
Region VII	26	17	65.4
Region VIII	14	11	78.6
Unidentified	NA	4	NA
Total	213	139	65.3

NA: not applicable.

Table 2. Survey Distribution by North Dakota State County

North Dakota County	Surveys		
	Number Distributed	Number Received	Response Rate (Percent)
Adams	2	2	100.0
Barnes	2	1	50.0
Benson	2	2	100.0
Billings	0	0	NA
Bottineau	2	2	100.0
Bowman	1	1	100.0
Burke	0	0	NA
Burleigh	16	10	62.5
Cass	69	48	69.6
Cavalier	1	1	100.0
Dickey	0	0	NA
Divide	1	1	100.0
Dunn	1	1	100.0
Eddy	1	0	0.0
Emmons	0	0	NA
Foster	3	2	66.7
Golden Valley	0	0	NA
Grand Forks	12	4	33.3
Grant	2	1	50.0
Griggs	5	1	20.0
Hettinger	1	1	100.0
Kidder	1	1	100.0
LaMoure	4	3	75.0
Logan	0	0	NA
McHenry	0	0	NA
McIntosh	2	2	100.0
McKenzie	2	0	0.0
McLean	1	0	0.0
Mercer	2	1	50.0
Morton	2	2	100.0
Mountrail	2	2	100.0
Nelson	2	2	100.0
Oliver	1	1	100.0
Pembina	4	3	75.0
Pierce	3	1	33.3
Ramsey	2	1	50.0
Ransom	1	0	0.0
Renville	3	2	66.7
Richland	10	9	90.0
Rolette	3	2	66.7
Sargent	0	0	NA
Sheridan	1	1	100.0
Sioux	0	0	NA
Slope	0	0	NA
Stark	9	6	66.7
Steele	0	0	NA
Stutsman	6	3	50.0
Towner	2	2	100.0
Traill	4	2	50.0
Walsh	5	2	40.0
Ward	14	7	50.0
Wells	0	0	NA
Williams	6	2	33.3
Unidentified	NA	4	NA
Total	213	139	65.3

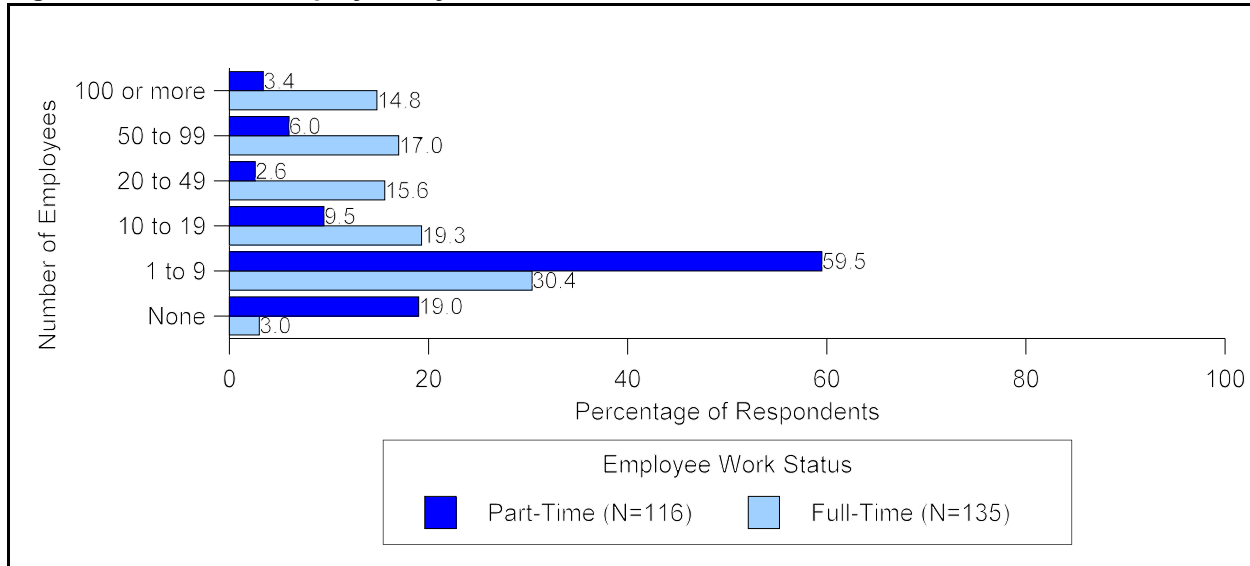
NA: not applicable.

SURVEY RESULTS

CURRENT LABOR FORCE

- Of the employers who responded, nearly 60 percent indicated they have between one and nine part-time employees (59.5 percent). While 30.4 percent of employers have between one and nine full-time employees (Figure 2, Appendix Table 1).

Figure 2. Number of Employees by Work Status



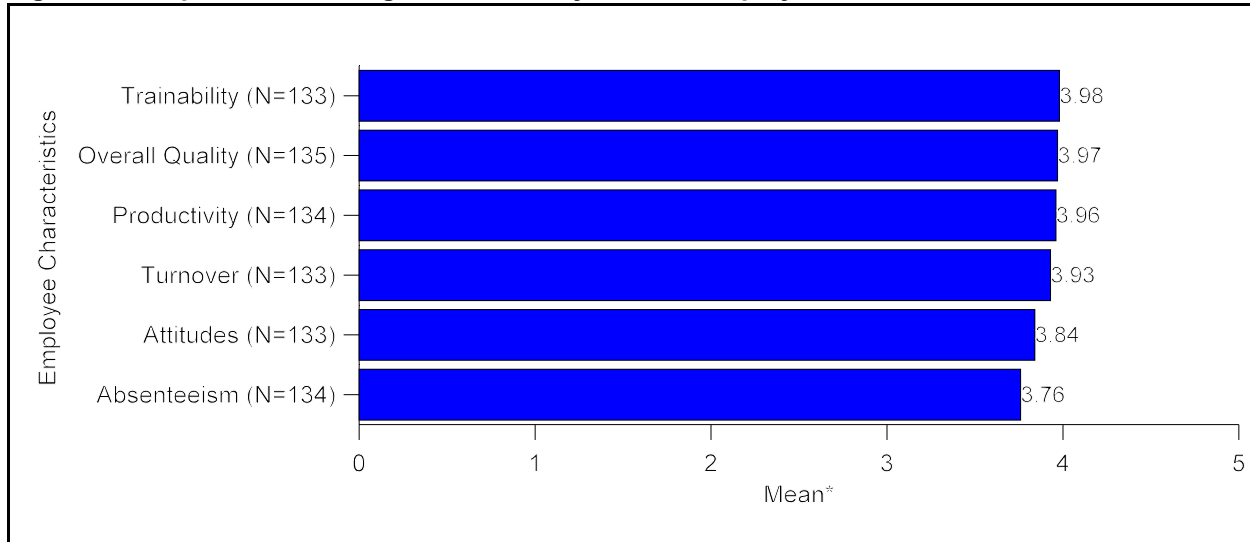
- Nearly two-thirds of employers indicated that 75 percent or more of employees are drawn from a commuting area of less than 20 miles (64.9 percent) (Table 3).

Table 3. Commuting Area From Which Employees Are Drawn

Commuting Area	Respondents by Proportion of Employees									
	None		1 to 24%		25 to 49%		50 to 74%		75% or more	
	#	%	#	%	#	%	#	%	#	%
Less than 20 miles (N=131)	2	1.5	14	10.7	9	6.9	21	16.0	85	64.9
20 to 29 miles (N=76)	17	22.4	37	48.7	17	22.4	4	5.3	1	1.3
30 to 59 miles (N=73)	18	24.7	47	64.4	2	2.7	6	8.2	0	0.0
60 miles or more (N=60)	29	48.3	27	45.0	1	1.7	3	5.0	0	0.0

- Respondents rated employee quality above average in all characteristics. The majority of respondents rated the quality of their employees as above average or excellent in terms of overall quality (74.9 percent), trainability (72.9 percent), productivity (71.7 percent), turnover (71.4 percent), absenteeism (61.9 percent), and attitudes (60.2 percent) (Figure 3, Table 4).

Figure 3. Respondents' Ratings of the Quality of Their Employees Characteristics



*Means were based on a scale of 1 to 5, with 1 being "poor" and 5 being "excellent."

Table 4. Respondents' Ratings of the Quality of Their Employees by Employee Characteristics

Employee Characteristics	Mean	Respondents by Quality Rating									
		Poor 1		Below Average 2		Average 3		Above Average 4		Excellent 5	
		#	%	#	%	#	%	#	%	#	%
Trainability (N=133)	3.98	0	0.0	3	2.3	33	24.8	60	45.1	37	27.8
Overall Quality (N=135)	3.97	0	0.0	1	0.7	33	24.4	70	51.9	31	23.0
Productivity (N=134)	3.96	0	0.0	1	0.7	37	27.6	62	46.3	34	25.4
Turnover (N=133)	3.93	2	1.5	11	8.3	25	18.8	51	38.3	44	33.1
Attitudes (N=133)	3.84	0	0.0	4	3.0	49	36.8	44	33.1	36	27.1
Absenteeism (N=134)	3.76	2	1.5	14	10.4	35	26.1	46	34.3	37	27.6

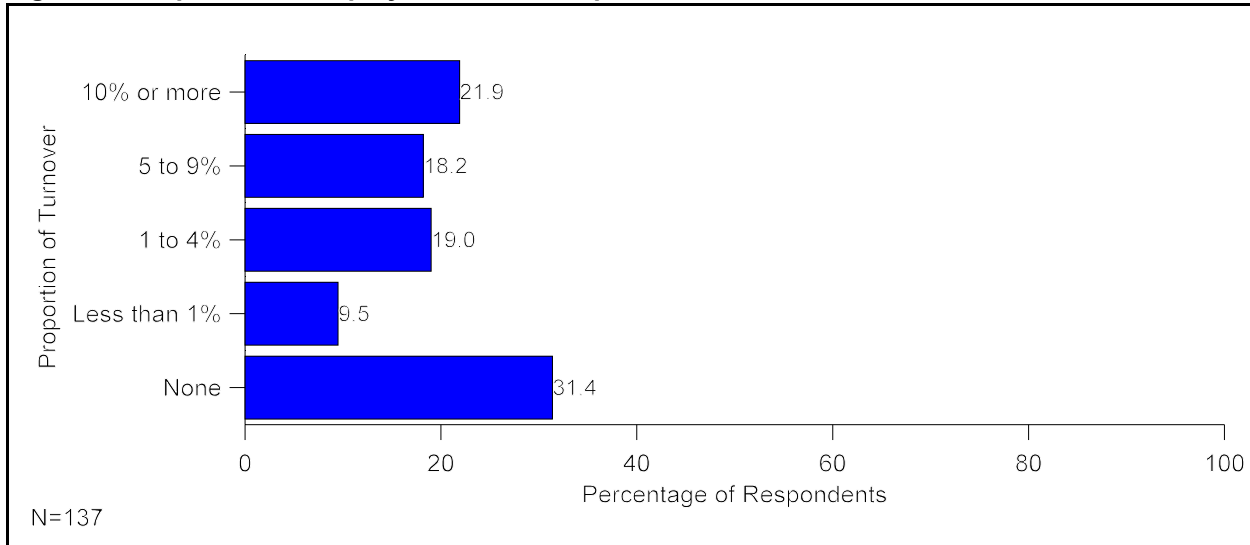
- Approximately 38 percent of respondents indicated at least half of their employees were 25 to 44 years of age (38.3 percent). While older employees (55 years of age or older) capture only a small percentage of the workforce, 82.6 percent of respondents indicated they employ persons ages 55 to 64 and 41.3 percent employ persons 65 years of age or older (Table 5).

Table 5. Age Groups of Employees

Age Group	Respondents by Proportion of Employees													
	None		1 to 4%		5 to 9%		10 to 19%		20 to 29%		30 to 49%		50% or more	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Less than 25 years of age (N=117)	21	17.9	23	19.7	14	12.0	17	14.5	17	14.5	20	17.1	5	4.3
25 to 44 years of age (N=128)	4	3.1	4	3.1	3	2.3	5	3.9	22	17.2	41	32.0	49	38.3
45 to 54 years of age (N=124)	8	6.5	20	16.1	15	12.1	20	16.1	26	21.0	24	19.4	11	8.9
55 to 64 years of age (N=98)	17	17.3	41	41.8	20	20.4	8	8.2	5	5.1	6	6.1	1	1.0
65 years of age or older (N=92)	54	58.7	26	28.3	1	1.1	2	2.2	0	0.0	4	4.3	5	5.4

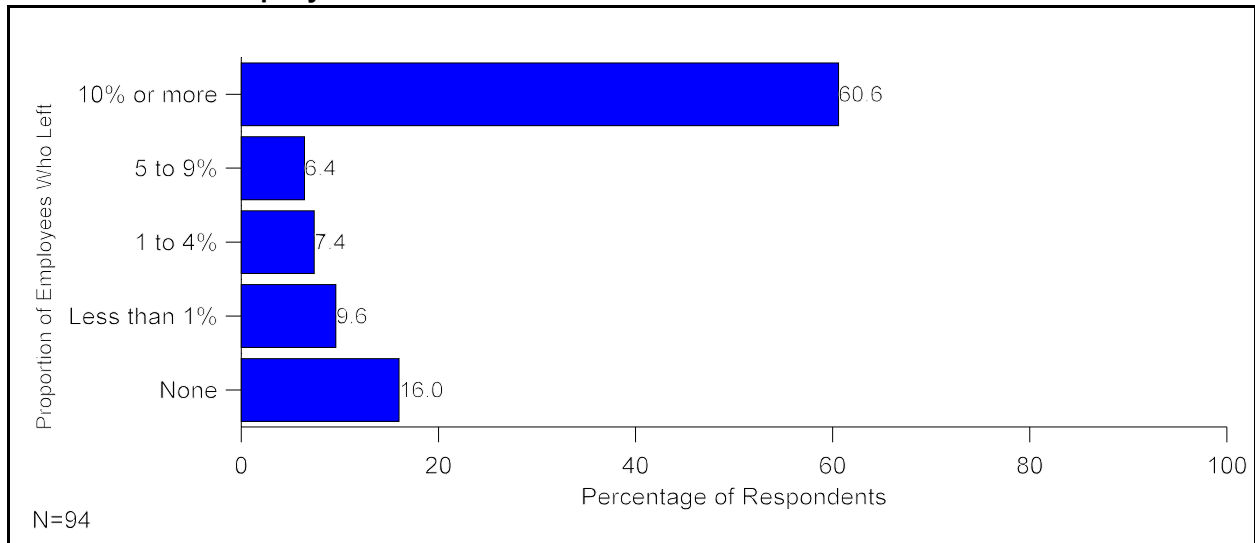
- Approximately 69 percent of employers reported they experienced employee turnover in the past year (68.6 percent). One in five respondents (21.9 percent) had 10 percent turnover or more (Figure 4, Appendix Table 2).

Figure 4. Proportion of Employee Turnover Experienced in the Past Year



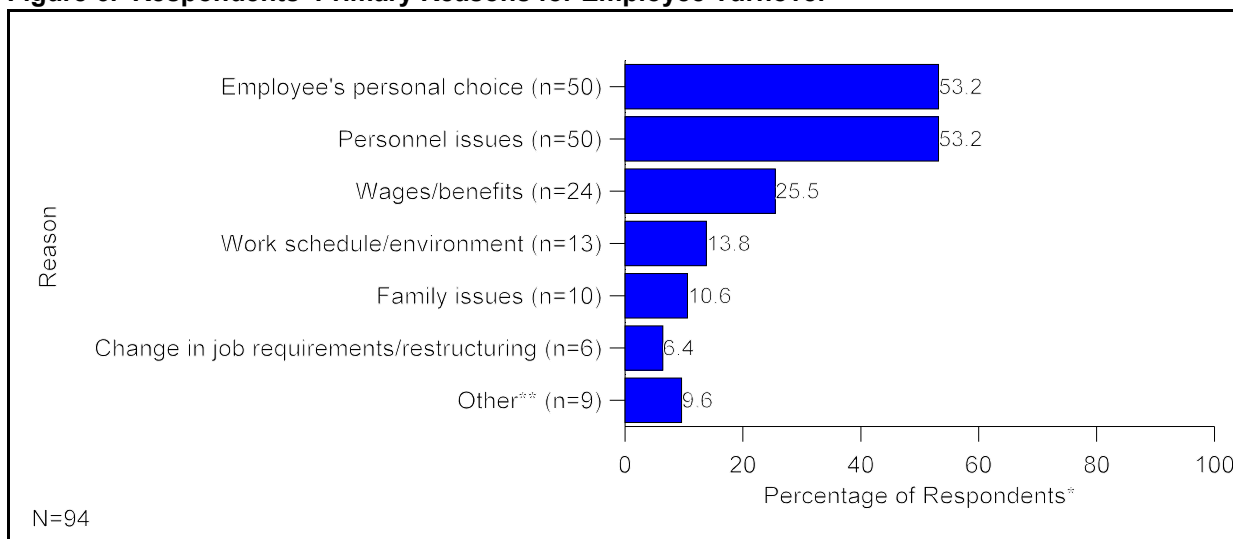
- Nearly 61percent of respondents who had employee turnover in the last year indicated that at least 10 percent of employees who left had been employed with them for less than two years (60.6 percent) (Figure 5, Appendix Table 3).

Figure 5. Of Respondents Who Experienced Turnover, Proportion of Employees Who Left That Had Been With Company Less Than Two Years



- The majority of respondents indicated that the employee's personal choice and personnel issues are the primary top reasons for employee turnover (53.2 percent, each) (Figure 6, Appendix Table 4).

Figure 6. Respondents' Primary Reasons for Employee Turnover



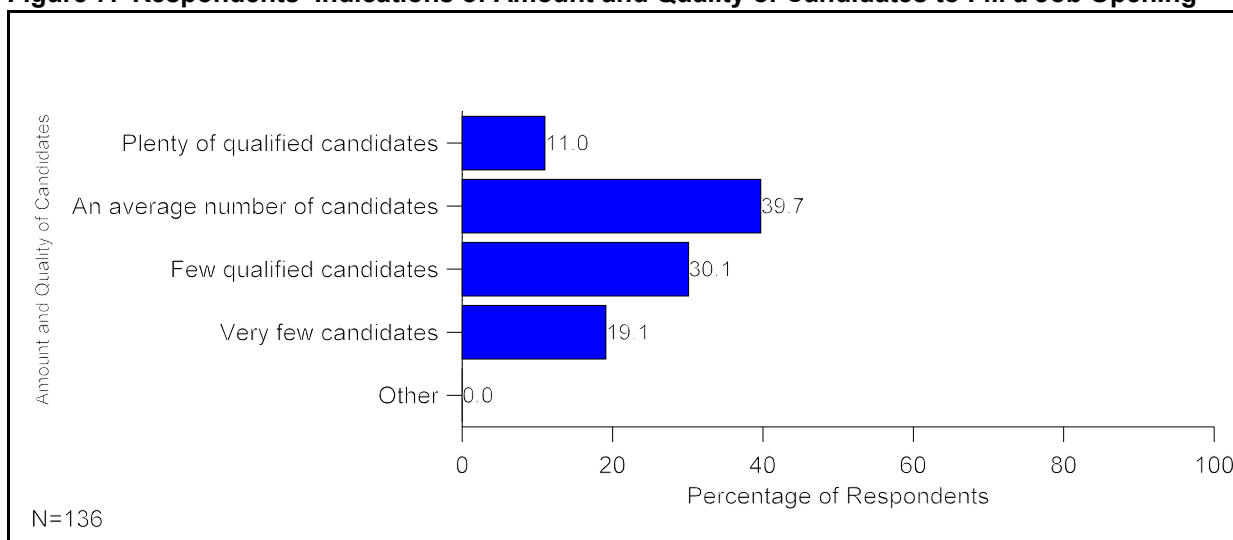
*Percentages do not add to 100.0 due to multiple response; N=94.

**See Appendix Table 4 for "other" reasons for employee turnover.

Note: See Appendix Table 4 for full response categories.

- While half of respondents said there are an average number of candidates or plenty of qualified candidates to fill a job opening (50.7 percent), nearly half of respondents said there are few or very few (49.2 percent) (Figure 7, Appendix Table 5).

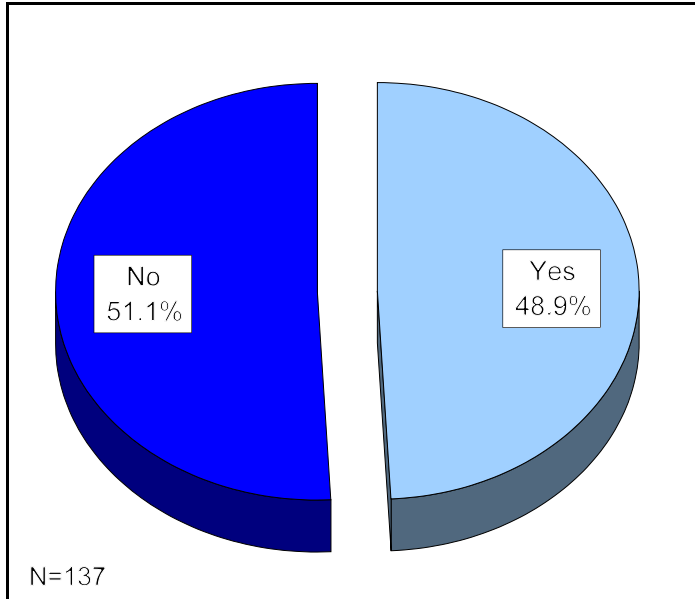
Figure 7. Respondents' Indications of Amount and Quality of Candidates to Fill a Job Opening



Note: See Appendix Table 5 for full response categories.

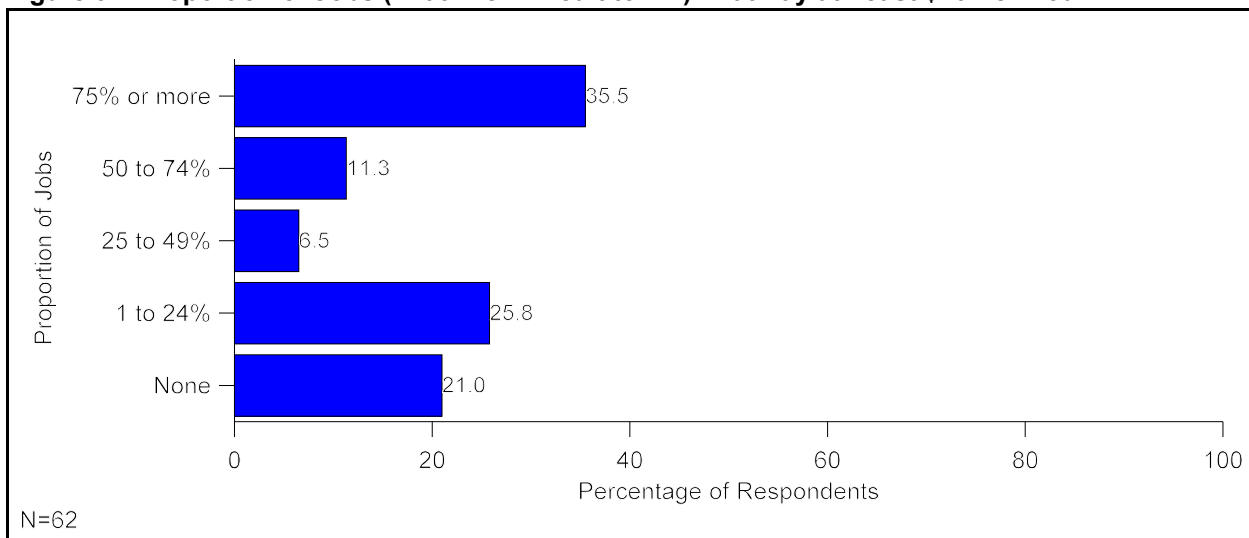
- Though 51.1 percent of respondents indicated they are not having difficulty finding qualified employees for their organization, nearly the same proportion of respondents said they are having difficulty (48.9 percent) (Figure 8, Appendix Table 6).

Figure 8. Whether Respondents' Organizations Are Having Difficulty Finding Qualified Employees



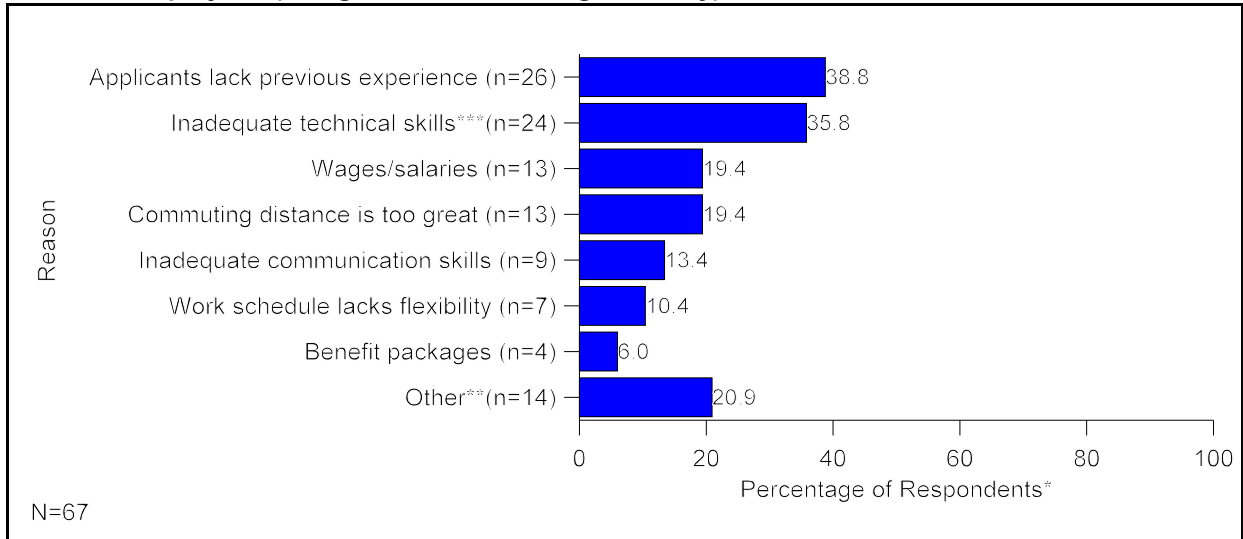
- Nearly half of respondents (46.8 percent) said the majority of jobs they have difficulty filling pay at least \$10 per hour. However, 21 percent of employers said that all of the jobs they have difficulty filling pay less than \$10 per hour (Figure 9, Appendix Table 7).

Figure 9. Proportion of Jobs (That Are Difficult to Fill) That Pay at Least \$10 Per Hour



- More than one-third of respondents indicated the main reasons why their organizations are having difficulty finding qualified employees, if the organizations are having difficulty, are that applicants lack previous work experience and have inadequate technical skills (38.8 percent and 35.8 percent, respectively). Approximately 19 percent said the main reasons for their difficulty is the organizations' wages or salaries and the commuting distance (19.4 percent, each) (Figure 10, Appendix Table 8).

Figure 10. Main Reasons Why Respondents' Organizations Are Having Difficulty Finding Qualified Employees (if Organization is Having Difficulty)



*Percentages do not add to 100.0 due to multiple response; N=67.

**See Appendix Table 8 for "other" reasons organizations are having difficulty finding employees.

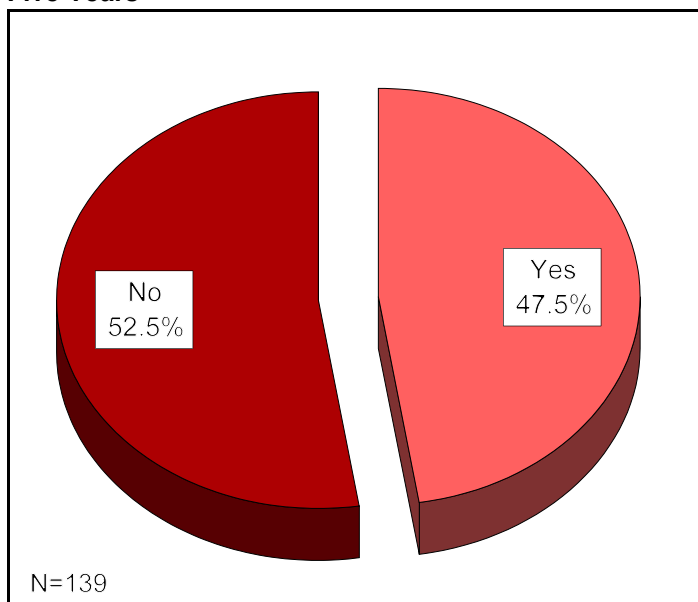
***See Appendix Table 9 for the type of technical skills applicants needed.

Note: See Appendix Table 8 for full response categories.

FUTURE LABOR FORCE NEEDS

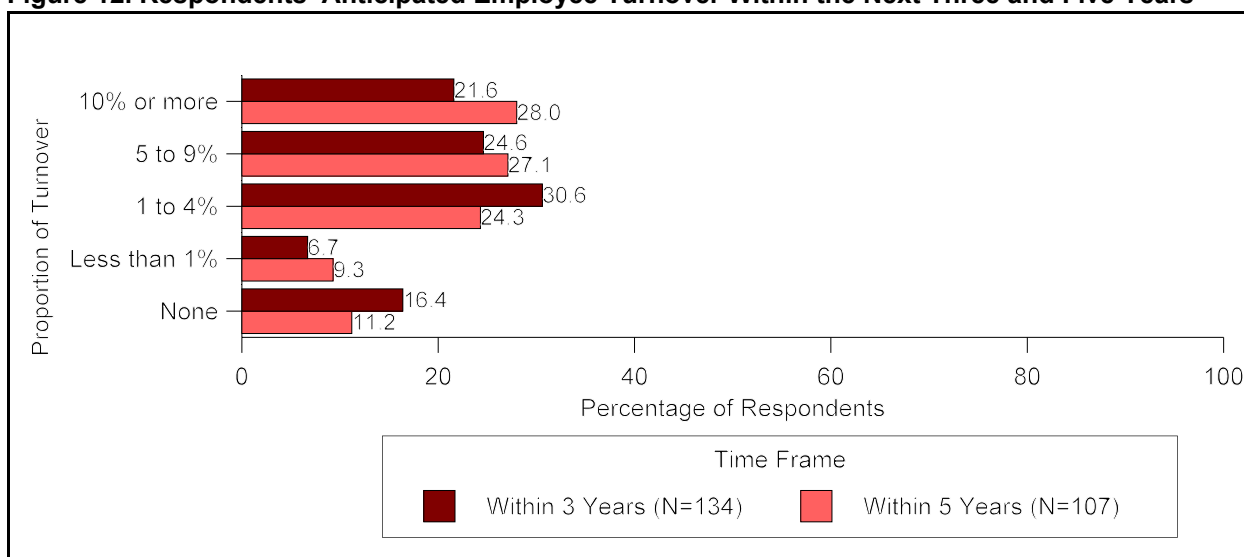
- While 52.5 percent of respondents do not anticipate having difficulty finding qualified employees over the next five years, nearly the same proportion of respondents do anticipate having difficulty (47.5 percent) (Figure 11, Appendix Table 10).

Figure 11. Whether Respondents Anticipate Having Difficulty Finding Qualified Employees Over the Next Five Years



- Nearly half of respondents anticipate that within three years they will experience at least 5 percent employee turnover (46.2 percent). Within five years the majority of respondents (55.1 percent) anticipate at least 5 percent employee turnover (Figure 12, Appendix Table 11).

Figure 12. Respondents' Anticipated Employee Turnover Within the Next Three and Five Years



- Within the next three years the majority of respondents expect to hire up to 19 new employees in the following categories: clerical (61.5 percent), technical (61.0 percent), managerial (60.3 percent), miscellaneous labor (59.5 percent), and operators/assembly (53.7 percent). In contrast, the majority of respondents expect no new hires in information technology (62.7 percent), service (58.9 percent), or professional occupations (56.3 percent) (Table 6).

Table 6. Number of New Employees Respondents' Organizations Expect to Hire in the Next Three Years by Area of Employment

Area of Employment	Respondents by Number of New Employees											
	None		1 to 9		10 to 19		20 to 49		50 to 74		75 or more	
	#	%	#	%	#	%	#	%	#	%	#	%
Information technology (N=110)	69	62.7	37	33.6	1	0.9	3	2.7	0	0.0	0	0.0
Service (N=107)	63	58.9	34	31.8	5	4.7	1	0.9	2	1.9	2	1.9
Professional (N=112)	63	56.3	40	35.7	5	4.5	3	2.7	1	0.9	0	0.0
Managerial (N=121)	47	38.8	69	57.0	4	3.3	1	0.8	0	0.0	0	0.0
Clerical (N=117)	44	37.6	66	56.4	6	5.1	1	0.9	0	0.0	0	0.0
Operators/assembly (N=123)	44	35.8	54	43.9	12	9.8	7	5.7	3	2.4	3	2.4
Technical (N=118)	41	34.7	64	54.2	8	6.8	4	3.4	1	0.8	0	0.0
Miscellaneous labor (N=116)	39	33.6	59	50.9	10	8.6	5	4.3	1	0.9	2	1.7
Other* (N=85)	64	75.3	16	18.8	1	1.2	3	3.5	0	0.0	1	1.2

*See Appendix Table 12 for "other" areas in which the organization expects to hire new employees in the next three years.

- Within the next five years the majority of respondents expect to hire up to 19 new employees in the following categories: technical (61.4 percent), clerical (59.7 percent), managerial (59.3 percent), miscellaneous labor (55.7 percent), and operators/assembly (51.7 percent). In contrast, the majority of respondents expect no new hires in information technology (62.0 percent), service (60.4 percent), and professional occupations (56.5 percent) (Table 7).

Table 7. Number of New Employees Respondents' Organizations Expect to Hire in the Next Five Years by Area of Employment

Area of Employment	Respondents by Number of New Employees											
	None		1 to 9		10 to 19		20 to 49		50 to 74		75 or more	
	#	%	#	%	#	%	#	%	#	%	#	%
Information technology (N=108)	67	62.0	39	36.1	0	0.0	1	0.9	1	0.9	0	0.0
Service (N=106)	64	60.4	34	32.1	4	3.8	1	0.9	1	0.9	2	1.9
Professional (N=108)	61	56.5	40	37.0	5	4.6	1	0.9	1	0.9	0	0.0
Managerial (N=118)	46	39.0	69	58.5	1	0.8	1	0.8	1	0.8	0	0.0
Clerical (N=114)	45	39.5	63	55.3	5	4.4	1	0.9	0	0.0	0	0.0
Miscellaneous labor (N=115)	40	34.8	53	46.1	11	9.6	6	5.2	3	2.6	2	1.7
Operators/assembly (N=120)	39	32.5	50	41.7	12	10.0	13	10.8	2	1.7	4	3.3
Technical (N=114)	38	33.3	63	55.3	7	6.1	3	2.6	2	1.8	1	0.9
Other* (N=82)	70	85.4	9	11.0	1	1.2	0	0.0	1	1.2	1	1.2

*See Appendix Table 13 for "other" areas in which the organization expects to hire new employees in the next five years.

- Approximately one in five respondents require at least 20 percent of new employees to have a Bachelor's degree (21.7 percent) or Technical degree (19.2 percent). The majority of respondents do not require new employees to have a Graduate/Professional degree (69.6 percent) or Certification (64.9 percent) (Table 8).

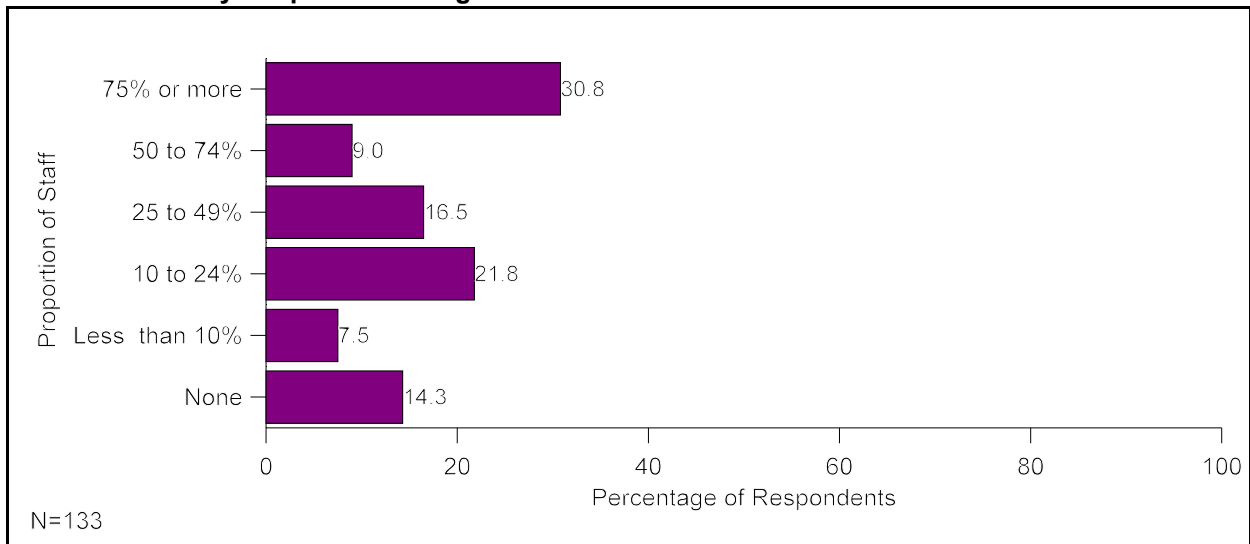
Table 8. Respondents' Minimum Education Requirements for New Employees

Educational Requirements	Respondents by Proportion of New Employees											
	None		1 to 4%		5 to 9%		10 to 19%		20 to 29%		30% or more	
	#	%	#	%	#	%	#	%	#	%	#	%
Certification (N=114)	74	64.9	9	7.9	12	10.5	3	2.6	7	6.1	9	7.9
Technical degree (N=120)	50	41.7	26	21.7	13	10.8	8	6.7	8	6.7	15	12.5
Bachelor's degree (N=124)	53	42.7	28	22.6	11	8.9	5	4.0	7	5.6	20	16.1
Graduate or professional (N=115)	80	69.6	13	11.3	7	6.1	4	3.5	1	0.9	10	8.7

PROFESSIONAL SKILLS TRAINING

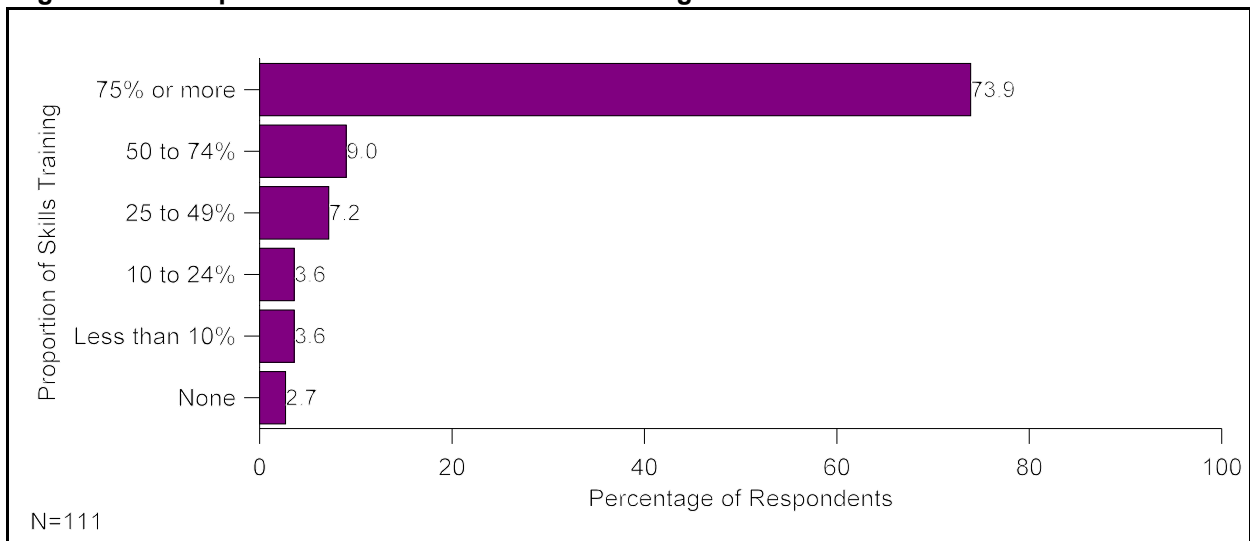
- The majority of respondents (78.1 percent) indicated at least 10 percent of their staff is receiving some type of required or recommended skills training (Figure 13, Appendix Table 14).

Figure 13. Proportion of Staff Receiving Some Type of Skills Training Either Required or Recommended by Respondents' Organizations



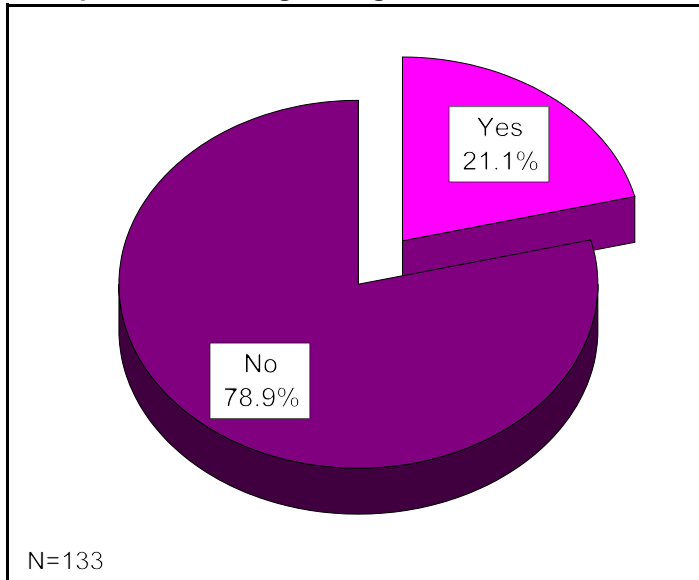
- Nearly three-fourths of respondents indicated their organization pays for or provides at least 75 percent of skills training if it is required or recommended by their company (73.9 percent) (Figure 14, Appendix Table 15).

Figure 14. Proportion of Skills Training That Respondents' Organizations Pay For or Provide (if Organization Requires or Recommends Skills Training)



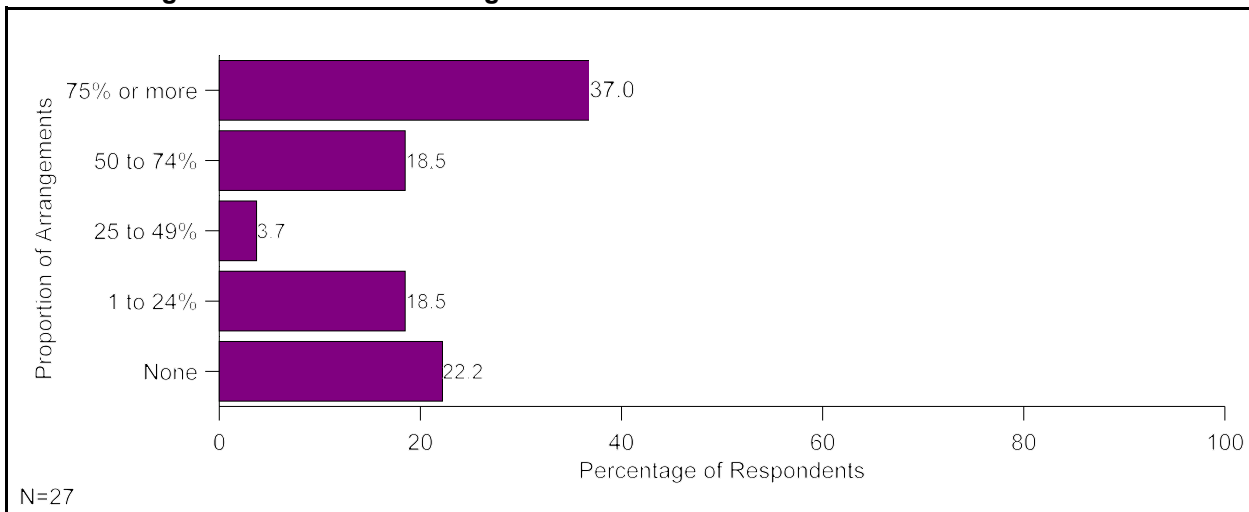
- Approximately one in five respondents indicated they have a cooperative training arrangement (21.1 percent) (Figure 15, Appendix Table 16).

Figure 15. Whether Respondents' Organizations Have a Cooperative Training Arrangement



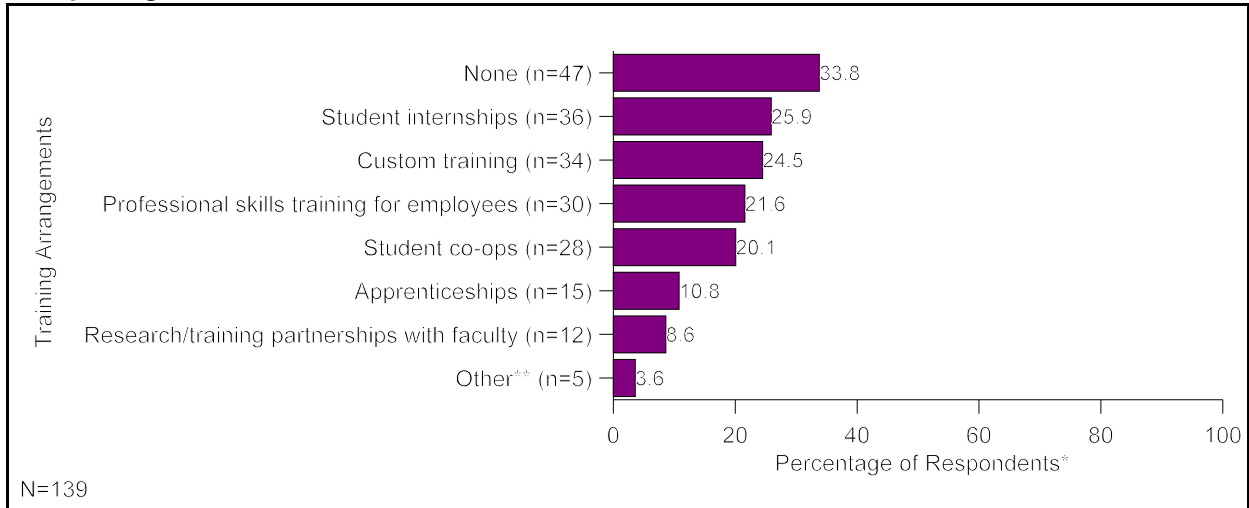
- The majority of respondents with cooperative training arrangements (55.5 percent) indicated that at least half of the arrangements are with local colleges and universities (Figure 16, Appendix Table 17). Caution should be used when interpreting these data due to the small number of responses (N=27).

Figure 16. If Respondents' Organizations Have a Cooperative Training Arrangement, Proportion of Those Arrangements With Local Colleges and Universities



- Approximately two-thirds of respondents showed interest in cooperative training arrangements (66.2 percent). One in four respondents were interested in student internships (25.9 percent) and custom training (24.5 percent), while one in five respondents indicated interest in professional skills training for employees (21.6 percent) and student co-ops (20.1 percent). Respondents showed less interest in apprenticeships and partnerships with faculty (10.8 percent and 8.6 percent, respectively) (Figure 17, Appendix Table 18).

Figure 17. Cooperative Training Arrangements Respondents' Organizations Would be Interested in Exploring



*Percentages do not add to 100.0 due to multiple response; N=139.

**See Appendix Table 18 for a list of "other" cooperative training arrangements organizations would be interested in exploring.

APPENDIX TABLES

Appendix Table 1. Number of Employees by Work Status

Number of Employees	Respondents by Employee Work Status			
	Part-Time		Full-Time	
	#	%	#	%*
None	22	19.0	4	3.0
1 to 9	69	59.5	41	30.4
10 to 19	11	9.5	26	19.3
20 to 49	3	2.6	21	15.6
50 to 99	7	6.0	23	17.0
100 or more	4	3.4	20	14.8
Total	116	100.0	135	100.1

*Percentages do not add to 100.0 due to rounding.

Appendix Table 2. Proportion of Employee Turnover Experienced in the Past Year

Proportion of Turnover	Respondents	
	#	%
None	43	31.4
Less than 1%	13	9.5
1 to 4%	26	19.0
5 to 9%	25	18.2
10% or more	30	21.9
Total	137	100.0

Appendix Table 3. Of Respondents Who Experienced Turnover, Proportion of Employees Who Left That Had Been With Company Less Than Two Years

Proportion of Employees Who Left	Respondents	
	#	%
None	15	16.0
Less than 1%	9	9.6
1 to 4%	7	7.4
5 to 9%	6	6.4
10% or more	57	60.6
Total	94	100.0

Appendix Table 4. Respondents' Primary Reasons for Employee Turnover

Reason	Respondents (N=94)	
	#	%*
Employee's personal choice (retirement, return to school, new career)	50	53.2
Personnel issues (e.g., absenteeism, productivity, conflicts)	50	53.2
Wages/benefits	24	25.5
Work schedule/environment	13	13.8
Family issues (e.g., child care/elder care)	10	10.6
Change in job requirements/restructuring	6	6.4
Other:	9	9.6
<i>Moving/relocation</i>	4	
<i>Seasonal demand</i>	1	
<i>Find they do not have time for extra work</i>	1	
<i>Job not for them</i>	1	
<i>Lazy</i>	1	
<i>Technology update, job eliminated</i>	1	

*Percentages do not add to 100.0 due to multiple response; N=94.

Appendix Table 5. Respondents' Indications of Amount and Quality of Candidates to Fill a Job Opening

Amount and Quality of Candidates	Respondents	
	#	%*
Plenty of qualified candidates to choose from	15	11.0
An average number of candidates to choose from	54	39.7
Few qualified candidates to choose from	41	30.1
Very few candidates to choose from	26	19.1
Other	0	0.0
Total	136	99.9

*Percentages do not add to 100.0 due to rounding.

Appendix Table 6. Whether Respondents' Organizations Are Having Difficulty Finding Qualified Employees

Response	Respondents	
	#	%
Yes	67	48.9
No	70	51.1
Total	137	100.0

Appendix Table 7. Proportion of Jobs (That Are Difficult to Fill) That Pay at Least \$10 Per Hour

Proportion of Jobs	Respondents	
	#	%*
None	13	21.0
1 to 24%	16	25.8
25 to 49%	4	6.5
50 to 74%	7	11.3
75% or more	22	35.5
Total	62	100.1

*Percentages do not add to 100.0 due to rounding.

Appendix Table 8. Main Reasons Why Respondents' Organizations Are Having Difficulty Finding Qualified Employees (if Organization is Having Difficulty)

Reason	Respondents (N=67)	
	#	%*
Applicants lack previous work experience	26	38.8
Technical skills of applicants are not adequate	24	35.8
Wages/salaries offered do not meet employee requirements	13	19.4
Distance for applicant to commute is too great	13	19.4
Communication skills of applicants are not adequate	9	13.4
Work schedule lacks flexibility	7	10.4
Benefit packages offered do not meet employee requirements	4	6.0
Other:	14	20.9
<i>Lack of labor pool</i>	5	
<i>Electrical and mechanical</i>	1	
<i>Labor pool has preconceived notions of the type of work we do</i>	1	
<i>Location</i>	1	
<i>Manufacturing work is not desirable</i>	1	
<i>Physically and emotionally demanding</i>	1	
<i>Seasonality</i>	1	
<i>Shortage in medical field</i>	1	
<i>Work ethic</i>	1	
<i>No specific response</i>	1	

*Percentages do not add to 100.0 due to multiple response; N=67.

Appendix Table 9. Type of Technical Skills Applicants Need in Respondents' Organizations

Response	Respondents (N=24)
Welders	7
Graphic arts/artistic background	3
Electronic technician	2
Sales	2
Carpentry, woodwork	1
CD license	1
CNC lathe	1
Computer design	1
Computer programming	1
Die casting	1
Diesel techs	1
Engineers	1
Fabrication	1
IT	1
Job internet	1
Machinists	1
Mechanics	1
Programming and operation	1
Read a tape measure, read blueprints	1
Tool and die setup	1
No specific response	2

Note: Some respondents provided multiple skills.

Appendix Table 10. Whether Respondents Anticipate Having Difficulty Finding Qualified Employees Over the Next Five Years

Response	Respondents	
	#	%
Yes	66	47.5
No	73	52.5
Total	139	100.0

Appendix Table 11. Respondents' Anticipated Employee Turnover Within the Next Three and Five Years

Proportion of Turnover	Respondents by Time Frame			
	Within 3 Years		Within 5 Years	
	#	%*	#	%*
None	22	16.4	12	11.2
Less than 1%	9	6.7	10	9.3
1 to 4%	41	30.6	26	24.3
5 to 9%	33	24.6	29	27.1
10% or more	29	21.6	30	28.0
Total	134	99.9	107	99.9

*Percentages do not add to 100.0 due to rounding.

Appendix Table 12. “Other” Areas in Which the Respondents’ Organizations Expect to Hire New Employees in the Next *Three* Years

Area of Employment	Respondents (N=85)
Sales	4
Construction	1
Customer service	1
Maintenance	1
Semi-drivers	1
Students	1
Temp	1
Unknown	1
No specific response	74

Appendix Table 13. “Other” Areas in Which the Respondents’ Organization Expect to Hire New Employees in the Next *Five* Years

Area of Employment	Respondents (N=82)
Sales	3
Construction	1
Customer service	1
Maintenance	1
Semi-drivers	1
Unknown	1
No specific response	74

Appendix Table 14. Proportion of Staff Receiving Some Type of Skills Training Either Required or Recommended by Respondents' Organizations

Proportion of Staff	Respondents	
	#	%*
None	19	14.3
Less than 10%	10	7.5
10 to 24%	29	21.8
25 to 49%	22	16.5
50 to 74%	12	9.0
75% or more	41	30.8
Total	133	99.9

*Percentages do not add to 100.0 due to rounding.

Appendix Table 15. Proportion of Skills Training That Respondents' Organizations Pay For or Provide (if Organization Requires or Recommends Skills Training)

Proportion of Skills Training	Respondents	
	#	%
None	3	2.7
Less than 10%	4	3.6
10 to 24%	4	3.6
25 to 49%	8	7.2
50 to 74%	10	9.0
75% or more	82	73.9
Total	111	100.0

Appendix Table 16. Whether Respondents' Organizations Have a Cooperative Training Arrangement

Response	Respondents	
	#	%
Yes	28	21.1
No	105	78.9
Total	133	100.0

Appendix Table 17. If Respondents' Organizations Have a Cooperative Training Arrangement, Proportion of Those Arrangements With Local Colleges and Universities

Proportion of Arrangements	Respondents	
	#	%*
None	6	22.2
1 to 24%	5	18.5
25 to 49%	1	3.7
50 to 74%	5	18.5
75% or more	10	37.0
Total	27	99.9

*Percentages do not add to 100.0 due to rounding.

Appendix Table 18. Cooperative Training Arrangements Respondents' Organizations Would be Interested in Exploring

Training Arrangements	Respondents (N=139)	
	#	%*
None	47	33.8
Student internships	36	25.9
Custom training	34	24.5
Professional skills training for employees	30	21.6
Student co-ops	28	20.1
Apprenticeships	15	10.8
Research/training partnerships with faculty	12	8.6
Other:	5	3.6
<i>Dental background</i>	1	
<i>Internal and National Industry specific</i>	1	
<i>Safety/OSHA regulations</i>	1	
<i>Sales</i>	1	
<i>NA</i>	1	

*Percentages do not add to 100.0 due to multiple response; N=139.

Appendix Table 19. Additional Comments

Response
I am the owner, manager, and sole employee. These questions are not applicable to me.
[Next to the heading "Current Labor Force"] in North Dakota

Appendix Table 20. Additional Comments Regarding Specific Questions

Question Number	Response
Question 1	15 contract workers-part time
Question 1	[Part-time] We are retiring and closing down the business-but still are selling some product on hand.
Question 3	Poor question, 10% of employees account for 90% of absenteeism
Question 5, 5a, 5b, 5c	Poor question, seasonal operations by nature [illegible] turnover
Question 5c	Except new hires 40%-50%
Question 5c	?
Question 7	100%
Question 8-5 years	?
Question 9	Crystal ball is foggy
Question 10	Annually
Question 11	100%

Note: Some respondents provided multiple comments.

SURVEY INSTRUMENT

Dear Business Owner/Manager:

- * Please note that Question 1 is the only question that asks for specific information regarding part-time and full-time employees. All other questions ask for information regarding employees **overall** (i.e., part-time and full-time combined).
- * Please fill in the ovals **completely**, using a #2 pencil, or black or blue ink. Thank you for taking the time to help us with this important study.

CURRENT LABOR FORCE

1. How many FULL-TIME and PART-TIME employees do you currently have? (Please fill in the oval that corresponds to the number of employees in each category).

	100 or more
	50 to 99
	20 to 49
	10 to 19
	1 to 9
	None
Full-time.....	(1) (2) (3) (4) (5) (6)
Part-time.....	(1) (2) (3) (4) (5) (6)

2. What proportion of employees do you draw from each of the following commuting areas?

	75% or more
	50 to 74%
	25 to 49%
	1 to 24%
	None
Less than 20 miles.....	(1) (2) (3) (4) (5)
20 to 29 miles.....	(1) (2) (3) (4) (5)
30 to 59 miles.....	(1) (2) (3) (4) (5)
60 miles or more.....	(1) (2) (3) (4) (5)

3. On a scale from 1 to 5, with 1 being POOR and 5 being EXCELLENT, please rate the QUALITY of your employees.

	Excellent
	Above average
	Average
	Below average
	Poor
Turnover.....	(1) (2) (3) (4) (5)
Absenteeism.....	(1) (2) (3) (4) (5)
Attitudes.....	(1) (2) (3) (4) (5)
Trainability.....	(1) (2) (3) (4) (5)
Productivity.....	(1) (2) (3) (4) (5)
Overall.....	(1) (2) (3) (4) (5)

4. What proportion of your current workforce is in each of the following age groups?

	50% or more
	30 to 49%
	20 to 29%
	10 to 19%
	5 to 9%
	1 to 4%
	None
Less than 25 years.....	(1) (2) (3) (4) (5) (6) (7)
25 to 44 years.....	(1) (2) (3) (4) (5) (6) (7)
45 to 54 years.....	(1) (2) (3) (4) (5) (6) (7)
55 to 64 years.....	(1) (2) (3) (4) (5) (6) (7)
65 years or older.....	(1) (2) (3) (4) (5) (6) (7)

5. How much employee turnover did you experience in the past year?

- (1) None (SKIP TO QUESTION 5c)
- (2) Less than 1%
- (3) 1 to 4%
- (4) 5 to 9%
- (5) 10% or more

5a. What proportion of the employees who left were there less than 2 years?

- (1) None
- (2) Less than 1%
- (3) 1 to 4%
- (4) 5 to 9%
- (5) 10% or more

5b. What are the primary reasons for the employee turnover? (Select all that apply)

- Personnel issues (e.g., absenteeism, productivity, conflicts)
- Wages/benefits
- Work schedule/environment
- Family issues (e.g., child care/elder care)
- Change in job requirements/restructuring
- Personal choice (retirement, return to school, new career)
- Other: _____

5c. How much employee turnover do you anticipate within the next 3 and 5 years?

Within 3 years

- (1) None
- (2) Less than 1%
- (3) 1 to 4%
- (4) 5 to 9%
- (5) 10% or more

Within 5 years

- (1) None
- (2) Less than 1%
- (3) 1 to 4%
- (4) 5 to 9%
- (5) 10% or more

6. When your organization has an opening, would you say it has...

- (1) Plenty of qualified candidates to choose from
- (2) An average number of candidates to choose from
- (3) Few qualified candidates to choose from
- (4) Very few candidates to choose from
- (5) Other: _____

7. Is your organization having difficulty finding qualified employees?

- (1) Yes
- (2) No (SKIP TO QUESTION 7c)

7a. Of the jobs you have difficulty filling, what proportion pay at least \$10/hour?

- (1) None
- (2) 1 to 24%
- (3) 25 to 49%
- (4) 50 to 74%
- (5) 75% or more

7b. Please indicate the main reason(s) your organization is having difficulty finding qualified employees.
(Select all that apply)

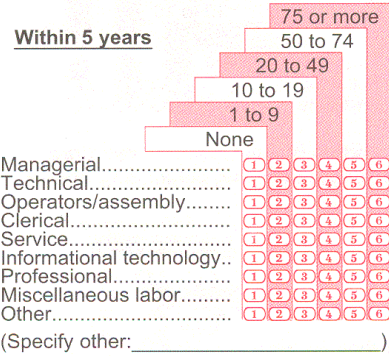
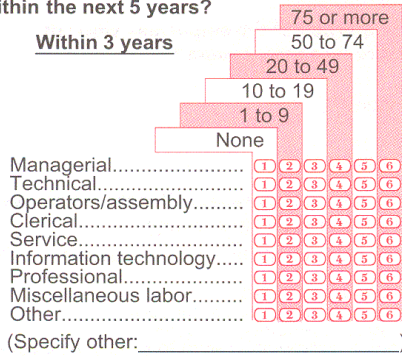
- Communication skills of applicants are not adequate
- Distance for applicant to commute is too great
- Work schedule lacks flexibility
- Applicants lack previous work experience
- Technical skills of applicants are not adequate → What types of technical skills are needed? _____
- Benefit packages offered do not meet employee requirements
- Wages/salaries offered do not meet employee requirements
- Other: _____

7c. Do you anticipate having difficulty finding qualified employees over the next five years?

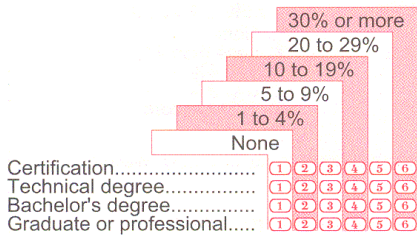
- 1 Yes
- 2 No

FUTURE LABOR FORCE NEEDS

8. How many new employees do you expect to hire in each of the following areas within the next 3 years and within the next 5 years?



9. What proportion of your new employees will need to have each of the following educational requirements?



10. What proportion of your staff receives some type of skills training either required or recommended by your organization?

- 1 None (SKIP TO QUESTION 12)
- 2 Less than 10%
- 3 10 to 24%
- 4 25 to 49%
- 5 50 to 74%
- 6 75% or more

11. What proportion of the skills training that your staff receives is paid for or provided by your company?

- 1 None
- 2 Less than 10%
- 3 10 to 24%
- 4 25 to 49%
- 5 50 to 74%
- 6 75% or more

12. Does your organization have a cooperative training arrangement?

- 1 Yes → 12a. What proportion is with local colleges and universities?
- 2 No

- 1 None
- 2 1 to 24%
- 3 25 to 49%
- 4 50 to 74%
- 5 75% or more

13. Which of these cooperative training arrangements would you be interested in exploring? (Select all that apply)

- Custom training
- Student co-ops
- Student internships
- Professional skills training for employees
- Research/training partnerships with faculty
- Apprenticeships
- None
- Other: _____

THANK YOU!