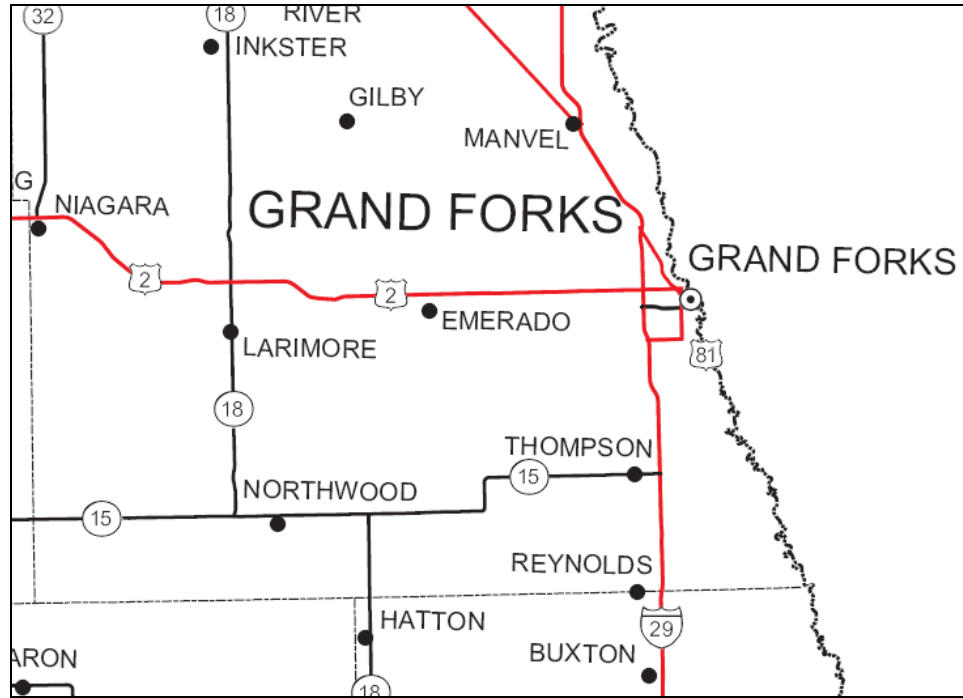


Labor Availability Study
Revised July 20, 2006

The Community of Grand Forks and Surrounding Area

2006



A collaboration of:

North Dakota Department of Commerce
University of North Dakota – Social Science Research Institute
Job Service North Dakota

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Grand Forks Labor Availability and Surrounding Area

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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; but while the unemployment rate is 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 2006, 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 the community of Grand Forks, there exists a potential labor force of 72,279 individuals, or approximately 66 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 63 percent of the adult population, or 69,023 individuals.

Characteristics of the Potential Job Seekers

	<u>Number*</u>	<u>Percentage of 18+</u>
Potential Job Seekers	34,424	31.3%
Actively Seeking Work	2,152	2.0%
Planning to Look Within the Year	2,966	2.7%
Interested in Changing Jobs	26,400	24.0%
Interested in Additional Jobs	10,176	9.2%
Those Discouraged From Looking	291	0.3%

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

Grand Forks Labor Availability and Surrounding Area

Scope of Study

The purpose of this study was to explore the size and characteristics of the potential labor pool in and around Grand Forks, North Dakota. A telephone survey was conducted by the University of North Dakota – Social Science Research Institute (SSRI), who contacted 1,874 respondents in the greater Grand Forks area. This area was determined by the developer and was based on community and business trade patterns. According to 2000 Census estimates, there are approximately 110,018 people age 18 and older living in these areas.

Area/Counties	Census	
	2000	Adult 18+
Grand Forks County	66,109	50,375
Traill County	8,477	6,375
Nelson County	3,715	2,894
Walsh County	12,389	9,304
Polk County (MN)	31,369	23,244
Marshall County (MN)	10,156	7,572
Pennington County (MN)	13,584	10,254
Total	145,799	110,018

The Population

Approximately 46 percent of the survey respondents live in Grand Forks County, another 21 percent live in Polk County (MN) – closest to Grand Forks. Slightly more women (52 percent) than men (48 percent) completed the survey. The typical respondent is 50 years old, currently working (61 percent) and travels approximately 16 minutes or less than 12 miles to get to work. The largest occupations in the Grand Forks area are Office and Administrative Support (10 percent), Healthcare Support (9 percent), and Education, Training and Library (9 percent). In general, respondents are well-educated with 93 percent having received a high school diploma and 35 percent having received a college degree.

These results are similar to the 2000 Census data for the region.¹ According to the Census Bureau 51 percent of the population is female while 49 percent is male, and the median age is 29.2. The Census Bureau also found that 89 percent of the population has a high school diploma and 28 percent has a college degree.

The median age of respondents (50) is older than the population of the 2000 Census. In comparison, the median age of the nation was 35.3 in 2000. Among survey respondents, 20 percent were between the ages of 18 and 34.

¹ Census figures shown are for Grand Forks County.

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Education Level	Percentage that Attained This Level
Less Than HS Diploma	6.6%
HS GED Graduate	23.8%
Some College and Vo-tech	25.6%
Vo-tech Graduate	9.1%
College Grad and Advanced Degree	34.8%
Total	100.0

At the time of this study the unemployment rate in the Grand Forks area was 4.2² percent. Among the respondents, 61 percent are currently working, 2 percent are actively seeking work, and 3 percent are not actively seeking work. Also, an additional 20 percent are considered potential job seekers (PJSs), who are people willing to change jobs or take an additional job if the circumstances are right. These PJSs will be covered later in the paper.

The Current Workforce

A typical employed respondent works 41.4 hours per week and makes \$14.55 per hour. A majority of these respondents has only one job and works full-time, which is defined in this study as 30 hours per week or more. Seventeen percent held more than one job. Generally, if a respondent works more than one job, the additional job is part-time. Only 28 percent of employed respondents have shift-oriented schedules, but an additional 16 percent of working respondents who do not currently work shifts said they would be willing to consider shift work. The following table shows the most recent occupations of the current employees in the Grand Forks area.

Occupational Group	Numbers ³		Percentage of Workforce	
Managerial, Professional and Related Occupations	25,674		38.4%	
Managerial		2,361		3.5%
Business and Financial Operations		1,239		1.9%
Computer and Mathematical Science		649		1.0%

² This figure reflects Grand Forks County as of March, 2006. Regional data is not available to the specific geographical region defined by this study.

³ Estimates are rounded to the nearest whole number and may not sum.

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Occupational Group	Numbers		Percentage of Workforce	
Architecture and Engineering		1,180		1.8%
Life, Physical and Social Services		-- ⁴		--
Community and Social Services		944		1.4%
Legal Occupation		590		0.9%
Education, Training and Library		7,614		11.4%
Arts, Design, Entertainment, Sports and Media		236		0.4%
Healthcare Practitioner and Technicians		944		1.4%
Healthcare Support		9,916		14.8%
Service Occupations	5,961		8.9%	
Protective Services		590		0.9%
Food Preparation and Serving		2,597		3.9%
Building and Grounds, Cleaning, Maintenance		1,712		2.6%
Personal Care		1,062		1.6%
Sales and Office Occupations	18,946		28.3%	
Sales		8,086		12.1%
Office and Administrative Support		10,860		16.2%
Farming and Related Occupations	2,302		3.4%	
Farming and Related Occupations		2,302		3.4%
Construction, Extraction, Installation and Repair	5,194		7.8%	
Construction and Extraction		2,479		3.7%
Installation and Repair		2,715		4.1%
Production, Transportation and Material Moving	5,253		7.9%	
Production		2,951		4.4%
Transportation and Material Moving		2,302		3.4%
Other Occupations not Classified Elsewhere	1,476		5.3%	3.1%
Other Occupations not Classified Elsewhere		1,476		2.2%

⁴ Insufficient data sample

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The demographics of the workforce in the area are different from those of the general population. Current employees have a median age of 43.6. As shown in the chart, 25 percent of these current employees are between the ages of 18 and 34. Also, 42 percent are male, 40 percent have a college degree, and the average wage of current employees is \$14.56 per hour.

Age Group	Percentage
18 – 24	8.8%
25 – 34	16.3%
35 – 44	24.9%
45 – 54	31.3%
55 – 64	15.0%
65 Plus	3.7%

Typically, current employees travel 16 minutes or 12 miles to get to work. This, however, depends on the occupation of the employee. For instance, the majority of those in Protective Services travel, on average, about 30 minutes to get to work while those in Construction and Extraction travel more than 35 minutes to get to work.

The average length of tenure for employees in the Grand Forks area is 11 years. Of the currently employed respondents, 86 percent work full-time--defined here as more than 30 hours a week--and most (91 percent) work year round jobs. The following table shows the benefits that currently employed respondents receive at their jobs.

Benefit	Percentage Provided
Healthcare	73%
Retirement Plan	64%
Life Insurance	47%
Disability Insurance	37%
Child Care	5%
Other	23%
Provided No Fringe Benefits	20%

The following table shows various occupations in the area by number of employed respondents as well as by years with employer, hours worked and hourly wages. In the Grand Forks area the highest percentage of employees are in Office and Administrative Support, Healthcare Support, and Education, Training and Library occupations. The occupations with the oldest employees are Community and Social Services at 54, while those in Personal Care and Services have the youngest employees at 33. Computer and Mathematics Sciences pays the highest with an average wage of \$23.89 per hour. On average, employees in Farming work the most hours (53).

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Occupational Group	Estimated Number	Percentage	Years with current employer	Hours worked in average week	Hourly wage
Management	2,361	4%	12	48.64	\$17.74
Business and Financial Operations	1,239	2%	8	38.82	\$21.33
Computer and Mathematical Science	649	1%	94	39.74	\$23.89
Architecture and Engineering	1,180	2%	10	43.10	\$22.09
Life, Physical, and Social Science	-- ⁵	--	10	32.00	--
Community and Social Services	944	1%	13	44.32	\$14.87
Legal Occupations	590	1%	16	42.51	\$32.57
Education, Training, and Library	7,614	11%	10	43.86	\$14.66
Arts, Design, Entertainment, Sports, and Media	236	< 1%	7	45.18	13.39
Healthcare Practitioner and Technical	944	1%	6	43.45	\$11.59
Healthcare Support	9,916	15%	9	37.81	\$15.28
Protective Service	590	1%	11	46.57	\$22.95
Food Preparation and Serving Related	2,597	4%	4	29.39	\$8.75
Building and Grounds Cleaning and Maintenance	1,712	3%	9	34.91	\$9.06
Personal Care and Service	1,062	2%	6	32.92	\$8.50
Sales and Related	8,086	12%	9	41.88	\$13.07
Office and Administrative Support	10,860	16%	10	39.91	\$13.72
Farming, Fishing, and Forestry	2,302	3%	12	52.74	\$11.07
Construction and Extraction	2,479	4%	10	46.55	\$14.61
Installation, Maintenance, and Repair	2,715	4%	12	41.98	\$14.67
Production	2,951	4%	9	41.67	\$13.41
Transportation and Material Moving	2,302	3%	9	42.94	\$17.16
Military	2,066	3%	13	49.35	\$13.75
Miscellaneous	1,476	2%	11	35.33	\$18.90

Potential Job Seekers

Potential job seekers (PJSs) may either be employed or unemployed and are interested in either taking an additional job or changing jobs if the circumstances are right. In the Grand Forks area, 31 percent or approximately 34,424 people age 18 or over fall into this category. The five types of potential job seekers are listed in detail below.

⁵ Insufficient data sample

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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.

Characteristics of the Potential Job Seekers		
	Number	Percentage of Population 18 Years of Age and over
Potential Job Seekers ⁶	34,424	31.3%
Actively Seeking Work	2,152	2.0%
Planning to Look Within the Year	2,966	2.7%
Interested in Changing Jobs but No Additional Jobs	18,840	17.1%
Interested in Both Changing Jobs and Additional Jobs	7,559	6.9%
Interested in Additional Jobs -but not changing jobs	2,617	2.4%
Those Discouraged From Looking	291	0.3%

The number of available workers an employer can expect in an area depends upon individual work experiences, the skills of applicants, the working conditions, wages, and benefits offered. The following table reports the current or most recent occupation of potential job seekers.

⁶ Will not sum as PJSs can be in multiple categories.

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Occupational Group	Number ⁷		Percentage of Potential Job Seekers	
Managerial, Professional and Related Occupations	9,278		32.0%	
Managerial		956		3.3%
Business and Financial Operations		281		1.0%
Computer and Mathematical Science		394		1.4%
Architecture and Engineering		619		2.1%
Life, Physical and Social Services		-- ⁸		--
Community and Social Services		337		1.2%
Legal Occupation		169		0.6%
Education, Training and Library		2,530		8.7%
Arts, Design, Entertainment, Sports and Media		112		0.4%
Healthcare Practitioner and Technicians		281		1.0%
Healthcare Support		3,599		12.4%
Service Occupations	2,362		8.1%	
Protective Services		56		0.2%
Food Preparation and Serving		1,012		3.5%
Building and Grounds, Cleaning, Maintenance		843		2.9%
Personal Care		450		1.6%
Sales and Office Occupations	10,459		36.0%	
Sales		4,555		15.7%
Office and Administrative Support		5,904		20.3%
Farming and Related Occupations	1,068		3.7%	
Farming and Related Occupations		1,068		3.7%
Construction, Extraction, Installation and Repair	2,193		7.6%	
Construction and Extraction		1,125		3.9%
Installation and Repair		1,068		3.7%
Production, Transportation and Material Moving	3,093		10.7%	
Production		1,743		6.0%
Transportation and Material Moving		1,350		4.7%
Other Occupations not Classified Elsewhere	562		1.9%	
Other Occupations not Classified Elsewhere		562		1.9%

The demographics of PJSs are different from those of the sample population. In general, the median age of a PJS is 41, making them younger than the rest of the sample. In addition, PJSs are more likely to be female (51.7 percent), are more likely to have completed high

⁷ Estimates are rounded to the nearest whole number and may not sum.

⁸ Insufficient data sample / none found

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school, but less likely to have completed college. They have shorter tenure at their jobs (7.5 years). However, the PJSs have both the same number of years of management experience and computer experience as the current workforce – eleven years of each.

The typical PJS travels 15 minutes or 13 miles one-way to get to his or her job. This varies by occupation. PJSs in Healthcare Practitioners and Technical occupations travel an average, of 28 miles to get to work while PJSs work in Buildings, Grounds and Maintenance only travel 10 miles. The typical PJS would be willing to travel 36 minutes or 34 miles to go to work, but this also depends on their occupation. A PJS employed in Personal Care and Services is only willing to travel 13 miles, while the typical PJS in Production is willing to travel 25 miles.

On average, 30 percent of PJSs work shifts. Of those who do not currently work shifts, 17 percent would be willing to work shifts. Specifically, many PJSs (52 percent) say they would work shifts if it resulted in better pay. The most popular choice of shift for this group is day time (62 percent). Currently, 81 percent of PJSs work year round while 17 percent work seasonal jobs. Generally, in the Grand Forks area, year round jobs are preferred (81 percent). On average, 63 percent of PJSs are interested in flexible work schedules in which their work hours are arranged around their personal schedules.

As the following table shows, there are differences among occupational groups between those who are willing to take an additional job and those who are willing to change jobs. Notably, PJSs in every occupational group are most likely to be interested in new jobs than additional jobs. Those interested in full-time employment work are currently working an average of 22 hours per week.

Occupational Group	Interested In New Job ⁹		Interested in Additional Job	
Managerial, Professional and Related Occupations	8,442		3,700	
Managerial		870		173
Business and Financial Operations		256		289
Computer and Mathematical Science		358		58
Architecture and Engineering		563		405
Life, Physical and Social Services		-- ¹⁰		--
Community and Social Services		307		58
Legal Occupation		153		--
Education, Training and Library		2,302		983
Arts, Design, Entertainment, Sports and Media		102		58
Healthcare Practitioner and Technicians		256		289
Healthcare Support		3,274		1,388

⁹ Estimates are rounded to the nearest whole number and may not sum.

¹⁰ Insufficient data sample / none found

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Occupational Group	Interested In		Interested in	
	New Job		Additional Job	
Service Occupations	2,149		1,156	
Protective Services		51		58
Food Preparation and Serving		921		694
Building and Grounds, Cleaning, Maintenance		767		405
Personal Care		409		-- ¹¹
Sales and Office Occupations	10,284		2,949	
Sales		4,144		1,041
Office and Administrative Support		5,167		1,561
Farming and Related Occupations	972		347	
Farming and Related Occupations		972		347
Construction, Extraction, Installation and Repair	1,995		752	
Construction and Extraction		1,023		636
Installation and Repair		972		116
Production, Transportation and Material Moving	2,814		1,156	
Production		1,586		867
Transportation and Material Moving		1,228		289
Military Specific	205		231	
Military Specific		205		231
Other Occupations not Classified Elsewhere	512		231	
Other Occupations not Classified Elsewhere		512		231

The reasons why PJSs would consider alternative employment vary. As shown in the following table, the most common reason to choose alternative employment is an increase in pay (49 percent). However, 12 percent would seek alternative employment for more career advancement opportunities.

Reason	Percentage
Increase in pay	49%
Increase in benefits	9%
Improvement in working conditions	10%
More career advancement opportunities	12%
Feel you are underutilized	9%
Gain more job status/prestige	1%
Something else ¹²	9%

¹¹ Insufficient data sample

¹² Of those who selected "Something else" the most common cited reasons dealt with variety of work experienced, quality of management and desire to reduce stress.

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The next table shows that currently employed PJs would generally accept a lower wage to work at an additional job. Similarly, many of those who would consider changing jobs would also be willing to accept a lower wage. The previous table indicates that 49 percent of PJs would consider taking a different job for an increase in pay, but 9 percent would consider different employment if it meant an increase in benefits. The most desirable benefit, to PJs is healthcare – overwhelmingly desired by 65 percentage of those responding—distantly followed by paid vacations (9 percent) and a retirement plan (8 percent).

Occupational Group	Current Pay	Minimum Pay to Accept New Job
Management	\$20.16	\$17.30
Business and Financial Operations	\$25.37	\$23.76
Computer and Mathematical Science	\$25.70	\$17.83
Architecture and Engineering	\$22.68	\$12.59
Life, Physical, and Social Science	-- ¹³	--
Community and Social Services	\$11.54	\$11.11
Legal Occupations	\$12.28	\$12.21
Education, Training, and Library	\$13.95	\$11.41
Arts, Design, Entertainment, Sports, and Media	\$11.14	\$9.49
Healthcare Practitioner and Technical	\$12.69	\$11.02
Healthcare Support	\$13.96	\$12.32
Protective Service	\$8.00	\$13.92
Food Preparation and Serving Related	\$8.73	\$7.96
Building and Grounds Cleaning and Maintenance	\$7.96	\$7.41
Personal Care and Service	\$6.44	\$6.43

¹³ Insufficient sample

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Occupational Group	Current Pay	Minimum Pay to Accept New Job
Sales and Related	\$12.69	\$10.99
Office and Administrative Support	\$13.33	\$10.84
Farming, Fishing, and Forestry	\$11.23	\$11.45
Construction and Extraction	\$15.27	\$14.70
Installation, Maintenance, and Repair	\$13.27	\$12.46
Production	\$13.23	\$10.95
Transportation and Material Moving	\$14.14	\$11.81
Military Specific	\$25.00	\$6.83
Other Occupations not Classified Elsewhere	\$17.55	\$12.51
Average	\$13.65	\$11.61

Approximately 96 percent of PJSs in the area have at least a high school education, and 34 percent have a college degree. Among the PJSs, 69 percent have some management experience. The median length of time for this experience is 11 years.

Education Level	Percent Attainment
Less than High School	3.8%
High School	21.1%
Some College	29.2%
Vo-tech Graduate	12.8%
College and Advanced Degree	33.1%

A majority of PJS respondents have experience using computers (85 percent), and 79 percent report experience using office suite productivity software. However, there were differences in levels of proficiency with different types of applications. Many respondents (65 percent) have high levels of proficiency¹⁴ with word processing, but fewer are proficient at databases (38 percent).

¹⁴ High levels of skill is interpreted as meaning that the respondent selected either 4 or 5 on a 5 point scale with the higher number indicating a higher level of skill.

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Technical Skill	Not Skilled	Some Skills	Average	Above Average	Very Skilled	No Answer
Word Processing	3%	6%	26%	31%	34%	0%
Spreadsheets	11%	17%	33%	18%	21%	0%
Databases	13%	19%	29%	27%	11%	0%
Desktop Publishing	24%	18%	28%	16%	13%	1%

Just under 14 percent or the equivalent of 4,682 PJSs indicated they have specialized computer technology training. Their identified their level of proficiency as follows:

Technical Skill	Not Skilled	Some Skills	Average	Above Average	Very Skilled	No Answer
Installing Computer Hardware	4%	16%	21%	36%	22%	0%
Writing Computer Program	39%	24%	15%	15%	8%	0%
HTML Programming	44%	15%	23%	5%	12%	0%

Although PJSs in the Grand Forks area have impressive education and skill levels, there is still the acknowledgement by the group that more training may be necessary in certain professions. There are, however, some differences in the type of training these people would be willing to consider. As shown in the table below, the industry that PJSs were most interested in receiving training in Computer related fields (70 percent) while the industry with the least amount of interest is Construction (29 percent).

Industry	Percent Interested
Information Computer Technology	70%
Business Services	55%
Production	38%
Healthcare Service Fields	48%
Engineering Fields	33%
Construction Trades	29%

Respondents were asked “what type of training would they be most likely to consider, such as 2 – 4 years of training including apprenticeships, associate or bachelor’s degrees, licenses and/or certification.” Overall, the most desirable type of training was “on-the-job” according to 66 percent of PJSs.

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Training Desired	Percent Interested
On-the-job	66%
Eighteen months or less of training	16%
Nineteen to twenty three months of Training	4%
Two to four years of training	9%
Over four years of training	2%
Did not know / Refused	4%

Many PJSs have received Job Skills training in the past three years. Forty-nine percent indicated they have received some Job Skill training. The most common training received was Technical Training followed by Safety Training. The majority of these individuals are PJS who currently hold jobs but are interested in a new job or an additional job.

Job Skills Training	
Basic Skills	6%
Product Sales	10%
Interpersonal Skills	17%
Thinking and Organizing	12%
Quality Improvement	16%
Technical Training	29%
Safety Training	19%
Did not know /Refused	5%

Discouraged Workers¹⁵

In the Grand Forks area there are approximately 291 individuals who are categorized as discouraged workers. The typical discouraged worker in this area has been out of the labor force for about one year. In general, these workers are older than the average PJSs, with a median age of 44 years. These individuals tend to be fairly well educated with most holding at least a high school diploma. Discouraged workers are not in the labor force for a number of reasons. The most common reasons a person may be a discouraged worker are childcare, care for ill or disabled adult members of the family, or lack of interest in work.

¹⁵ The Discouraged Worker sample size for the City of Grand Forks is too small to provide a demographic description.

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How the Study was Done

The Workforce Development Division of the Department of Commerce selected the Social Science Research Institute (SSRI) to conduct Labor Availability and Underemployment Studies for several North Dakota communities, including designated counties in Minnesota and South Dakota. The goal of the studies are to provide the “core” data elements which have been identified as being needed to support businesses attraction, expansion and retention by a workgroup consisting of representatives from local development organizations, Job Service North Dakota, and the Department of Commerce.

SSRI uses a proven research methodology that has been adopted by the Bureau of Labor Statistics which establishes standards for collection of the core data. The following is a detailed description of SSRI’s research methodology utilized in these studies.

Methodology

Target Population. The target population was defined as adults 18 years of age or older who had the most recent birthday residing in telephone households in the selected labor market county areas.

Target Labor Market Areas. As defined by the Department of Commerce, the 2006 study included 40 North Dakota counties, 8 Minnesota counties and 4 South Dakota counties.

Target Labor Market County Area Sample Sizes. County sample sizes provide accuracy at plus or minus five percent¹⁶ with a 90 percent confidence level. The samples are distributed in proportion to the total adult population age 18 or older in each of the target labor market county areas.

Field Period. The survey was pre-tested January 3 and 4 and the data were collected February 1 through June 21, 2006.

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.

¹⁶ This means that one can be 90 percent confident that the mean response for any question in the survey will not vary any more than 5.0% in either direction from the actual mean for that response if all persons age 18 or older in the target county area were surveyed.

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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 (18 or older) performed by SSRI was conducted by telephone. A random sample of 10-digit telephone numbers were 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, Minnesota and South Dakota 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.

Overall, SSRI called 15,879 numbers in the selected labor market counties to determine whether it was a working residential number in contrast to a non-working number, a commercial/business line, a cell phone, data or fax line, or a non-primary household telephone. SSRI staff classified 3,250 of these numbers as working residential numbers eligible for interview and successfully interviewed 1,840 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 Dakota and Minnesota residents' age 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 liberal approach is called the Upper Bound method and takes into account only those individuals who refuse to participate or who terminate an interview. This approach is used by the federal government because of controversies about the eligibility of numbers that could not be reached. The Upper Bound method of calculating the response rate for the overall project yields an average rate of 59%. The most conservative approach 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 the overall project yields an average completion rate of 68.5% if over-quota eligible are assumed to qualify as "good numbers." Table 1 shows the dispositions and the Upper Bound and CASRO response rates by county for the sample numbers classified.

Grand Forks Labor Availability and Surrounding Area

County Area Labor Market Sample Dispositions

County	Dates	C	NW	NP	B	R	T	HCNI	U-Bound	CASRO	Total
Grand Forks											
Grand Forks	3-9 to 3-13	269	1142	120	9	56	25	89	76.9%	61.3%	1,710
Traill	3-13 to 3-26	262	2792	55	15	105	14	56	68.8%	60.0%	3,299
Nelson	3-14 to 3-19	252	811	45	17	119	2	75	67.6%	56.3%	1,321
Walsh	3-24 to 3-27	269	1390	73	14	102	22	99	68.4%	54.7%	1,969
Polk, MN	3-26 to 3-31	268	1563	96	13	85	11	102	73.6%	57.5%	2,138
Marshall, MN	3-29 to 4-11	255	3190	55	14	56	15	150	78.2%	53.6%	3,735
Pennington, MN	4 - 7 to 4-12	265	1062	137	16	120	12	95	66.8%	53.9%	1,707
Totals		1840	11950	581	98	643	101	666	71.2%	56.6%	15,879

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

Interviewing Procedures. Telephone interviews were conducted from SSRI and the Department of Sociology at the University of North Dakota by trained interviewers with supervision and random monitoring for technique and adherence to established procedures. Production interviewing began after a pre-test of the survey in a series of actual telephone interviews. The majority of interviews were conducted on weekday and Sunday evenings. Throughout the study, completed interviews were monitored to determine whether the samples match U.S. Census 2000 North Dakota County population figures in terms of gender and the age distribution of respondents age 18 or older. Efforts to complete interviews with selected respondents were extensive. The number of callbacks to complete an interview with an eligible respondent ranged from 1 to 12.

Computerized Assisted Telephone Interviewing (CATI). To ease telephone interviewing, all telephone interviews were conducted with a computer assisted telephone interview (CATI) system. The SSRI version of CATI is implemented with microcomputers, which display survey questions on interview terminals and collect telephone interview data as the interview is being conducted. For CATI telephone interviews, all coding of numeric and categorical responses is done by microcomputer software, with error checking to catch out-of-range values at the time of the interview.

The use of CATI increases both the speed of data collection and the accuracy of data collected. All CATI questionnaires are tested prior to conducting telephone interviews to ensure accurate encoding of survey responses and accurate branching and skip patterns in the questionnaire. The system prompts interviewers for a valid response to every question in the survey. For numeric questions, legitimate ranges of responses are entered into the computer so that the computer can detect out-of-range values. When these are detected during the interview, the computer warns the interviewer that the entered value is out of range and prompts the interviewer for a legitimate response.

Grand Forks Labor Availability and Surrounding Area

Data validation at the data management step consists of accounting for all cases in the survey, and ensuring that the data record exists for every completed interview in the sample. Data records were passed through a SPSS program to ensure that all data fields are readable, and that all fields are reading the format specified for that variable. A separate data-cleaning step will also be reviewed and spell-checked for readability. The final validation step consists of checking the consistency of respondents' answers to objective and verifiable survey questions. All survey data will be backed up and stored on micro- computer diskettes for immediate access and corrections, should data corrections be needed.