

Minot and the Surrounding Area Labor Availability Study

A collaboration of:

North Dakota Department of Commerce

University of North Dakota – Social Science Research Institute

Job Service North Dakota

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Major Findings

Summary of Findings

Site developers, economic planners, and others will often refer to the unemployment rate to determine if there is an available labor force. While a consistent measure across the country, it is incomplete. Being unemployed is defined as not working but actively seeking work. However, some individuals who are working would be interested in changing jobs or occupations, others would want additional hours, and some are planning to find work within the year. These individuals are not normally counted as part of the available labor pool in an area. In 2002, the state of North Dakota, in cooperation with local partners, funded a study to measure the available labor pool.

Within a 60-mile radius surrounding Minot, there exists an available labor force of 21,160 individuals, or approximately 32 percent of the adult population. The majority of these individuals are currently working, but would be willing to consider alternative jobs. The labor force (those employed and unemployed) is estimated to be 55 percent of the adult population, or 35,660 individuals.

Characteristics of the Potential Job Seekers

	<u>Number*</u>	<u>Percentage</u>
Potential Job Seekers**	21,160	32.4
Actively Seeking Work	2,870	4.4
Planning to Look Within the Year	1,570	2.4
Interested in Changing Jobs	12,340	18.9
Interested in Additional Jobs	5,680	8.7
Those Discouraged From Looking	2,160	3.3

*Rounded to the nearest 10.

**The numbers will not total to the Potential Job Seekers, as duplication is possible.

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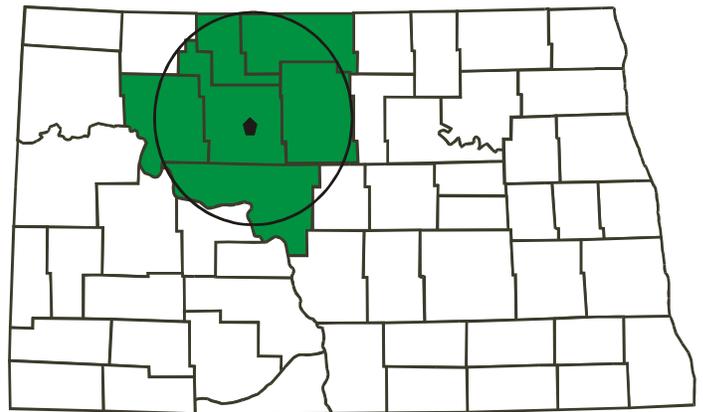
Introduction

Scope of the Study:

During the spring of 2002, the state of North Dakota sponsored a study to identify the available labor force in those communities and counties that provided matching funds to conduct a labor availability survey. This was done in collaboration with the Workforce Development Division of the North Dakota Department of Commerce, Job Service North Dakota, and the Social Research Institute (SSRI) at the University of North Dakota.

The purpose of the survey was to explore the potential labor force in and around the city of Minot, located in the north central portion of the state. A questionnaire was designed to identify the characteristics and the size of the potential labor force in that area. A telephone survey was conducted by SSRI, which contacted 1,557 respondents.

The core area for this survey included respondents from Bottineau, McHenry, McLean, Mountrail, Renville, and Ward Counties within a 60 mile radius of Minot. These areas were included because of established commuting patterns in and around the city of Minot. The area highlighted in the adjacent map indicates the geographic area included in this report.



Location of Minot and the Area Studied

Potential Job Seekers

Definitions of Potential Job Seekers:

The study focused only on adults 18 years and older. That focus is different from the defined labor force used by the U.S. Department of Labor and the Census Bureau, which use 16 years and older. In order to be considered unemployed, one has to be not working and actively seeking work. However, the potential labor pool includes not only those who are actively seeking work, but also those who are working and may be interested in working for another firm. In this survey, the identified Potential Job Seekers (PJSs) were divided into five categories:

1. The unemployed.

Those who are 18 and older, unemployed and actively seeking work.

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2. Individuals who plan to seek a job within the next year.

Those who are not working, not seeking work, but plan to look for work within the year.

3. People who are working, but would be willing to change jobs.

Using Bureau of Labor Statistics definitions, these people would be classified as employed. This group includes those individuals who are presently working who may or may not be actively seeking work, but would consider changing employers.

4. People who are currently working and are willing to take an additional job.

Like the previous group, these individuals would be defined as employed. However, they would be willing to work an additional job and, as such, are part of the available labor pool for different businesses.

5. Individuals who are discouraged and do not look for work.

For the purpose of this study, the discouraged worker is defined as someone who is not working, is not actively seeking work, or planning to find a job within the next year, but would accept a job if it met their minimum acceptable wage requirements.

Population Characteristics

General Population Characteristics:

Based on the 2000 Census, Ward County has slightly more females (50.2 percent) than males (49.8 percent). The adult population 25 and older is well educated, with 87.4 percent having completed high school, which is higher than the national average (80.4 percent). Compared to the nation, the population of Ward County is more mobile, with 49.1 percent of the population residing in a different residence than the one where they lived in 1995. Nationally, 46 percent of the population moved from their 1995 residence and lived elsewhere in 2000. The median age for the general population in Ward County is 32.4.

According to the Minot Area Development Corporation, the labor market area for Minot extends beyond the borders of Ward County. Using data from the 2000 Census, there are 65,309 individuals 18 years or older who lived in the survey area.

Sample Population Characteristics:

The sample gathered for the area around Minot closely mirrors the general population characteristics. The sample reported slightly more female respondents than males, 51.4 to 48.6 percent. This is within the acceptable range of plus or minus 5 percent. In addition, the unemployment rate reported by the study was 4.4 percent, which is slightly higher than the reported unemployment rate of 4.0 percent for Ward County. The median age for the respondents was 49 years of age.

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Employment Status:

According to the survey, about 50 percent of the adult population, or approximately 32,790 individuals, are currently working for wages in the Minot labor market area.

Active Labor Force:

The active labor force includes those who are working (32,790), and the 2,870 who are actively seeking work, or a labor force of 35,660.

Inactive Labor Force:

The inactive labor force includes those who are planning to look for work within the next year (1,450), as well as those who are discouraged from seeking work (2,160). These individuals are not included in the unemployment rate, as they are not working or actively seeking work.

Characteristics of the Employed Labor Force

Employed Workers:

The 32,790 employed in the area work an average of 40.0 hours a week. Those involved in farming and agricultural production were most likely to work longer hours than any other group. Those involved in clerical and sales or miscellaneous occupations worked the fewest average hours, 36.0 hours per week. The following table reports the average hours worked by occupational group.

Average Hours Worked by Occupations	
<u>Occupational Group</u>	<u>Average Hours Worked</u>
Professional, Technical and Managerial	39.8
Clerical and Sales	36.0
Service	38.0
Farming and Agricultural Production	53.8
Processing	48.2
Machine Trades	43.5
Benchwork	42.9
Structural Work	46.5
Miscellaneous	36.0

Age Distribution:

The median age for those who are working is 43 years of age. The youngest occupational group is comprised of those involved in service occupations with a median age of 38. The oldest group, with a median age of 50, consisted of those who worked processing occupations.

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Median Age of Occupations

<u>Occupational Group</u>	<u>Median Age</u>
Professional, Technical and Managerial	44
Clerical and Sales	44
Service	38
Farming and Agricultural Production	42
Processing	50
Machine Trades	45
Benchwork	45
Structural Work	40
Miscellaneous	46

Educational Attainment:

The level of education of those currently working is impressive. The typical worker has at least some college, but this varies as some occupations have differing levels of required education/training. Those in the occupational group of professionals, technicians, and managers have obtained the highest level of education. Typically, these individuals have a college degree. A lower level of formal training is found in three groups: processing occupations, benchwork jobs, and farming and agricultural production workers. Individuals who are working in these occupations typically have a high school education.

Current Occupation:

The largest occupational group for the Minot labor area consists of professional, technical, and managerial workers. The following table shows the number of employed by occupational group.

Occupations of Those Employed

<u>Occupational Group</u>	<u>Number*</u>	<u>Percentage*</u>
Professional, Technical and Managerial	12,760	38.9
Clerical and Sales	7,020	21.4
Service	4,230	12.9
Farming and Agricultural Production	2,230	6.8
Processing	560	1.7
Machine Trades	980	3.0
Benchwork	1,480	4.5
Structural Work	1,380	4.2
Miscellaneous	<u>2,160</u>	<u>6.6</u>
Total	32,800	100.0

* Rounded data

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Trained in Another Occupation:

Thirty-eight percent of those currently employed are working in an occupation different from the one in which they received training. Twenty-two percent of those who are working in clerical and sales were trained as professionals, technicians, and managers. In addition, 34 percent of the professional, technicians, and managers were working in occupations other than the one in which they were trained.

Longevity With Current Employer:

As a group, processing occupations have the longest tenure with their current employer, with an average of 12 years. Those involved in benchwork occupations have been working for their employer for 6 years.

Current Wage:

Overall, the typical wage for this area is \$10.50 per hour. As an occupational group, the highest typical wage is found among machine trade workers with a wage of \$14.50 per hour. Professional, technical, and managerial occupations have the largest range of wage. The lowest paid occupational group was involved with service occupations showing a median wage of \$8.75 per hour.

Wages of Those Employed

<u>Occupational Group</u>	<u>Average/Mean</u>	<u>Typical/Median</u>
Professional, Technical and Managerial	\$14.56	\$11.85
Clerical and Sales	10.69	9.00
Service	10.59	8.75
Farming and Agricultural Production	14.16	11.00
Processing	13.61	12.30
Machine Trades	20.00	14.50
Benchwork	14.55	12.50
Structural Work	15.01	14.00
Miscellaneous	13.28	12.80
Total	\$13.27	\$10.50

Job Service North Dakota conducts other surveys that collect information on wages. The city of Minot is part of the West Central portion of the state. The wages reported in the labor availability survey are consistent with the wage information gathered from employers.

Current Commute Distance:

The occupational group likely to commute the furthest distance consists of those people involved in structural work occupations with an average commute of 24 miles. The group that makes the shortest commute was made up of those who work in services with a commute of 9 miles. The furthest distance reported to travel to work was 63 miles.

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Characteristics of the Available Labor Force

Available Workers:

Those individuals looking for work, planning to seek work, or would consider a different or alternative job were defined as being part of the available labor force. According to the survey, there were 21,160 individuals available for work in the Minot labor area.

Work Status:

The majority of the available labor force is currently employed. Of the available labor force, 69 percent or 14,560 individuals are currently working. The majority of the available labor force (75 percent) is interested in working at jobs on a year-round basis. About 860 people, or 44 percent, of those who are working part-time (defined as less than 30 hours) would like to work on a full-time basis.

Additional Employment:

According to the survey, about 5,680 individuals are willing to take on an additional job. Some of these would also be willing to consider a different employer, depending on wages, benefits and working conditions.

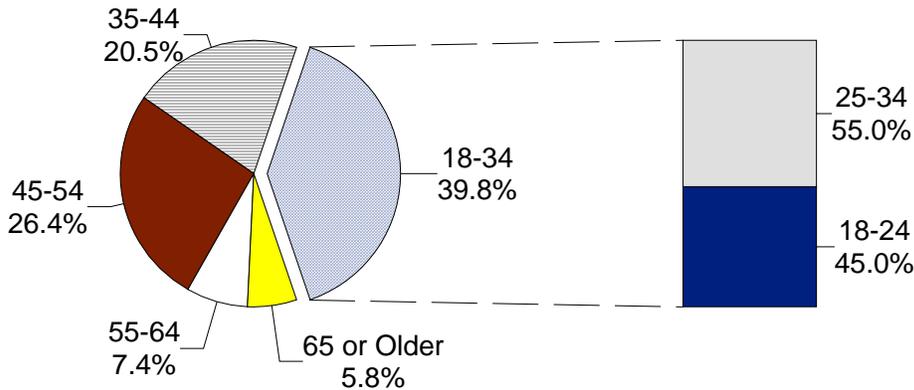
Available for Work in the Next Year:

Approximately 1,570 individuals reported that they plan to seek work within the next 12 months.

Age Distribution:

Of the available labor force, 8,420 individuals, or 40 percent, are under the age of 35.

Age Distribution of Respondents



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Educational Attainment:

Almost 25 percent of the available labor force are graduates of a post-secondary program of study.

Educational Attainment of the Available Labor Force

<u>Educational Attainment</u>	<u>Number*</u>	<u>Percentage*</u>
Below HS Diploma or GED	2,030	9.6
HS Diploma or GED	7,510	35.5
Some College/Vo-Tech	6,410	30.3
Vo-Tech Graduate	870	4.1
College Degree	3,470	16.4
Advanced Degree	870	4.1
Total	21,160	100.0

*Rounded Data

Last Held Occupation:

The following table shows the estimated number of individuals who reported their current job classification.

Current Occupation of the Available Labor Force

<u>Occupational Group</u>	<u>Number*</u>	<u>Percentage*</u>
Professional, Technical and Managerial	3,820	37.2
Clerical and Sales	2,180	21.2
Service	1,090	10.6
Farming and Agricultural Production	630	6.1
Processing	260	2.5
Machine Trades	500	4.9
Benchwork	670	6.5
Structural Work	380	3.7
Miscellaneous	750	7.3
Total	10,280	100.0

* Rounded data

Occupations Trained In:

Over 6,280 people were trained in an occupation other than the one they are, or have been, working in. Approximately 2,260 of these individuals were trained in fields requiring specialized training, including health and medicine, education, clerical, managerial, repair and mechanical technicians.

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Minimum Acceptable Wage:

Lowest Acceptable Hourly Wage of Those Currently Working

<u>Occupation</u>	<u>Minimum Acceptable Average Wage</u>
Professional, Technical, and Managerial	\$9.98
Clerical and Sales	8.94
Service	9.39
Farming and Agricultural Production	8.60
Processing	10.69
Machine Trades	13.58
Benchwork	13.06
Structural Work	9.47
Miscellaneous	9.96

The median minimum acceptable wage was \$8.50 per hour.

Maximum Distance Willing to Commute:

Those involved in benchwork are willing to commute the furthest distance, with a median of 60 miles. The typical distance for the available labor force was around 30 miles or 30 minutes.

Benefits Desired:

The most desired benefit for potential workers was health insurance, followed by a retirement plan, and then paid vacations. This pattern was consistent for all occupational groups.

Main Factor Influencing Decision to Change Jobs:

The single most important factor to entice someone to work at a different job other than his or her current occupation was pay, with 47 percent citing that factor.

Work Schedule Preference:

The majority of the available labor force would like to have some ability to have a flexible schedule at work. They would prefer to work 40 hours a week and to work during the daytime.

Education and Training Willingness by Age Distribution:

The available labor force is well educated, with 43 percent receiving training within the last three years. The type of training included: basic skills, product or sales information, interpersonal skills, how to be better organized, quality improvement, technical skills, and safety.

The available labor force is willing to be trained, if needed, for a different job. However, they would prefer to have on-the-job training, in part to take care of their existing financial responsibilities. Generally speaking, the longer the training, the fewer people who would consider that training. The most popular form of training desired is on-the-job training, with over 60 percent of the available labor force opting for that method.

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Type of Company Desired by the Available Labor Force:

The majority of the available labor force would like to work for a business involved in computer technology and information processing. The least desired firm is one involved in machine trades. The following table reports the desirability of different types of companies.

Industry That is of Interest to the Available Labor Force

<u>Industry</u>	<u>Percentage of Available Labor</u>
Information Computer Technology	66.7
Health Services	46.1
Engineering	38.4
Manufacturing	46.1
Business Services Operation	61.4
Machine Trades or Construction	36.4

The desirability of a particular firm is dependent on the skill sets of the available labor force. For example, of those who have a college degree or higher, about 68 percent, would like to work for an information technology firm. This same group would be the least willing to work for a firm involved in machine trades.

Interest for Specific Industries by Educational Attainment of Available Labor (Percent)

<u>Industry</u>	<u>No HS Diploma</u>	<u>HS Graduate or (GED)</u>	<u>Some Schooling Post HS</u>	<u>Vo-Tech Graduate</u>	<u>4 Yr College Degree or Higher</u>
Information/Computer Technology	63.0	66.5	74.7	70.0	67.7
Health Services	54.3	46.8	47.9	40.0	47.0
Engineering	52.2	41.6	41.1	50.0	26.0
Manufacturing	54.3	54.9	47.9	45.0	33.0
Business Services Operation	63.0	62.4	69.9	45.0	60.0
Machine Trades or Construction	45.7	46.8	34.9	45.0	21.0

Technical Skills of the Available Labor Force:

The available labor force has a variety of skills it can bring to the workplace. The typical manager had two years of experience.

Less than half of the available labor force, 48 percent, reported having experience with office suite software.

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Self-Reported Proficiency of Various Computer/IT Skills (Percent)

<u>Technical Skill</u>	<u>Not Skilled</u>	<u>Some Skills</u>	<u>Average</u>	<u>Above Average</u>	<u>Very Skilled</u>	<u>No Answer</u>
Word Processing	2.2	4.4	15.8	14.3	11.1	52.3
Using Spreadsheets	6.1	9.7	17.6	9.7	4.6	52.3
Using Databases	8.1	11.3	15.0	7.7	5.5	52.3
Using Desktop Publishing	13.5	8.9	13.9	6.1	5.3	52.3
Computer Programming	5.3	3.4	2.4	1.2	1.2	86.5
HTML Programming	5.5	2.2	3.2	1.6	0.8	86.7
Installing Computer Hardware	1.0	1.8	5.3	2.8	2.6	86.5

Characteristics of the Discouraged Workforce

Characteristics of the Discouraged:

According to the survey, about 2,160 people would be defined as discouraged workers. A discouraged worker is someone who does not have a job, is not looking for a job, and is not planning to look for a job, but knows what pay would encourage them to become a part of the labor force.

The median age of the discouraged workers is 49, which is older than those who are currently working. The most common barrier for these people is difficulty with childcare, with 7 percent reporting this to be a barrier to work.

The discouraged workers, as a group, have lower levels of education when compared to other members of the available labor force. Approximately 20 percent of the discouraged are graduates of a post-secondary program of study. If training were required, 68 percent would like on-the-job training.

This group does not have a great deal of experience as employees, with 65 percent not having worked for an employer within the past two years.

The minimum acceptable wage for the discouraged is \$11.15 per hour. The discouraged workers were more likely to want to work year round. The average distance the discouraged worker is willing to travel to work is 30 miles.

Benefits Desired:

Discouraged workers desire health insurance, followed by retirement contributions and paid vacations. Flexible scheduling was also highly desired.

The industry that appealed to the discouraged workers was information technology, which is similar to that of the rest of the available labor force. However, engineering firms were the least desired by members of the discouraged work force.

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Percentage of Discouraged Workers Interested by Industry

<u>Industry</u>	<u>Percentage</u>
Information/Computer Technology	54.9
Health Services	33.3
Engineering	25.5
Manufacturing	51.0
Business Services Operation	41.2
Machine Trades or Construction	39.2

How the Study was Done

A workgroup which consisted of members from the Economic Development Association of North Dakota, local economic development professionals, Job Service North Dakota, the North Dakota Department of Commerce and the North Dakota Workforce Development Council developed and approved a research instrument that was standardized for statewide use, to measure the availability of labor and underemployment. This instrument measured the adult population in and around Minot, North Dakota. The telephone survey included Ward, Bottineau, McHenry, McLean, Mountrail, and Renville Counties.

The study is able to report with 95% confidence, at a level of plus or minus 5%, the characteristics of the available labor for the area around the city of Minot.

To obtain a representative sample for the Minot area, a random selection of respondents within households was used during the data collection process. The survey of adults (18 or older) performed by the SSRI was conducted by telephone. A random sample of 10-digit telephone numbers was generated by SSRI for the primary and secondary labor market areas utilizing Genesys Sampling Systems Random Digit Dialing (RDD) in-house software. The list from which the numbers were drawn included only actual North Dakota area codes and telephone bands (that is, blocks of 1,000 consecutive numbers within North Dakota) that had contained a threshold of active residential phone numbers.

Overall, SSRI called 6,058 numbers in the Minot area to determine whether it was a working number in contrast to a nonworking number, a commercial/business line, a cell phone, data or fax line, or a non-primary household telephone. SSRI staff classified 3,587 of these numbers as working residential numbers eligible for interview and successfully interviewed 1,557 of those households. Throughout the study, completed interviews were monitored to determine whether the samples matched population estimates in terms of gender and the age distribution of North Dakota residents age 18 and older.

All interviews were conducted at the SSRI facilities by trained interviewers with supervision and random monitoring for technique and adherence to established procedures. Interviews were conducted afternoons and evenings on weekdays and weekends.

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The most conservative approach of calculating a response rate for telephone surveys is the method adopted by the Council of American Survey Research Organizations (CASRO). The CASRO method uses the known status of portions of the sample that are contacted to impute characteristics of portions of the sample that were not reached. The CASRO method of calculating the response rates for primary labor market (Minot labor area) yields a completion rate of 66.6 percent.