

Valley City and Barnes County Labor Availability Study

A collaboration of:

The Valley City/Barnes County 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 pool.

In the area surrounding Barnes County, there exists a potential labor force of 11,800 individuals, or approximately 28 percent of the adult population. The majority of these individuals are currently working, but would be willing to consider alternative jobs.

Characteristics of the Potential Job Seekers		
	<u>Number*</u>	<u>Percentage</u>
Potential Job Seekers**	11,800	27.7
Actively Seeking Work	1,320	3.1
Planning to Look Within the Year	900	2.1
Interested in Changing Jobs	8,100	19.0
Interested in Additional Jobs	3,710	8.7
Those Discouraged From Looking	590	1.3

*Rounded to the nearest 10.

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

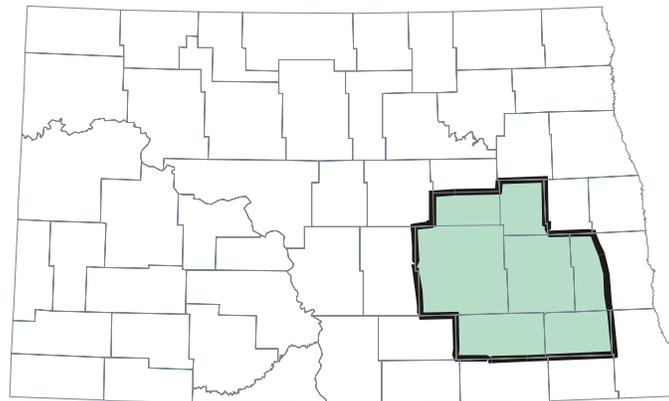
Introduction

Scope of the Study:

During the spring of 2002, the state of North Dakota sponsored a study that examined the available labor in those communities and counties that provided matching funds to conduct a labor availability survey. This was done in collaboration with the North Dakota Department of Commerce, Workforce Development Division, 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 Barnes 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 the University of North Dakota SSRI, who contacted 1,302 respondents.

The core area for this survey was Barnes County. In addition to Barnes County, the area also included respondents from Griggs, LaMoure, Stutsman, and Ransom Counties. The study also included the western portion of Cass County. These areas were included because of established commuting patterns to and from Barnes 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 Barnes County at less than 4 percent. The study focused only on adults 18 years and older. That focus is different from the defined labor force used by the US Department of Labor and Census Bureau, which uses 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 who are actively seeking employment.

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 be looking for work within the year would be included in this category.

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 possible labor pool for different businesses.

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

The discouraged worker is defined as someone who is not working, is not actively seeking work nor 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:

Within Barnes County, the census reported that the adult population 25 and older is highly trained, with over 85 percent of the population having completed high school, which is higher than the national average (80 percent). Compared to the nation, the population of Barnes County is less mobile, with 38 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 Barnes County is 41 years of age compared to the national median age of 35 years of age.

According to the Valley City Development Corporation, the labor market area for Barnes County extends beyond its borders. Using the area identified by the Valley City Development Corporation, the Census reported 42,637 individuals 18 years or older who lived in the area.

Sample Population Characteristics:

The sample gathered for the Barnes County labor area closely mirrors the general population characteristics. For example, according to the census, Barnes County had slightly more females (51 percent) than males (49 percent). In comparison, the sample for the area also reported more female respondents than males, 52 to 48 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 3.1 percent, which is consistent with the reported unemployment rate for Barnes County. The median age for the respondents was 50 years of age.

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Employment Status:

According to the survey, about 53 percent of the adult population, or 22,600, are currently working for wages in the Barnes County labor market area.

Active Labor Force:

The active labor force includes those who are working, 22,600 individuals, and the 1,300 who are actively seeking work, or a labor force of 23,900.

Inactive Labor Force:

The inactive labor force includes those who are planning to look for work within the next year (900 individuals), as well as those who are discouraged from seeking work (590 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:

According to the survey, about 53 percent of the adult population, or 22,600 people, is currently working for wages in the Barnes County labor market area. These individuals work an average of 40.2 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, 33.7 hours per week. The following table reports the average hours worked by occupational group.

Occupation Group by Average Hours Worked	
<u>Occupational Group</u>	<u>Average Hours Worked</u>
Professional, Technical and Managerial	40.3
Clerical and Sales	36.3
Service	33.7
Farming and Agricultural Production	52.5
Processing	43.6
Machine Trades	49.7
Benchwork	40.0
Structural Work	42.0
Miscellaneous	43.1

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 processing occupations with a median age of 36 years of age. Examples of processing occupations would include: food processing, chemicals, or other occupations involved in creating or processing raw materials to create products, usually in a manufacturing context. The oldest group, with a median age of 46,

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was those working in benchwork occupations. Examples of benchwork occupations are usually involved in fabrication; these are often skilled positions with moderate to long-term on-the-job training.

Occupational Group by Median Age

<u>Occupational Group</u>	<u>Median Age</u>
Professional, Technical and Managerial	45.0
Clerical and Sales	41.0
Service	39.5
Farming and Agricultural Production	41.0
Processing	36.0
Machine Trades	41.0
Benchwork	46.0
Structural Work	40.0
Miscellaneous	45.1

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 Barnes 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	9,000	39.8
Clerical and Sales	4,570	20.2
Service	3,160	14.0
Farming and Agricultural Production	1,330	5.9
Processing	720	3.2
Machine Trades	500	2.2
Benchwork	720	3.2
Structural Work	1,400	6.2
Miscellaneous	<u>1,200</u>	<u>5.3</u>
Total	22,600	100.0

* Rounded data

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Trained in Another Occupation:

Of those currently working, around 39 percent are working in an occupation different from the one in which they received training. Nearly half, 47 percent, of those who are working in clerical and sales were trained as professionals, technicians, and managers. In addition, 43 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 professional, technical, and managerial workers have the longest tenure with their current employer, with a median of eight years. Those involved in clerical and sales, machine trades, and miscellaneous occupations (which include truck drivers, freight handlers and related work) have been working for their employer typically four years.

Current Wage:

Overall, the typical wage for this area is \$10.50 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 \$14.50 per hour. The lowest paid occupational group was involved with farming and agricultural production (\$8.50 per hour). This group, however, also had the most diversity of income. In other words, those who are doing well in farming and agricultural production are doing very well, but the majority of workers in this group are not getting paid well.

Job Service North Dakota conducts other surveys that collect information on wages. The Barnes County labor market area would be considered to be in the east central portion of the state. 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 24 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 100 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 almost 12,000 individuals available for work in the Barnes County area.

Work Status:

The majority of the available labor force is currently employed. Of the available labor force, over two-thirds (68 percent), or 8,000 individuals, are currently working at jobs on a year-round basis. Around 7 percent, or 780 people are currently working part-time (defined as less than 30 hours) but would like to work on a full-time basis.

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Additional Employment:

According to the survey, over 3,700 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 900 individuals reported that they plan to seek work within the next 12 months.

Age Distribution:

Of the available labor force, over 4,000 individuals are under the age of 35.

Age Distribution of the Available Work Force

<u>Age</u>	<u>Number</u>	<u>Percentage</u>
18-24	2,210	18.7
25-34	1,860	15.8
35-44	2,610	22.1
45-54	3,540	30.0
55-64	990	8.4
65-95	<u>590</u>	<u>5.0</u>
Total	11,800	100.0

Educational Attainment:

Almost 20 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	1,300	11.0
HS Diploma or GED	4,300	36.3
Some College/Vo-Tech	3,380	28.6
Vo-Tech Graduate	650	5.5
College Degree	1,860	15.7
Advanced Degree	<u>340</u>	<u>2.9</u>
Total	11,830	100.0

*Rounded Data

Last Held Occupation:

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

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Current Occupation of the Available Labor Force

<u>Occupational Group</u>	<u>Number*</u>	<u>Percentage*</u>
Professional, Technical and Managerial	2,890	24.5
Clerical and Sales	1,980	16.8
Service	2,300	19.5
Farming and Agricultural Production	2,640	22.4
Processing	130	1.1
Machine Trades	340	2.9
Benchwork	260	2.2
Structural Work	420	3.6
Miscellaneous	<u>810</u>	<u>6.9</u>
Total	11,770	99.9

* Rounded data

Occupations Trained In:

Almost 5,000 people were trained in an occupation other than the one they are, or have been, working in. Over 1,200 of these individuals were trained in fields requiring specialized training, including health and medicine, education, clerical, managerial, repair and mechanical technicians.

Minimum Acceptable Wage:

Lowest Acceptable Hourly Wage of Those Currently Working

<u>Occupation</u>	<u>Minimum Acceptable Average Wage</u>
Professional, Technical, and Managerial	\$10.36
Clerical and Sales	8.48
Service	7.04
Farming and Agricultural Production	8.23
Processing	11.35
Machine Trades	10.71
Benchwork	10.92
Structural Work	12.25
Miscellaneous	9.98

The average minimum acceptable wage was under \$9.00 per hour.

Maximum Distance Willing to Commute:

Those involved in the machine trades are willing to commute the furthest distance, with a median of over 50 miles or 50 minutes. The typical distance for the available labor force was around 30 miles/30 minutes. People who are involved in clerical or sales are willing to commute the least distance, with a median of 20 miles.

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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 almost 50 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 & Training Willingness by Age Distribution:

The available labor force is well-trained, with over one-third, 38 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 50 percent of those who responded reported 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 60 percent of the available labor force opting for that method.

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 engineering. 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	72.1
Health Services	49.7
Engineering	34.9
Manufacturing	50.1
Business Services Operation	63.1
Machine Trades or Construction	38.3

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 74 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 or construction.

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

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<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	52.4	71.4	82.7	61.9	73.6
Health Services	47.6	52.1	54.5	38.1	34.7
Engineering	50.0	36.4	32.7	42.9	23.6
Manufacturing	50.0	51.8	55.5	47.6	36.1
Business Services Operation	64.3	58.3	70.0	47.6	59.7
Machine Trades or Construction	57.1	38.8	39.1	47.6	20.8

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 12 years of experience.

Almost half of the available labor force, 49 percent, reported having experience with office suite software.

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

<u>Technical Skill</u>	<u>Not Skilled</u>	<u>Some Skills</u>	<u>Average</u>	<u>Fairly</u>	<u>Very Skilled</u>	<u>No Answer</u>
Word Processing	2.2	5.5	13.9	13.3	13.9	51.2
Using Spreadsheets	6.4	12.2	17.2	6.6	6.4	51.2
Using Databases	9.7	9.1	15.0	8.3	6.6	51.3
Using Desktop Publishing	8.6	10.0	16.9	6.4	6.9	51.2
Computer Programming	4.2	3.0	2.5	1.1	0.8	88.4
HTML Programming	4.2	1.9	3.3	0.6	1.7	88.3
Installing Computer Hardware	1.1	2.8	3.0	2.2	2.5	88.4

Characteristics of the Discouraged Workforce

Characteristics of the Discouraged:

According to the survey, about 600 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 9 years 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. Child care and lack of job skills are not considered barriers to this group.

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The discouraged workers, as a group, have attained lower levels of education than other members of the available labor force. Slightly more than one-third of the discouraged workers have a high school diploma, while 12.5 percent of the discouraged have a college degree or higher. If training were required, almost 75 percent would like on-the-job training.

This group has not been employed for some time. Over 85 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

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Appendix

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 the research instrument. This instrument was standardized for statewide use, to measure the availability of labor and underemployment. The instrument also measured the adult population in and around areas of the city of Valley City. The telephone survey included all of Barnes, Griggs, LaMoure, Stutsman, and Ransom Counties as well as portions of Cass County in North Dakota.

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

To obtain a representative sample for the city of Valley City area labor market survey, a random selection of respondents within households were 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 4,408 numbers in the Barnes County labor 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 2,241 of these numbers as working residential numbers eligible for interview and successfully interviewed 1,293 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.

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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.

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 (Barnes County) yields a completion rate of 57.7 percent.