

Labor Availability Study

Trail County and the Surrounding Area



A collaboration of:

North Dakota Department of Commerce

University of North Dakota – Social Science Research Institute

Job Service North Dakota

Prepared by LMI Center of Job Service North Dakota

Maren L. Daley, Executive Director

Duane Broschat, Labor Market Information Manager

Compiled by Nelse Grundvig, Research Analyst

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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 2004, the state of North Dakota, in cooperation with local partners, funded a study to measure the available labor pool.

In the area including and surrounding Traill County there exists a potential labor force of 15,977 individuals, or approximately 33 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, which includes the self-employed as well as those actively seeking work) is estimated to be 56 percent of the adult population, or 26,720 individuals.

Characteristics of the Potential Job Seekers

	<u>Number*</u>	<u>Percentage</u>
Potential Job Seekers**	15,980	33.3
Actively Seeking Work	1,730	3.6
Planning to Look Within the Year	910	1.9
Interested in Changing Jobs	11,080	23.1
Interested in Additional Jobs	4,220	8.8
Those Discouraged From Looking	1,340	2.8

*Rounded to the nearest 10.

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

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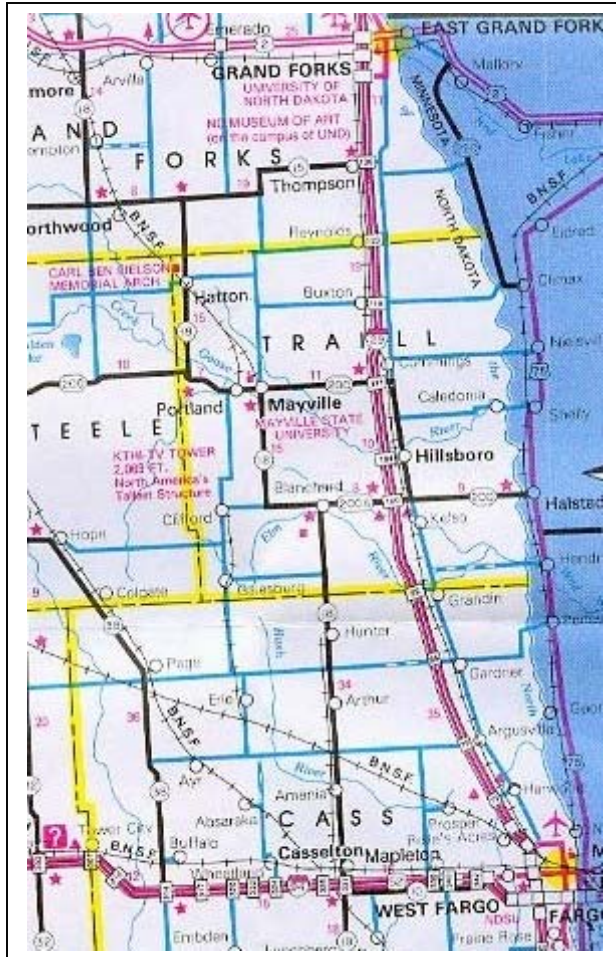
Introduction

Scope of the Study:

During the spring of 2004, 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, the Social Science Research Institute (SSRI) at the University of North Dakota and the Traill County Economic Development Commission.

The purpose of the survey was to explore the potential labor force in and around Traill County North Dakota, 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 SSRI, who contacted 1,304 respondents.

The core area for this survey included respondents from Traill, Steele, Counties, as well as portions of Cass, Grand Forks Counties and, Norman County in Minnesota. These areas were included at the request of local economic developers who stated these counties are part of the established commuting patterns to and from Traill County. Traill County is adjacent to two metropolitan areas: Fargo and Grand Forks, because a large percentage of the student population of the two largest universities reside in these two communities, the cities of Fargo and Grand Forks were not included in the analysis. The above map indicates the geographic area included in this report.



Potential Job Seekers

Definitions of Potential Job Seekers:

During April of 2004, Job Service North Dakota reported the unemployment rate for Traill County was 3.4 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 not working and actively seeking work. However, the

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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:

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1. The unemployed

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

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

For the purpose of this study, 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:

Based on the 2000 Census, Traill County had slightly more males (50.2 percent) than females (49.2 percent). Over 83 percent of the adult population 25 and older have completed high school, and nearly 22 percent have a college degree. Compared to the nation, the population of Traill County is less mobile, with 39.1 percent of the population residing in a different residence than the one where they lived in 1995. Nationally, 43.0 percent of the population moved from their 1995 residence and lived elsewhere in 2000. The median age for the general population in Traill County is 39.0 years of age.

According to the Traill County Economic Development Corporation, the labor market area for Traill extends beyond the borders of Traill County. The U.S. Census reported 134,276 individuals 18 years or older who lived in the area surrounding Traill.

Sample Population Characteristics:

The sample gathered for the Traill area closely mirrors the general population characteristics. The sample reported fewer male respondents than female respondents, 47.1 to 52.9 percent. This is within the acceptable range of plus or minus 5 percent. In addition, the unemployment rate, defined as those who are not working and actively seeking work reported by the study, was 3.6 percent, which is lower than the reported unemployment rate for the area. The median age of the respondents was 50 years of age.

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Employment Status:

According to the survey, about 56 percent of the adult population, or approximately 26,720 individuals, are currently working for wages in the Traill County labor market area. Within the Traill County area there are approximately an additional 3,210 people who are self-employed.

Active Labor Force:

The active labor force includes 26,720 individuals working for wages and 1,730 who are actively seeking work, for a labor force of 28,450.

Inactive Labor Force:

The inactive labor force includes those who are planning to look for work within the next year (910 individuals), as well as those who are discouraged from seeking work (1,340 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 26,720 employed in the Traill County labor market area work an average of 38.5 hours a week. Those involved in farming and agricultural production were most likely to work longer hours than any other group (47.3 hours per week). Those involved in the service occupations worked the fewest average hours, 35.4 hours per week. This is an indication of the larger percentage of part-time jobs in this occupational group. The following table reports the average hours worked by occupational group.

<u>Occupational Group</u>	<u>Average Hours Worked</u>
Managerial, Professional and Related Occupations	38.6
Service Occupations	35.4
Sales and Office Occupations	36.4
Farming and Related Occupations	47.3
Construction, Extraction and Repair	42.7
Production, Transportation and Material Moving	42.8
Other Occupations not Classified Elsewhere	38.1

Age Distribution:

The median age for those who are working is 42. As shown in the following table, the youngest occupational group is comprised of those involved in service occupations, with a median age of 40. The oldest group, with a median age of 48, are those who are involved in farming and agricultural production.

<u>Occupational Group</u>	<u>Median Age</u>
Managerial, Professional and Related Occupations	44
Service Occupations	40
Sales and Office Occupations	42
Farming and Related Occupations	48
Construction, Extraction and Repair	41
Production, Transportation and Material Moving	42
Other Occupations not Classified Elsewhere	41

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Educational Attainment:

The typical worker has at least some college, but this varies as some occupations have differing levels of required education and training. Those in the occupational group of managers, professionals, and related occupations generally have the highest education, while those in service occupations or manufacturing or farming have at least a high school diploma.

Current Occupation:

The largest occupational group for the Traill labor area consists of managerial, professional, and related 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>
Managerial, Professional and Related Occupations	11,580	43.4
Managerial	2,730	10.2
Business and Financial Operations	1,440	5.4
Computer and Mathematics	290	1.1
Architecture and Engineering	130	0.5
Life, Physical, and Social Science	80	0.3
Community and Social Services	530	2.0
Legal Occupation	320	1.2
Education, Training and Library	2,620	9.8
Arts, Design, Entertainment, Sports and Media	130	0.5
Healthcare Practitioner and Technicians	1,520	5.7
Healthcare Support	1,790	6.7
Service Occupations	3,920	14.7
Protective Service	530	2.0
Food Preparation and Serving	1,840	6.9
Building and Grounds, Cleaning, Maintenance	830	3.1
Personal Care	720	2.7
Sales and Office Occupations	5,260	19.7
Sales	1,630	6.1
Office and Administrative Support	3,630	13.6
Farming and Related Occupations	610	2.3
Farming and Related Occupations	610	2.3
Construction, Extraction, Installation and Repair	2,620	9.8
Construction and Extraction	860	3.2
Installation and Repair	1,760	6.6
Production, Transportation and Material Moving	1,710	6.4
Production	800	3.0
Transportation and Material Moving	910	3.4
Other Occupations not Classified Elsewhere	1,020	3.8
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* Rounded data

Trained in Another Occupation:

Of those currently working, 44 percent are working in an occupation different from the one in which they received training. About 23 percent of those who are working in clerical and sales were trained as professionals, technicians, and managers. In addition, 52 percent of the managerial, professional, and related occupations were working in occupations other than the one in which they were trained.

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Longevity with Current Employer:

Those who work in the farming and related occupations had the longest tenure (as a group) with their current employer, with a median 8 years. Those involved in service or sales and office occupations have the shortest tenure with their current employer (approximately 3 years). This indicates a relatively high turnover in these occupations.

Current Wage:

Overall, the typical wage for this area is \$11.22 per hour. As an occupational group, the highest median (typical) wage is found among other managerial, professional, and related occupations (\$13.50 per hour). The lowest paid occupational group was involved with service occupations (\$8.50 per hour).

Wages of Those Employed

<u>Occupational Group</u>	<u>Average/Mean</u>	<u>Typical/Median</u>
Managerial, Professional and Related Occupations	\$16.92	\$13.50
Service Occupations	9.26	8.50
Sales and Office Occupations	10.99	9.75
Farming and Related Occupations	10.62	10.00
Construction, Extraction and Repair	14.00	13.00
Production, Transportation and Material Moving	13.77	12.50
Other Occupations not Classified Elsewhere	11.54	10.00

Job Service North Dakota conducts other surveys that collect information on wages. The Trail labor market area is part of the Far East portion of the state. When comparing wages as reported in the labor availability survey with the other sources, the wage data are consistent with those sources.

Current Commute Distance:

The occupational groups likely to commute the furthest were those people involved in the production and transportation occupations, with an average commute of 25 miles. The group that makes the shortest commute was made up of those who work in the farming occupations, with a commute of 7 miles. The furthest distance reported to travel to work was over 100 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 15,977 individuals available for work in the Trails County area.

Work Status:

The majority of the available labor force is currently employed. Of the available labor force, 79 percent, or 12,640 individuals, are currently working. The majority of the available labor force (76 percent) is interested in working at jobs on a year-round basis. About 260 people, or 34 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:

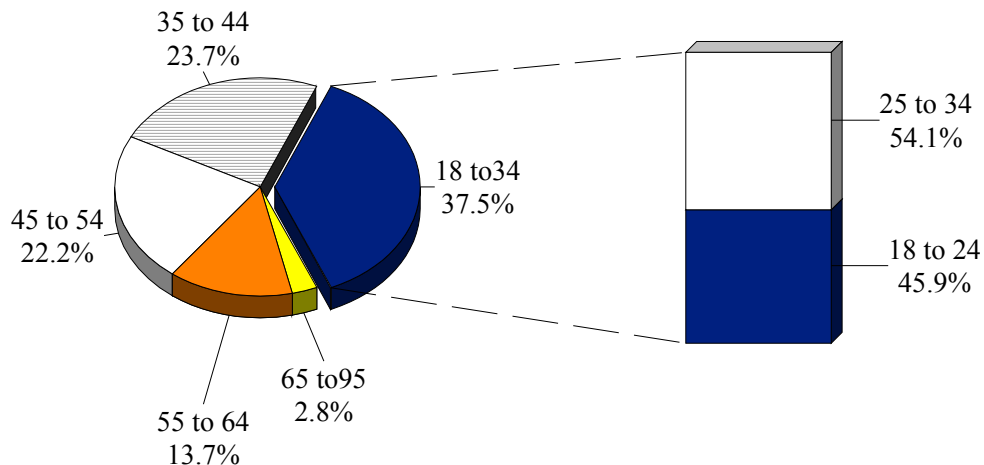
According to the survey, about 4,220 individuals are willing to take on an additional job. Some of these would also be willing to consider a different employer, depending on wages, benefits and working conditions.

Available for Work in the Next Year:

Approximately 910 individuals reported that they plan to seek work within the next 12 months.

Age Distribution:

Of the available labor force, over 5,990 individuals, or 38 percent, are under the age of 35.



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Educational Attainment:

Almost 41 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	590	3.7
HS Diploma or GED	4,570	28.6
Some College/Vo-Tech	4,300	26.9
Vo-Tech Graduate	1,570	9.8
College Degree	3,830	24.0
Advanced Degree	<u>1,120</u>	<u>7.0</u>
Total	15,980	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>
Managerial, Professional and Related Occupations	4,780	37.8
Service Occupations	1,810	14.3
Sales and Office Occupations	2,840	22.5
Farming and Related Occupations	370	2.9
Construction, Extraction and Repair	1,590	12.6
Production, Transportation and Material Moving	1,000	7.9
Other Occupations not Classified Elsewhere	<u>250</u>	<u>2.0</u>
Total	12,640	100.0

* Rounded data

Occupations Trained In:

Approximately 5,580 people were trained in an occupation other than the one in which they are or have been working.

Additional Occupations in which the Available Labor Force Have Trained

<u>Occupational Group</u>	<u>Number*</u>	<u>Percentage*</u>
Managerial, Professional and Related Occupations	2,410	43.1
Service Occupations	510	9.2
Sales and Office Occupations	1,140	20.5
Farming and Related Occupations	150	2.6
Construction, Extraction and Repair	890	15.9
Production, Transportation and Material Moving	310	5.6
Other Occupations not Classified Elsewhere	<u>170</u>	<u>3.1</u>
Total	5,580	100.0

* Rounded data

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Minimum Acceptable Wage:

Lowest Acceptable Hourly Wage of Those Currently Working

<u>Occupation</u>	<u>Minimum Acceptable Average Wage</u>
Managerial, Professional and Related Occupations	\$13.15
Service Occupations	8.57
Sales and Office Occupations	9.67
Farming and Related Occupations	8.72
Construction, Extraction and Repair	12.20
Production, Transportation and Material Moving	10.87
Other Occupations not Classified Elsewhere	13.25

The median minimum acceptable wage for the available labor force was \$10.00 per hour.

Maximum Distance Willing to Commute:

Those in other occupations not classified elsewhere, are willing to travel the furthest for a job, with a median distance 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. This pattern was consistent for all occupational groups. Other benefits desired include retirement plan, paid vacation, and sick leave.

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. Another factor that would influence a person's decision is career advancement (17 percent).

Work Schedule Preference:

The majority of the available labor force would like some ability to have a flexible schedule at work, as well as 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 trained, with 47 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 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 majority of the available labor force would like to work for a business involved in information and computer technology. The least desired firms are those 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	68.5
Health Services	45.8
Engineering	32.4
Manufacturing	36.1
Business Services Operation	59.0
Machine Trades or Construction	33.7

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 70 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 construction (23 percent).

**Interest for Specific Industries by Educational Attainment of Available Labor Force
(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	58.8	69.5	71.5	60.0	70.4
Health Services	47.1	46.6	51.2	35.6	45.1
Engineering	41.2	32.1	33.3	35.6	30.3
Manufacturing	52.9	45.0	36.6	42.2	23.9
Business Services Operation	47.1	55.7	65.9	57.8	59.9
Machine Trades or Construction	52.9	42.0	34.1	37.8	23.2

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 14 years of experience.

About half of the available labor force (58 percent) reported having experience with office suite software.

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**Self-Reported Proficiency of Various Computer/IT Skills (Percentage)
of Potential Job Seekers**

<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	1.7	5.6	14.0	18.4	17.7	42.6
Using Spreadsheets	7.6	11.7	18.6	11.7	8.0	42.4
Using Databases	6.3	13.2	19.0	9.9	8.9	42.7
Using Desktop Publishing	13.8	10.8	15.6	11.0	6.3	42.5
Computer Programming	6.3	3.2	4.3	1.3	1.3	83.6
HTML Programming	5.6	3.2	3.5	2.6	1.5	83.6
Installing Computer Hardware	1.9	1.9	4.3	4.1	4.1	83.7

Characteristics of the Discouraged Workforce

Characteristics of the Discouraged:

According to the survey, about 1,340 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 44, which is older than those who are currently working (42). The lack of child care was a barrier for approximately 16 percent of the discouraged population. While this group is not considered part of the labor force, they consider their unpaid work on farms or other unpaid jobs a fulfilling alternative to employment.

The discouraged workers, as a group, have slightly lower levels of education when compared to other members of the available labor force. Approximately 27 percent of the discouraged have a college degree or higher. If training is required, 67 percent would like on-the-job training.

This group does not have a great deal of experience as employees, with almost 73 percent having not worked for an employer within the past two years.

The average 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 22 miles.

Benefits Desired:

Discouraged workers desire health insurance, followed by retirement contributions and paid vacations were 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.

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Percentage of Discouraged Workers Interested by Industry

<u>Industry</u>	<u>Percentage</u>
Information/Computer Technology	62.2
Health Services	40.5
Engineering	21.6
Manufacturing	37.8
Business Services Operation	56.8
Machine Trades or Construction	24.3

How the Study Was Done

Target Population:

The target population was defined as adults 18 years of age or older, who had a working residential telephone number, and resided in the Trail County labor market area. The adult with the most recent birthday in the household was asked to complete the survey.

Target Labor Market County Area Sample Sizes:

The sample was drawn at the county level and provides an accuracy at plus or minus five percent with a 90 percent confidence level. The samples are distributed in proportion to the total adult population age 18 or older.

Field Period:

The survey data were collected January 12, 2004, through May 12, 2004.

Sample Design:

Information about how survey samples are developed is important in assessing the validity and reliability of the results of the survey. While a fully random design is the most desirable approach in developing a representative sample of the population, this approach often results in under-sampling demographic groups with low rates of telephone ownership. These groups most often include young adults, minorities, and individuals with low education and income. Increasingly, researchers use stratified random designs to guard against under-sampling. To determine whether a representative sample was obtained, it is helpful to calculate the response rate for the sample as a whole, as well as to examine how closely the sample matches the known demographic characteristics of the population. If substantial differences are detected, post-stratification weights can be applied during analysis to ensure that the results of the survey can be generalized to the larger population.

To obtain a representative sample for the labor market survey, random selection of households and random selection of respondents within households by county were used during the data collection process. The survey of adults (17 or older) performed by SSRI was conducted by telephone. A random sample of 10-digit telephone numbers was generated for each county labor market area utilizing Genesys Sampling Systems Random Digit Dialing (RDD) in-house software. The list from which the numbers were drawn included only selected North Dakota and Minnesota area codes and telephone banks (that is, blocks of 1,000 consecutive numbers) that had been determined to contain a threshold number of active residential numbers.

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Overall, SSRI called 8,182 numbers in the selected labor market counties to determine whether each was a working residential 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 2,031 of these numbers as working residential numbers eligible for interview and successfully interviewed 1,304 of these households. Throughout the study, completed interviews were monitored to determine whether the county samples matched population estimates in terms of gender and the age distribution of North Dakotans aged 18 or older.

Response Rates:

Survey professionals in general have found that response rates for telephone surveys have declined in recent years. These declines are related to the proliferation of fax machines, answering machines, blocking devices and other telecommunications technology that make it more difficult to identify and recruit eligible individuals. These declines are also related to the amount of political polling and market research that is now done by telephone and to the higher likelihood that eligible households will refuse to participate in any surveys. The consequence has been that response rates for telephone surveys are now calculated in several different ways, although all of these approaches involve dividing the number of respondents by the number of contacts believed to be eligible. Differences in response rates result from different ways of calculating the denominator, i.e. the number of individuals eligible to respond. The most conservative approach is one 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 the overall project yields an average completion rate of 65.1 percent. The following table shows the dispositions as well as the CASRO response rates by county for the drawn sample.

Response Rate by County for the Traill County Area

<u>County</u>	<u>C</u>	<u>NW</u>	<u>NP</u>	<u>B</u>	<u>R</u>	<u>T</u>	<u>HCNI</u>	<u>CASRO</u>
Traill	262	1,340	35	2	71	11	51	66.3%
Cass	270	777	164	9	66	15	61	65.5%
Grand Forks	269	730	91	4	97	16	38	64.0%
Steele	242	1337	38	6	61	13	60	64.4%
Norman	<u>261</u>	<u>1588</u>	<u>51</u>	<u>8</u>	<u>73</u>	<u>10</u>	<u>55</u>	<u>65.4%</u>
Total	1,304	5,772	379	29	368	65	265	65.1%

C	Completed Interviews	R	Refused
NW	Non-working telephone	T	Terminated Interview
NP	Non-Primary Household	HCNI	Household Contacted Not Interviewed
B	Language Barrier		