

Fargo and the Surrounding Area Labor Availability Study

A collaboration of:

The Cass County Economic Development Corporation

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 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 force.

In the area surrounding Fargo, there exists a potential labor force of 42,140 individuals, or approximately 27 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 60 percent of the adult population, or 93,920 individuals.

Characteristics of the Potential Job Seekers

	<u>Number*</u>	<u>Percentage</u>
Potential Job Seekers**	42,140	26.7
Actively Seeking Work	3,950	2.5
Planning to Look Within the Year	3,630	2.3
Interested in Changing Jobs	30,150	19.1
Interested in Additional Jobs	11,680	7.4
Those Discouraged From Looking	3,150	2.0

*Rounded to the nearest 10.

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

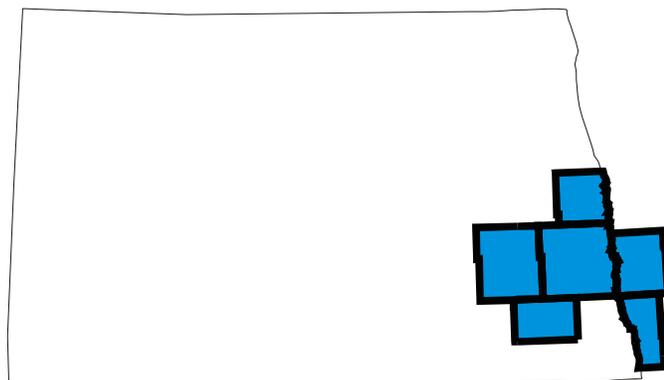
Introduction

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 Cass County, located in the eastern 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, who contacted 1,586 respondents.

The core area for this survey was Cass County. In addition to Cass County, the area also included respondents from Barnes, Ransom, and Traill Counties in North Dakota and Clay and Wilkin Counties in Minnesota. These areas were included because of established commuting patterns to and from Cass County. The area highlighted in the adjacent map indicates the geographic area included in this report.



Area Studied

Potential Job Seekers

Definitions of Potential Job Seekers:

At the time of the study, Job Service North Dakota reported the unemployment rate for Cass County at 2.5 percent. 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 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 who are 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, Cass County has slightly more males (50.1 percent) than females (49.9 percent). The adult population 25 and older is well educated, with almost 91 percent having completed high school, which is higher than the national average (80.4 percent). Compared to the nation, the population of Cass County is more mobile, with 53 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 Cass County is 31.

According to the Cass County Economic Development Corporation, the labor market area for Cass County extends beyond its borders. Using the area identified from the 2000 Census, there are 157,840 individuals, 18 years or older, who lived in the area.

Sample Population Characteristics:

The sample gathered for the Cass County labor area closely mirrors the general population characteristics. The sample reported slightly more female respondents than males, 51 to 49 percent. This is within the acceptable range of plus or minus 5 percent. In addition, the unemployment rate, defined as those who are actively seeking work reported by the study, was 2.5 percent, which is consistent with the reported unemployment rate of 2.4 percent for Cass County. The median age for the respondents was 47 years of age.

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Employment Status:

According to the survey, about 57 percent of the adult population, or 89,970 individuals, are currently working for wages in the Cass County labor market area.

Active Labor Force:

The active labor force includes those who are working, 89,970 individuals, and the 3,950 who are actively seeking work, or a labor force of 93,920.

Inactive Labor Force:

The inactive labor force includes those who are planning to look for work within the next year (3,630 individuals), as well as those who are discouraged from seeking work (3,150 individuals). 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 89,970 employed in the area work an average of 39.8 hours a week. Those involved in farming and agricultural production were most likely to work longer hours than any other group. Those involved in service occupations (examples would include protective services, janitors, cooks, and maintenance workers) worked the fewest average hours, 34.0 hours per week. This indicates a larger percentage of part-time workers in service occupations. 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	40.6
Clerical and Sales	35.7
Service	34.0
Farming and Agricultural Production	53.6
Processing	44.0
Machine Trades	44.3
Benchwork	37.3
Structural Work	50.0
Miscellaneous	44.3

Age Distribution:

The median age for those who are working is 42 years of age. The youngest occupational group is comprised of those involved in structural work with a median age of 37 years of age. Examples of structural work occupations would include: occupations in metal fabrication, welders, painting, plastering, heavy construction equipment, and related construction trades. The oldest group, with a median age of 46, consisted of those working in agricultural production.

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Median Age of Occupations

<u>Occupational Group</u>	<u>Median Age</u>
Professional, Technical, and Managerial	43
Clerical and Sales	41
Service	39
Farming and Agricultural Production	46
Processing	38
Machine Trades	42
Benchwork	44
Structural Work	37
Miscellaneous	44

Educational Attainment:

The level of education of those currently working is impressive. The typical worker has 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, this group has a college degree. The lowest level of formal training is found in three groups: service occupations, farming and agricultural production, and benchwork occupations. Individuals who are working in these occupations typically have a high school education.

Current Occupation:

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

Occupations of Those Employed

<u>Occupational Group</u>	<u>Number*</u>	<u>Percentage*</u>
Professional, Technical, and Managerial	38,510	42.8
Clerical and Sales	19,070	21.2
Service	13,050	14.5
Farming and Agricultural Production	3,420	3.8
Processing	3,330	3.7
Machine Trades	2,610	2.9
Benchwork	2,070	2.3
Structural Work	3,420	3.8
Miscellaneous	4,410	4.9
Total	89,890	100.0

* Rounded data

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Trained in Another Occupation:

Thirty-six percent of those currently employed are working in an occupation different from the one in which they received training. Fifty-six percent of those who are working in clerical and sales were trained as professionals, technicians, and managers. In addition, 29 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, the benchwork workers (those involved in the assembly and/or repair of products) have the longest tenure with their current employer, with a median of slightly more than 6 years. Those involved in clerical and sales, service occupations (which include food services, cleaning services, and protective services) have been working for their employer typically 4 years.

Current Wage:

Overall, the typical wage for this area is \$11.50 per hour. As an occupational group, the highest median (typical) wage is found among structural workers (skilled tradesmen and construction workers) with a wage of \$16.00 per hour. The professional, technical, and managerial as a group, had the widest range of wages. The lowest paid occupational group was involved with service occupations (\$8.00 per hour).

Wages of Those Employed

<u>Occupational Group</u>	<u>Average/Mean</u>	<u>Typical/Median</u>
Professional, Technical, and Managerial	\$16.94	\$13.75
Clerical and Sales	10.56	9.75
Service	9.55	8.00
Farming and Agricultural Production	9.61	9.00
Processing	13.52	12.38
Machine Trades	13.96	14.50
Benchwork	13.61	12.00
Structural Work	16.95	16.00
Miscellaneous	<u>16.18</u>	<u>15.80</u>
Total	\$13.71	\$11.50

Job Service North Dakota conducts other surveys that collect information on wages. The Cass County labor market area would be considered the Fargo-Moorhead Metropolitan Statistical Area. When comparing wages, the wages reported in the labor availability survey are consistent with the wage information gathered from employers.

Current Commute Distance:

The occupational groups likely to commute the furthest distance are those people involved in the processing occupations, with an average of 22 miles. The group that makes the shortest commute was made up of those involved in farming and agricultural production. The furthest distance reported to travel to work was over 60 miles.

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 42,140 individuals available for work in the Cass County area.

Work Status:

The majority of the available labor force is currently employed. Of the available labor force, 77 percent or 32,290 individuals are currently working. The majority of the available labor force (79 percent) is interested in working at jobs on a year-round basis. About 42 percent, or 3,290 people are currently working part-time (defined as less than 30 hours) but would like to work on a full-time basis.

Additional Employment:

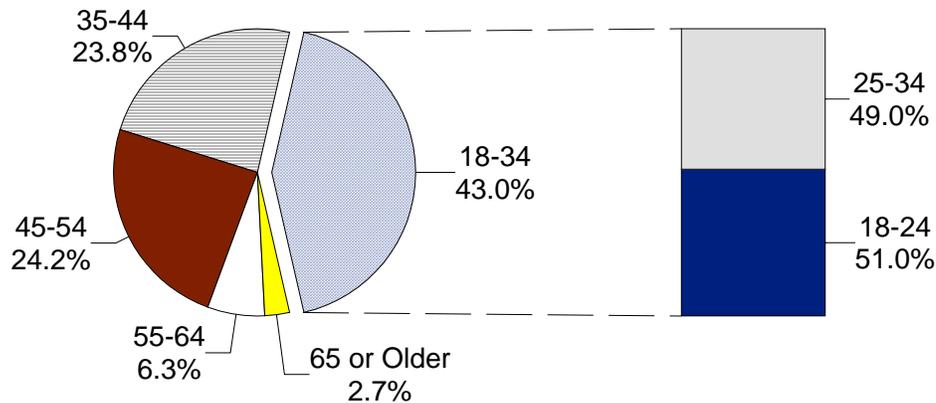
According to the survey, 11,680 individuals are willing to take on an additional job. Some of these would also be willing to consider a different employer, depending on wages, benefits and working conditions.

Available for Work in the Next Year:

Approximately 3,600 individuals reported that they plan to seek work within the next 12 months.

Age Distribution:

Of the available labor force, over 18,140 individuals are under the age of 35.



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Educational Attainment:

Over 25 percent of the available labor force has a college degree or higher.

Educational Attainment of the Available Labor Force

<u>Educational Attainment</u>	<u>Number*</u>	<u>Percentage*</u>
Below HS Diploma or GED	3,460	8.2
HS Diploma or GED	12,810	30.4
Some College/Vo-Tech	11,800	28.0
Vo-Tech Graduate	3,030	7.2
College Degree	9,060	21.5
Advanced Degree	1,980	4.7
Total	42,140	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	13,420	38.7
Clerical and Sales	8,250	23.8
Service	5,310	15.3
Farming and Agricultural Production	1,110	3.2
Processing	1,420	4.1
Machine Trades	900	2.6
Benchwork	1,010	2.9
Structural Work	1,420	4.1
Miscellaneous	1,840	5.3
Total	34,680	100.0

* Rounded data

Occupations Trained In:

Over 19,000 people were trained in an occupation other than the one they are, or have been, working in. Approximately 15,000 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	
Occupation	Minimum Acceptable Average Wage
Professional, Technical, and Managerial	\$11.38
Clerical and Sales	9.04
Service	7.40
Farming and Agricultural Production	9.13
Processing	10.36
Machine Trades	11.57
Benchwork	9.72
Structural Work	13.01
Miscellaneous	10.93

The median minimum acceptable wage for the available labor was \$9.00 per hour.

Maximum Distance Willing to Commute:

Those involved in the benchwork occupations are willing to commute the furthest distance, with a median of over 37 miles or 30 minutes. The typical distance for the available labor force was around 30 miles/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 46 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 41 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 most common training was technical skills, with almost one-quarter of the available labor force reporting that they had undergone this type of training.

This group 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 56 percent of the available labor force opting for that method.

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Type of Company Desired by the Available Labor Force:

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 of Interest to the Available Labor Force

<u>Industry</u>	<u>Percentage of Available Labor</u>
Information Computer Technology	69.1
Health Services	46.5
Engineering	38.2
Manufacturing	38.7
Business Services Operation	61.3
Machine Trades or Construction	34.4

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 71 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 manufacturing or construction.

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	71.4	64.1	84.1	61.5	71.2
Health Services	42.9	61.5	56.8	46.2	42.3
Engineering	57.1	46.2	36.4	69.2	36.5
Manufacturing	71.4	53.8	50.0	53.8	26.9
Business Services Operation	28.6	61.5	84.1	69.2	55.8
Machine Trades or Construction	71.4	41.0	50.0	53.8	26.9

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 over 4 years of experience.

Over 53 percent of the available labor force reported having experience with office suite software.

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	2.0	4.6	13.0	19.1	14.7	46.6
Using Spreadsheets	6.2	10.1	17.6	10.5	9.0	46.6
Using Databases	7.7	10.3	14.1	11.6	9.7	46.6
Using Desktop Publishing	9.9	10.3	16.0	7.7	9.5	46.6
Computer Programming	9.0	2.2	2.4	2.0	1.8	82.6
HTML Programming	8.1	2.9	3.5	0.4	2.4	82.6
Installing Computer Hardware	3.1	3.7	3.3	3.5	3.7	82.6

Characteristics of the Discouraged Workforce

Characteristics of the Discouraged:

According to the survey, about 3,150 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 52; this is older than those who are currently working. The most common barrier for these people to seek work is being retired or working on a family farm. Childcare and lack of job skills are not considered barriers to this group, 12 percent and 4 percent respectively.

The discouraged workers, as a group, have similar levels of education when compared to other members of the available labor force. Less than 13 percent have not completed high school, while 25 percent of the discouraged have a college degree or higher. If training is were required, almost 55 percent would like on-the-job training.

This group has not been employed for some time. Over 71 percent of the discouraged workers have no experience working for an employer within the last two years.

The minimum acceptable wage for the discouraged is \$7.50 per hour. The discouraged workers were more likely to desire seasonal work that was counter-cyclical to that of farming. The average distance the discouraged worker is willing 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, the health industry was less desired by members of the discouraged work force.

Percentage of Discouraged Workers Interested by Industry

<u>Industry</u>	<u>Percentage</u>
Information/Computer Technology	68.8
Health Services	25.0
Engineering	28.1
Manufacturing	41.9
Business Services Operation	45.2
Machine Trades or Construction	32.3

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 underemployment and the availability of labor. This instrument measured the adult population in and around areas of the city of Fargo. The telephone survey included all of Cass, Barnes, Ransom, and Traill Counties in North Dakota and Clay and Wilkin Counties in Minnesota.

The study is able to report with 90% confidence, at a level of plus or minus 5%, the characteristics of the available labor for Fargo.

To obtain a representative sample for the Fargo area, a random selection of respondents within households was used during the data collection process. The survey of adults (18 or older) performed by 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 6,321 numbers in the Cass County labor area to determine whether each was a working number in contrast to a nonworking number, a commercial/business line, a cell phone, data or fax line, or a nonprimary household telephone. SSRI staff classified 2,764 of these numbers as working residential numbers eligible for interview and successfully interviewed 1,586 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 (Cass County) yields a completion rate of 57.4 percent.