

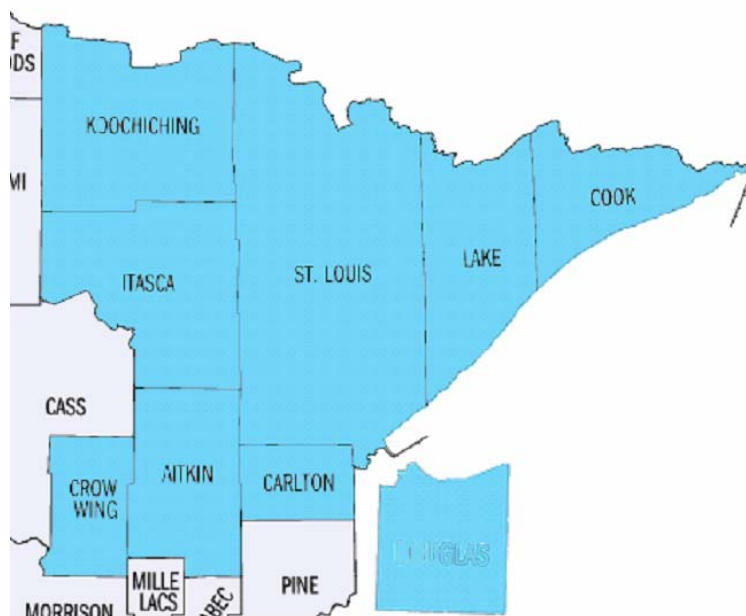


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# Under, Over, and Mis-Matched Skills Employment In Northeast Minnesota

January 2005

For the Minnesota Legislature, the MN Department of Employment and Economic Development and  
The Center for Community and Regional Research  
University of Minnesota – Duluth



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**EXECUTIVE SUMMARY**

This survey project collected data from households in seven counties of Northeast Minnesota, Crow Wing County, and Douglas County, Wisconsin in order to study the current labor force and report on workers who might be available, under what conditions, and how they can be found. The report includes descriptions of survey findings, preliminary analysis of the data, and comparisons within the data. Factors in the better use of the effective labor force are also discussed.

**Descriptions:**

- **Under-employment**, as used in this report, refers to those who are currently unemployed but want to work, plus those who are working and wish to work additional jobs or hours.

Overall, 60% of respondents were employed and another 17% are unemployed but want to work. About a quarter (23%) are not in the labor force in that they do not want to be employed, two-thirds of whom say they have retired.

Some 11.6% of those who are employed state that they want more hours of work or more jobs (this is 9.1% of the effective labor force).

<b>All Respondents:</b>		
Employed	60%	
Not employed, wants to work	17%	
Do not want to be employed (two thirds of these are retired)	23%	
	100%	
<b>Effective Labor force:</b>		
Employed	78%	
Employed who want to work more		9.1%
Unemployed but want to work	22%	22%
	100%	31.1%

There appears to be 31% under-employment in the effective labor force of Northeast Minnesota, or approximately 81,800 people.

- **Over-employment**, as used in this report, refers to those who are currently working but who express an interest in working FEWER jobs or FEWER hours at their current jobs. Part of the employed group includes those who express a preference for less work. In this study 28.9% of the currently employed wish to work less. This includes: those who

want fewer jobs (1.9%), fewer hours at current jobs (21.7%), or both fewer jobs and hours (5.3%).

<b>Of the Employed:</b>		
Employed who want to work less	28.9%	
Want fewer jobs		1.9%
Want fewer hours		21.7%
Want fewer jobs and fewer hours		5.3%

This would amount to about 76,300 of the currently employed in Northeast Minnesota.

- Mis-Matched Skills Employment** (or “mis-employment”) in this report refers to the mismatch between skills that job-holders are currently using and the skills they would like to use in their work and/or those with valid certificates that are not used in their current work. By this definition 48.4% of those currently employed are mis-employed in the sense that they could use more and different skills or certificates/degrees than they currently use in their jobs. In this region about 127,700 people would be mis-employed. In this study, 36.9% of those currently employed have job skills they would like to use but which are not used in their jobs. Some 23.3% of those currently employed have one or more valid certificates or degrees that are not used in their current job. Some have both unused skills and unused certificates/degrees.

## Comparisons:

### The Over-Employed

### The Employed Not Desiring Change

### The Under-Employed

### The Unemployed

- There are statistically significant differences between the four comparison groups, although some differences suggest that those not currently employed and those wanting less work have somewhat more favorable worker characteristics.
- The level of mismatched-employment is substantial in each category of employed, and differences are statistically significant.

### The Unemployed

### The Employed

Employed and unemployed appear to differ significantly on some characteristics.

- Unemployed list more unused work skills than those employed.
- Employed and Unemployed do not appear to differ significantly on a number of measures of technical skill.
- Unemployed appear to prefer to have a job in the Northeast and Greater Minnesota areas than is the case with the employed.
- Unemployed are split on preferring part or full-time jobs.
- Unemployed would prefer to work an average of 30.7 hours per week (ranging from 3 to 50 hours), and to work an average of 44 weeks per year (ranging from 9 to 52).

**Highlights from the tables, including job location, job fluidity, education, benefits, and commuting characteristics:**

Please see the Appendix for full tables and information including numbers used as base of the average or percentage, comments on samples sizes, and statistical significance.

**Comparison of Selected Characteristics by Employment Status  
in the Northeast Minnesota Laborforce<sup>1</sup>**

Source: UMD School of Business and Economic Bureau of Business and Economic Research, 2004 NE MN Household Workforce Survey

Selected Characteristics	Employed, Wants to Work LESS	Employed, No Change	Employed, Wants to Work MORE	Not employed, wants to work
<b>Job Location</b>				
Percent living in the Port Cities	35%	27%	82%	38%
Preferred job location if a suitable job were available:				
Duluth-Superior area	59%	60%	100%	60%
Other Northeast Minnesota area	43%	39%	38%	66%
Greater Minnesota outside NE MN	18%	30%	31%	40%
Twin Cities Metro area	10%	18%	29%	14%
Outside Minnesota	36%	20%	38%	36%
Would like to tele-commute	56%	23%	35%	62%
Would stay in Port Cities area even if a job paid less than elsewhere:	81%	69%	71%	77%
Would stay in Northeast Minnesota even if a job paid less than elsewhere:	79%	93%	--	80%
Difficulty getting a suitable job in the area among those seeking a job:				
Percent saying impossible or very difficult:	41%	45%	25%	43%

Selected Characteristics	Employed, Wants to Work LESS	Employed, No Change	Employed, Wants to Work MORE	Not employed, wants to work
<b>Wages</b>				
Lowest hr. wage to change jobs to use their skills:				
Mean	\$13.89	\$14.92	\$11.36	\$10.89
Median	\$14.00	\$14.98	\$10.54	\$9.00
Range	\$6.50- \$21.63	\$7.00- \$33.65	\$9.00- \$15.00	\$5.15- \$36.06
Percent who have some job that pays more than \$10.00 per hour	88%	85%	53%	--

Selected Characteristics	Employed, Wants to Work LESS	Employed, No Change	Employed, Wants to Work MORE	Not employed, wants to work
<b>Fluidity</b>				
Not fluid	32%	54%	22%	0%
In fluid job situation	3%	12%	17%	0%
Planning to change or changed jobs	58%	23%	28%	0%
Looking for work	7%	10%	33%	100%
Percent planning to leave the area in the next year.	0%	4%	12%	18%
Age respondent plans to retire:				
Mean	61.5	61.1	65.1	60.9

Selected Characteristics	Employed, Wants to Work LESS	Employed, No Change	Employed, Wants to Work MORE	Not employed, wants to work
<b>Education</b>				
Scale of self-rating of math/scientific/tech skills (6-item scale, range 0 to 18):				
Mean	8.3	7.5	7.6	8.0
Knowledge scale (range is 0 to a high of 3):				
Mean	1.8	1.5	1.7	1.4
Components:				
Education – some college or more	42%	35%	41%	27%
Higher self assessed math skills (3-6)	64%	49%	41%	51%
Has one+ certificates or degrees	88%	94%	82%	85%
Complex or advanced computer skill scale (range 0 to 12)				
Mean	3.9	3.1	3.9	4.1
Percent holding valid certificates/degrees not used in current jobs.	30%	8%	41%	36%
Percent mis-employed	59%	40%	82%	--
Percent currently taking courses/training to update or gain new skills.	45%	21%	41%	18%
Percent of respondents who are paying for their own courses/training	37%	43%	50%	27%

Selected Characteristics	Employed, Wants to Work LESS	Employed, No Change	Employed, Wants to Work MORE	Not employed, wants to work
<b>Benefits</b>				
Average number of benefits (of 5 listed) required for respondent to change jobs among those who would change to use more of their skills or the unemployed who want to work:				
Mean	3.0	3.2	3.2	3.4
Percent who would take a job even if it did not offer the following benefits:				
Medical coverage	35%	48%	50%	75%
Life insurance	100%	84%	71%	88%
Contributions to retirement plan	60%	67%	71%	56%
Paid vacation	25%	50%	50%	52%
Child care	95%	83%	88%	73%
Would be willing to change employment if a job using more skills became available, among those whose job does not use all of their skills:	80%	63%	64%	--

Selected Characteristics	Employed, Wants to Work LESS	Employed, No Change	Employed, Wants to Work MORE	Not employed, wants to work
<b>Commuting</b>				
Number of miles respondent is willing to travel one-way to work:				
0 – 15 miles	19%	25%	13%	28%
16 – 30 miles	52%	46%	50%	53%
31 – 60 miles	29%	29%	38%	10%
61 miles or more	0%	0%	0%	9%

1 Please see full table in appendix for numbers used as base of the average or percentage, comments on sample sizes, and statistical significance.

## Factors in the better use of the effective labor force in Northeast Minnesota..

Those who want to work less. Wages in the range of at least \$14 per hour appear to be sought, jobs that use more of their skills, and have medical coverage and paid vacation benefits appear to be among the items that would encourage changing jobs to their satisfaction.

Those who want more work. Wages at least around \$11 per hour, jobs that use more of their skills, plus medical coverage and paid vacation would appear to be likely to induce this group to change jobs.



Unemployed. Wages at least in the range of \$11 per hour would be needed to take a job, help in getting added training, and, interestingly, unlike other groups, three quarters of this group would take a job without medical coverage.

Those who are employed and who do not express an interest in changing how much they work. Overall, it would seem that seeking to better match job skills for this group would more likely represent “job churn” in that it would be taking more or less the same skills from one employer to another and the barriers to moving (wages, primarily) would be higher.

# Under, Over, and Mis-Matched Skills Employment In Northeast Minnesota

## PROJECT DESCRIPTION

This report is based on data from a 2004 household survey in Northeastern Minnesota. This is a continuation of a line of inquiry by the Bureau of Business and Economic Research at UMD, including workforce and skills assessment surveys and reports from 1998 to 2004. This most recent data collection effort (2004) was supported in part by State Legislative funds and funds from the Center for Community and Regional Research at the University of Minnesota Duluth. Field work for the survey was conducted by the University of Minnesota Center for Survey Research in spring 2004.

The survey is a stratified random sample of telephone households in Northeast Minnesota—the seven counties of the Arrowhead Region, and Crow Wing County, as well as Douglas County, Wisconsin. (See study area map for county details.)

A random person of working age (16 and older) in each household was asked in a telephone interview about:

- multiple jobs
- work skills
- job satisfaction
- desired changes in their work situation.

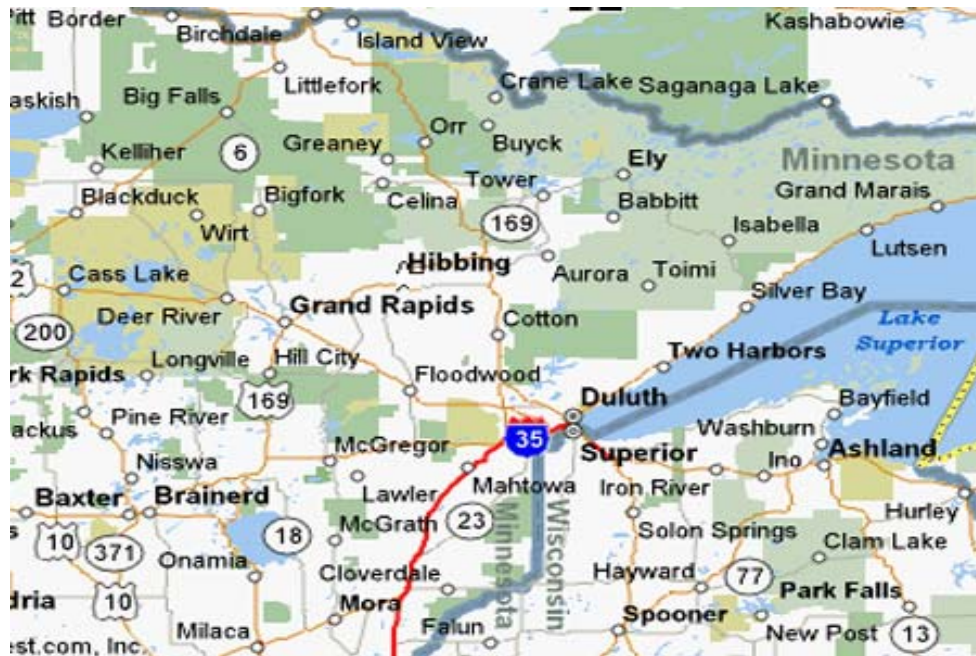
Those not currently employed were asked about:

- their skills
- pursuit of work.

The interview was similar to that used in a 2001 workforce survey, although the sample size was reduced to correspond with available funding. The sample includes 359 completed interviews. Forty-two percent of eligible, contacted respondents completed the survey.

We report data on under or over employment and the potential for Mis-Matched Skills Employment, meaning that workers had skills they wanted to use that were different from those used in their jobs. Tables summarizing these data are given in the Appendix.

## STUDY AREA



Figures 1 and 2: Study Region includes the seven counties of the Minnesota Arrowhead Region (Aitkin, Cook, Carlton, Lake, Koochiching, Itasca, and St. Louis), and Crow Wing County, Minnesota, as well as Douglas County, Wisconsin.

Source: US Census and Mapquest.

## Background

This report is based on data from a 2004 household survey in Northeastern Minnesota. This is a continuation of a line of inquiry by the Bureau of Business and Economic Research at UMD. The latest data collection effort was supported in part by State Legislative funds. Field work for the survey was conducted by the University of Minnesota Survey Research Center in spring 2004. The survey is a stratified random sample of telephone households in Northeast Minnesota and Douglas County, Wisconsin. A random person of working age (16 and older) in each household was asked in a telephone interview about their (potentially) multiple jobs, whether they wished to use other skills in their work, their satisfaction with their job/s and any interest they had in making a change in their work situation. Those not currently employed were asked about their skills and pursuit of work. The interview was similar to that used in a 2001 workforce survey although the sample size was reduced to correspond with available funding.

The sample includes 359 completed interviews. Forty-two percent of eligible, contacted respondents completed the survey.

Here, we report data on under- and over-employment, and the potential for “mis-matched skills employment”, meaning that they had skills they wanted to use that were different from those used in their jobs. Tables summarizing these data are given in the Appendix.

This report is divided into three sections: Section A defines and provides an overall estimate of the volume to each of the segments of the effective workforce. Section B contrasts the segments. Section C provides a basic contrast between all employed and the unemployed who want to work.

## ***A. Overall Under, Over and Mis-Matched Skills Employment in Northeastern Minnesota***

### **1. Under-employment**

Under-employment as used in this section refers to those who are ***currently unemployed but want to work plus those who are working and wish to work additional jobs or hours***. Overall, 60% of respondents were employed and another 17% are unemployed but want to work. About a quarter (23%) are not in the labor force in that they do not want to be employed, two-thirds of whom say they have retired. Among those who are employed or want to work (the *effective labor force* in this region) 78% are employed and 22% are unemployed<sup>1</sup>. Some 11.6% of those who are employed state that they want more hours of work or more jobs (this is 9.1% of the *effective labor force*).

**From this point of view, there appears to be 31% under-employment in the *effective labor force* of Northeast Minnesota, approximately 81,800 people<sup>2</sup>.**

Selected characteristics of the unemployed are given in the Appendix, Tables 1 and 2. Table 1 contrasts under-employed (both unemployed and those wanting to work more) with the over-employed and those who did not express an interest in changing how much they work. In Table 3, the unemployed part of the under-employed are compared with all those who are currently employed.

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<sup>1</sup> It should be noted that this definition of unemployment does not correspond to the Department of Labor definition because it includes those who currently say that they want to work whether or not they are currently searching. In this study 23.3% of the unemployed who want to work have looked for a job in the past month.

<sup>2</sup> The population aged 16 or over in the region is estimated at 342,777 (in 2000). The effective labor force as defined above would be about 263,938 people.

## 2. Over-employment

Over-employment as used in this section refers to those who are *currently working but who express an interest in working FEWER jobs or FEWER hours at their current jobs*. Part of the employed group includes those who express a preference for less work. **In this study 28.9% of the currently employed wish to work less.** This includes: those who want fewer jobs (1.9%), fewer hours at current jobs (21.7%), or both fewer jobs and hours (5.3%). This would amount to about 76,300 of the currently employed in Northeast Minnesota.

Characteristics of the over-employed are shown in the Appendix, Table 1, where these workers are compared with the employed who do not want to change how much they work and the employed who want to work more.

## 3. Mis-Matched Skills Employment

This refers to the mismatch between skills that job-holders are currently using and the skills they would like to use in their work and/or those with valid certificates that are not used in their current work. **By this definition 48.4% of those currently employed are mis-employed in the sense that they could use more and different skills or certificates/degrees than they currently use in their jobs.** In this region about 127,700 people would be mis-employed. In this study, 36.9% of those currently employed have job skills they would like to use but which are not used in their jobs. Some 23.3% of those currently employed have one or more valid certificates or degrees that are not used in their current job. Some have both unused skills and unused certificates/degrees.

Selected characteristics of the mis-employed are provided in the Appendix, Table 3 and the extent of Mis-Matched Skills Employment for employed groups is shown in Table 1.

## ***B. Comparison of Over-employed, Employed Not Desiring Change, Under-employed and Unemployed in the Northeast Minnesota Laborforce***

Table 1 in the Appendix provides comparisons of selected characteristics for the three categories of employed respondents plus those who are unemployed but want to work. Together, these constitute the *effective laborforce* of Northeast Minnesota, or some 76.5% of the population age 16 or over.

Overall, in the effective labor force of Northeastern Minnesota, **21.7% are employed but want to work less, 50.4% are employed and do not express an interest in changing how much they work, 6.2% are employed and want to work more, and 21.7% are unemployed but want to work.** Table 1 arranges these groups in that order, from the group that represents a pressure to reduce the available volume of employment – to the group less likely to change – to those who would increase current employment – and finally to those who are currently unemployed. It has been pointed out that the under-employed and over-employed might be a measure of “job churning” or worker interest in moving among jobs. By this definition, “**job churning**” would amount to **27.9%** of the *effective workforce* in this region.

- **In many respects there is *little significant difference between these four groups in the effective laborforce in Northeast Minnesota.***

Those who are employed and want to work *less* or *more* or *don't want to change* and the *unemployed* who want to work do not appear to differ significantly on:

- gender (**48% women**),
- average age (**44 years** old, but note the significant curvilinear pattern noted below),
- preference for a job outside Northeastern Minnesota (**29% prefer Greater Minnesota, 16% prefer the Twin Cities, and 28% prefer a job outside Minnesota**),
- difficulty finding a suitable job in the area (**42% say it is impossible or very difficult**),
- serious interest in starting a new business (**10%**),
- on a work ethic scale ranging 5 to a high of 13 (overall **average is 10**),
- percent holding one or more valid certificates or degrees not used in work (**26%**), and
- on a scale of math/scientific/technical skill ranging from 0 to a high of 18 (**overall 8**).

- willingness to change jobs to one using more skills, among those who are employed and whose job does not use all their skills (**overall 68%** of those currently employed would change jobs if one using more of their skills became available).
- **There are statistically significant differences between these four laborforce groups, although some differences suggest that *those not currently employed and those wanting less work have somewhat more favorable characteristics.***
  - The unemployed, compared to the employed groups, rate higher on a scale of complex or advanced computer skill which ranges from 0 to a high of 12 (**4.1 for unemployed, 3.9 for those who want more and those who want less work, and 3.1 for the employed who do not indicate an interest in changing the use of their skills**).
  - The same pattern shows for the total number of listed work skills that the respondent wants to use where up to 4 were listed (**unemployed were highest with an average of 1.7, those wanting to work more or less were 1.4 and 1.3, and those wanting no change listed an average of 0.8 unused skills**).
  - On a summative index of knowledge, accumulating information on higher education, higher math/scientific/technical skills, and having valid certificates or degrees, those wanting to work less **averaged 1.8** (on a scale from 0 to a high of 3), those wanting to work more were **1.7**, those wanting no change were **1.5** and the unemployed were **1.4**.
  - The pattern of difference on the knowledge scale reflects, in part, significant differences in attained education where the unemployed were more likely to have lower attainment (some technical school or less) – **63% vs. 38%** for the employed wanting no work change, and about **17%** for those wanting more or less work. A **quarter** of those wanting less work had postgraduate college attainment compared to from **10% to 13%** for the other groups. Those wanting more work were most likely (**71%**) to have between a technical school degree and a 4-year college degree. Only **27%** of the unemployed, **49%** of those wanting more work, and **58%** of those wanting less work had this level of educational attainment.
  - **62%** of the unemployed would like to telecommute compared to **56%** for those wanting less work, **36%** of those wanting more work, and **23%** indicating no work change.
  - Over **40%** of the employed who want less or more work are currently taking courses or training to update or gain skills (**45% and 41% respectively**), compared to **18%** for the unemployed and **21%** for the employed who did not want to change how much they worked).

- **Who might be available, under what conditions, and how can they be found?**

**Availability.** Table 1 provides data on labor force “*fluidity*”, a measure which indicates how available respondents in each of the four labor force groups may be, ranging from “*not fluid*” to “*in a fluid job situation*” (i.e. temporary or on-call), to those “*planning to change or recently changed jobs*”, and, finally, those who are *actively looking for work*. Differences among labor force groups are statistically significant.

- *Looking for work:* A third of those wanting more work are looking for work as are 7% of those wanting less work and 10% of those who did not indicate an interest in changing how much they worked. All of the unemployed and seeking work, by definition, are among the *most fluid* part of the effective labor force since they don’t have a job and want to work.
- *Planning to change or recently changed jobs.* Over half (58%) of those wanting less work were planning to change or changed jobs, compared to 28% of those wanting more work and 23% of those not indicating an interest in work change.
- *Fluid job situation.* Seventeen percent of those wanting more work were in a fluid job situation, compared to 12% of those not expressing an interest in changing how much they worked, and 3% of those wanting less work.
- *Not fluid.* Over half (54%) of those who did not express an interest in changing how much they worked are in this category as are 32% of those wanting less work, and 22% of those wanting more work.

**Moves out of the region.** Some 18% of the unemployed and 12% of those employed who want more work, plan to leave the area within the next year (compared to 4.4% of those not indicating an interest in changing how much they work and 0% of those who want less work).

### **Conditions.**

**Wages.** Respondents were asked what the lowest wage would be for them to change jobs. Those employed and not indicating an interest in changing how much they work required the highest hourly wage (mean of **\$14.92**, median \$14.98 and ranging from \$7.00 to \$33.65 per hour). Those wanting less work would require an average of **\$13.89** per hour (median of \$14.00, range from \$6.50 to \$21.63). Those wanting more work, would accept less. For those who are employed and want more work the mean is **\$11.36** per hour, (median \$10.54 and range \$9.00 to \$15.00). For the unemployed the mean is **\$10.89** per hour (median of \$9.00 and range \$5.15 to \$35.06).

**Travel.** There was no statistically significant difference in how far respondents would travel one-way to a more suitable job (overall 24% would go up to 15 miles, 51% would go 16-30 miles one way, 20% would go 31-60 miles and 5% would go more than 61 miles).



*Benefits.* Those who are unemployed are significantly more willing to take a job even if it does not offer medical coverage (75% compared to about 50% for the employed who did not want to change how much they worked or those who want to work more, and 35% for those who want to work less).

*Identification.* There are few leads in these data (other than asking direct questions) on easy categories to search to find the under-employed. Perhaps the easiest category to search would be the unemployed. While their educational achievement is less than other groups, their skill and work ethic appears to be as good as or better than other groups. Those who want to work more, tend to be more likely than other groups to live in the Port Cities.

- **The level of *Mis-Matched Skills Employment* is substantial in each category of employed and differences are statistically significant.**

The mis-employed are those who want to use more of their skills than they use in their current job/s and/or they have certificates and degrees that are valid but unused in their job/s. While 40% are mis-employed among those who are employed and do not want to change how much they work, some 82% of those who want to work more are mis-employed, and 59% of those who want to work less.

- **Factors in the better use of the effective laborforce in Northeast Minnesota.**

*Those who want to work less.* A substantial number of workers want to work less and a substantial percentage would be willing to change their job if one that used more of their skills became available, although, like other groups they do not plan to leave the area. They are among the better educated, overall they have a higher level of knowledge, and are more likely to take courses to update and gain skills. They are also more likely to be in the prime working age group (34-45). While 35% live in the Port Cities, 59% would prefer a job there. Overall, the data suggest that this group would be available in the region to shift to a less intense and, perhaps, more effective use of their skills. ***Wages in the range of at least \$14 per hour appear to be sought, jobs that use more of their skills, and have medical coverage and paid vacation benefits appear to be among the items that would encourage changing jobs to their satisfaction.***

*Those who want more work* are more likely to be in the Port Cities so a more focused recruitment program might be feasible. These are more likely to be young and mid-career workers who are either in a fluid job situation or looking for work so they should be relatively quickly available for other jobs. A very high percentage (82%) appear to be

mis-employed and, as with other employed groups, willing to change jobs to use more of their skills. They are undertaking training to update or gain new skills (about half at their own expense, although the sample size is quite small), and they are relatively high on complex or advanced computer skills and not different from other groups on math/scientific/technical knowledge or work ethic. About 12% are planning to leave the area in the next year but virtually all would prefer a job in the Port Cities area and 82% already live there. Like others, about 10% are interested in starting a new business. This group does not appear to differ from other groups in seeing difficulty in finding a suitable job. *Further investigation of this group with a larger sample would be helpful. **Wages at least around \$11 per hour, jobs that use more of their skills, plus medical coverage and paid vacation would appear to be likely to induce this group to change jobs.***

Unemployed respondents are the most fluid in that they are not attached to a current work situation. Their skills and work ethic are at least as strong, overall, as other groups although their formal educational attainment is more likely to be lower. This group listed the highest average number of unused job skills. Tele-commuting would be desirable and they are highest of these groups on the complex and advance computer knowledge scale. This group is more likely to be the youngest or oldest compared to other groups and it is also the most likely to plan to leave the region in the next year (18%). The unemployed are least likely to be taking courses/training to improve or gain new skills, suggesting that help in this regard may be needed. ***Wages at least in the range of \$11 per hour would be needed to take a job, help in getting added training, and, interestingly, unlike other groups, three quarters of this group would take a job without medical coverage.***

Those who are employed and who do not express an interest in changing how much they work are as interested in changing jobs to use more of their skills as other groups (about 68%). Twenty-seven percent live in the Port Cities but 60% would prefer a job in the Port Cities. These are more likely than other groups to be workers aged 54-65 and they are the least fluid group of workers. This group has the smallest percentage mis-employed (40%). A relatively small percentage (21%) is currently taking courses to improve or gain new skills. On average it would take a higher salary (a lower bound, on average, of \$15 per hour) to induce them to change jobs to use more of their skills and half or less would take a job without medical coverage or paid vacations. Only 4% are planning to leave the area in the next year. ***Overall, it would seem that seeking to better match job skills for this group would more likely represent “job churn” in that it would be taking more or less the same skills from one employer to another and the barriers to moving (wages, primarily) would be higher.***

### **C. Comparison of Unemployed and Employed in Northeast Minnesota**

Since there is an interest in contrasting the overall employed group with those unemployed, this section provides data organized in this manner. Table 1 and 2 (see Appendix) provide a comparison of all who are employed versus those who are unemployed but want to work. Data on characteristics of those who want more hours or jobs, a smaller sub-set of the employed, are organized in Tables 3 and 4.

- **Employed and unemployed appear not to differ significantly on many characteristics.**

These characteristics include:

gender, average age, area of residence (Range or Port Cities), average number of miles from the Port Cities, average number of household members of working age, average age at which they plan to retire, perceived difficulty in finding a suitable job in the area, or whether they would stay in this area even if their job paid less than they could get elsewhere.

- **Employed and unemployed appear to differ significantly on some characteristics.**

These characteristics include:

- age (the unemployed are more likely to be 45 or younger or 66 and older),
- the number of working age members of the respondent's household who are working full or part time,
- the number of working age members of the respondent's household who are looking for work,
- education (unemployed are more likely to have some technical school education or less while the employed are more likely to have graduated from technical school through a 4-year degree and postgraduate work).
- Unemployed are more likely to have registered with a state employment agency in the past two years.
- Unemployed would accept, on average, a lower starting salary to take a new job than those who are now employed (\$10.89 vs. \$14.00 for employed).

- **Unemployed are significantly more likely to express a stronger work ethic than those employed.**

- **Unemployed list more unused work skills than those employed.**
- **Employed and Unemployed do not appear to differ significantly on a number of measures of technical skill.**

For example, there is no difference on a summary scale of knowledge that combines higher education, higher self-assessment of math/scientific/technical skills, and having one or more job-related certificates or degrees, or on a scale of complex or advanced computer skills.

- **Unemployed appear to prefer to have a job in the Northeast and Greater Minnesota areas than is the case with the employed.**

On the other hand, employed and unemployed do not differ on preference for a job in the Twin Ports, Twin Cities or Outside Minnesota. There appears to be no difference in willingness to stay in the area even if a job paid less than they could get elsewhere.

- **Unemployed are split on preferring part or full-time jobs.**

Some 54% prefer a part-time job and 46% prefer a full-time job.

- **Unemployed would prefer to work an average of 30.7 hours per week (ranging from 3 to 50 hours), and to work an average of 44 weeks per year (ranging from 9 to 52).**

- **Conditions of work.**

Almost half of the unemployed would not take a job that offered no paid vacation and contributions to a retirement plan. Around a quarter would not take a job that did not offer child care or medical coverage. Only 12% would not take a job that didn't offer life insurance.

- **A quarter (23.3%) of unemployed looked for work in the past month.**

This relatively low percentage suggests a considerable amount of discouragement, inability to find a job that suitably uses their skills, or a lack of commitment even though they currently say they want to work.

## Appendix

Table 1: Comparison of Selected Characteristics by Employment Status  
In the Northeastern Minnesota Laborforce, 2004 BBER Workforce  
Study

Table 2: Comparison Employed and Unemployed Who Want to Find a Job on  
Selected Characteristics, Northeastern Minnesota Laborforce,  
2004 BBER Workforce Study

Table 3: Selected Characteristics of the MIS-EMPLOYED In Northeastern  
Minnesota Laborforce (Those with a Mis-match of Job and Skills they  
Want to Use), 2004 BBER Workforce Study

Listing of Skills and Certificates for Workforce Groups

**Table 1**  
**Comparison of Selected Characteristics by Employment Status**  
**In the Northeast Minnesota Laborforce, 2004 BBER Workforce Study**

Selected Characteristics	Employed			Not employed, wants to work	sig <sup>3</sup>
	Wants to Work LESS	No Change	Wants to Work MORE <sup>4</sup>		
Percent women	50.0% (60)	45.7 (138)	52.9 (17)	50.8 (59)	ns
Age/cohort: mean	42.8 (60)	45.3 (138)	41.6 (17)	41.8 (59)	ns
median	44.0	47.0	47.0	41.6	
range	25 - 63	17 - 74	20 - 75	16 - 82	
Cohorts:					
16 – 33 (1971 – 1988)	20.3%	21.2%	<b>41.2%</b>	<b>32.2%</b>	
34 – 45 (1959 – 1970)	<b>35.6</b>	22.6	0.0	27.1	sig
46 – 53 (1951 – 1958)	28.8	27.0	<b>35.3</b>	15.3	
54 – 65 (1939 – 1950)	15.3	<b>24.8</b>	11.8	11.9	
66 – 95 (1909 – 1938)	<u>0.0</u>	<u>4.4</u>	<u>11.8</u>	<u>13.6</u>	
	100% (59)	100% (137)	100% (17)	100% (59)	
Percent living in the Port Cities	35.0% (60)	26.6% (139)	<b>82.4%</b> (17)	38.3% (60 <sup>5</sup> )	sig
Preferred job location if a suitable job were available:					
Duluth-Superior area	58.6% (58)	60.3% (131)	<b>100%</b> (17)	60.3% (58)	sig
Other Northeast Minnesota area	43.1% (58)	38.8% (129)	37.5% (16)	<b>66.1%</b> (59)	sig
Greater Minnesota outside NE					
Minnesota area	17.5% (57)	29.5% (132)	31.3% (16)	40.4% (57)	ns
Twin Cities Metro area	10.2% (59)	17.9% (134)	29.4% (17)	13.6% (59)	ns
Outside Minnesota	35.6% (59)	20.3% (128)	37.5% (16)	36.2% (58)	ns
Would like to tele-commute	55.9% (59)	23.1% (134)	35.3% (17)	<b>61.7%</b> (60)	sig

<sup>3</sup> Chi square or ANOVA were used as significance tests. "Sig" means statistically significant at the .05 level of significance and "ns" means not statistically significant at the .05 level.

<sup>4</sup> Note that this group is small. Small samples are less reliable. Percentages and averages are provided here as potentially suggestive of patterns warranting further research with larger sample sizes. Where the overall relationship shown in this table is statistically significant, the result does take account of the various sub-group sample sizes.

<sup>5</sup> The number in parentheses is the base of the average or percentage.

Table 1, continued

Selected Characteristics	Employed			Not employed, wants to work	sig
	Wants to Work LESS	No Change	Wants to Work MORE		
Lowest hourly wage that respondent would take or change jobs to use their skills: mean median range	\$13.89 (20) \$14.00 \$6.50-\$21.63	<b>\$14.92</b> (24) \$14.98 \$7.00-\$33.65	\$11.36 (7) \$10.54 \$9.00-\$15.00	\$10.89 (58) \$9.00 \$5.15-\$36.06	sig
Difficulty getting a suitable job in the area among those seeking a job. Percent saying <i>impossible</i> or <i>very difficult</i> .	40.7% (27)	45.0% (40)	25.0% (8)	42.8 (56)	ns
Labor force fluidity Not fluid In fluid job situation Planning to change or changed jobs Looking for work	32.2% 3.4 <b>57.6</b> <u>6.8</u> 100% (59)	<b>54.3%</b> 12.3 23.2 <u>10.1</u> 100% (138)	22.2% <b>16.7</b> 27.8 <b>33.3</b> 100% (18)	0.0 0.0 0.0 <u>100%</u> 100% (60)	sig
Scale of self-rating of math/scientific/technical skills (6-item scale – range 0 to a high of 18) mean	8.3 (59)	7.5 (134)	7.6 (16)	8.0 (52)	ns
Knowledge scale (range is 0 to a high of 3) mean <u>Components:</u> Education – some college or more Higher self assessed math skills (3-6) Has one+ certificates or degrees	<b>1.8</b> (60) 41.7% (60) 64.0% (60) 88.3% (60)	1.5 (138) 34.8% (138) 49.3% (138) 93.5% (138)	1.7 (17) 41.2% (17) 41.1% (17) 82.3% (17)	1.4 (60) 26.7% (60) 51.0% (59) 84.7% (59)	sig ns ns ns
Complex or advanced computer skill scale (range 0 to high of 12) mean	3.9 (56)	3.1 (133)	3.9 (17)	<b>4.1</b> (49)	sig
Work ethic scale (range is 5 to high of 13) mean	9.8 (56)	9.4 (124)	9.4 (16)	10.2 (56)	ns
Interested in starting a new business	8.5% (59)	10.1% (138)	11.8% (17)	10.0% (60)	ns

Table 1 continued

Selected Characteristics	Employed			Not employed, wants to work	sig
	Wants to Work LESS	No Change	Wants to Work MORE		
Percent holding one or more valid certificates/degrees that are not used in current jobs.	30.0% (60)	8.1% (138)	41.2% (17)	35.6% (59)	ns
Percent mis-employed	59.3% (59)	39.9% (138)	<b>82.4%</b> (17)	--	sig
Percent currently taking courses/training to update skills or gain new skills.	<b>45.0%</b> (60)	20.9% (139)	<b>41.2%</b> (17)	18.3% (60)	sig
Percent of respondents who are paying for their own courses/training.	37.0% (10)	42.9% (28)	50.0% (8)	27.3% (11)	ns
Average number of benefits (of 5 listed) <u>required</u> for respondent to change jobs among those who would change to use more of their skills or the unemployed who want to work. mean	3.0 (20)	3.2 (25)	3.2 (7)	3.4 (60)	ns
Percent who <u>would</u> take a job even if it did not offer the following benefits:					
Medical coverage	35.0% (20)	48.0% (25)	50.0% (8)	<b>74.6%</b> (59)	sig
Life insurance	100.0% (20)	84.0% (25)	71.4% (7)	88.1% (59)	ns
Contributions to retirement plan	60.0% (20)	66.7% (24)	71.4% (7)	55.9% (59)	ns
Paid vacation	25.0% (20)	50.0% (24)	50.0% (8)	51.7% (58)	ns
Child care	94.7% (19)	82.6% (23)	87.5% (8)	72.9% (59)	ns
Would be willing to change employment if a job using more skills became available, among those whose job does not use all of their skills.	80.0% (25)	62.5% (40)	63.6% (11)	--	ns
Percent planning to leave the area in the next year.	0% (59)	4.4% (136)	11.8% (17)	<b>17.5%</b> (57)	sig



Table 1 continued

Selected Characteristics	Employed			Not employed, wants to work	sig
	Wants to Work LESS	No Change	Wants to Work MORE		
Percent who have some job that pays more than \$10.00 per hour	88.1% (59)	84.8% (132)	52.9% (17)	--	sig
In respondent's household					
Average <i>number</i> of members 16 or older	2.4 (59)	2.4 (138)	3.1 (17)	2.6 (60)	ns
Average number 16+ working <i>full time</i>	1.7 (59)	1.4 (138)	1.1 (17)	0.9 (60)	sig
Average number 16+ working <i>part-time</i>	0.6 (59)	0.8 (138)	1.0 (17)	0.3 (60)	sig
Average number 16+ <i>looking for work</i>	.0.3 (59)	0.2 (138)	0.3 (17)	1.0 (60)	sig
Age respondent plans to retire      mean	61.5 (53)	61.1 (99)	65.1 (15)	60.9 (28)	ns
Would stay in <u>Port Cities</u> area even if a job paid less than elsewhere:	80.6% (31)	68.5% (73)	70.6% (17)	77.4% (31)	ns
Would stay in Northeast Minnesota even if a job paid less than elsewhere:	78.6% (14)	92.9% (28)	--	80.0% (20)	ns

**Table 2**  
**Comparison of Employed and Unemployed Who Want to Find a Job on Selected Characteristics, Northeastern Minnesota Laborforce, 2004 BBER Workforce Study**

<i>Selected Characteristics</i>		<i>Employed</i>	<i>Not employed, wants to work</i>	<i>sig</i> <sup>6</sup>
Percent women		47.4% (215) <sup>7</sup>	50.8% (59)	ns
Age/cohort:	mean range	44.3 (215) 17 – 75	41.8 (59) 16 – 82	ns
	16 – 33 (1971 – 1988)	22.4%	<b>32.2%</b>	sig
	34 – 45 (1959 – 1970)	24.3	<b>27.1</b>	
	46 – 53 (1951 – 1958)	<b>28.5</b>	15.3	
	54 – 65 (1939 – 1950)	<b>21.0</b>	11.9	
	66 – 95 (1909 – 1938)	<u>3.7</u>	<b>13.6</b>	
Percent living in the Port Cities		33.5% (215)	38.3% (60)	ns
Miles respondent lives from Port Cities	mean range	75.1 (148) 1 - 200	76.7 (43) 5 - 165	ns
Household – Average <i>number</i> of members 16 or older		2.5 (214)	2.6 (60)	ns
Average number 16+ working <i>full time</i>		<b>1.5</b> (214)	0.9 (60)	sig
Average number 16+ working <i>part-time</i>		<b>0.7</b> (214)	0.3 (60)	sig
Average number 16+ <i>looking for work</i>		0.2 (214)	<b>1.0</b> (60)	sig
Education	Some technical school or less	30.2%	<b>63.3%</b>	sig
	Graduated tech school to 4 yr college	<b>53.5</b>	26.7	
	Postgraduate work	<u>16.3</u>	<u>10.0</u>	
		100% (215)	100% (52)	
Age respondent plans to retire	mean	61.6 (168)	60.9 (28)	ns

<sup>6</sup> Chi square or ANOVA were used as significance tests. “Sig” means statistically significant at the .05 level of significance and “ns” means not statistically significant at the .05 level.

<sup>7</sup> The number in parentheses is the base of the average or percentage.

Table 2, continued

<b>Selected Characteristics</b>	<b>Employed</b>	<b>Not employed, wants to work</b>	<b>sig</b>
Scale of self-rating of math/scientific/technical skills (6-item scale – range 0 to a high of 18) mean	7.8 (209)	8.0 (52)	ns
Number of unused work skills respondent listed (up to 4 were requested) mean range	1.0 (81) 0 – 6	<b>1.7</b> (60) 0 – 5	sig
Complex or advanced computer skill scale (range 0 to high of 12)	3.4 (206)	4.1 (49)	ns
Work ethic scale (range is 5 to high of 13) mean	9.6 (199)	<b>10.2</b> (56)	sig
Lowest hourly wage that respondent would take or change jobs to use their skills mean median range	<b>\$14.00</b> (52) \$14.00 \$6.50 - \$33.65	10.89 (43) \$9.00 \$5.15 - \$36.06	sig
Perceived difficulty of finding a suitable job in their area – Percent saying it is impossible or very difficult	42.6% (75)	42.8% (56)	ns
Respondent registered with any state employment agency in the last 2 years	7.9% (215)	<b>22.8%</b> (57)	sig
Currently registered among those registering in past 2 years	47.1% (17)	75.0% (12)	ns
Percent who seriously thought about starting a new business	9.8% (215)	10.2% (57)	--
Would like to tele-commute to work	33.2% (211)	61.7% (60)	sig

Table 2, continued

<b>Selected Characteristics</b>	<b>Employed</b>	<b>Not employed, wants to work</b>	<b>sig</b>
Would stay in area even if job paid less than elsewhere:			
Duluth-Superior area	71.7% (120)	77.4% (31)	ns
Other Northeast Minnesota area	88.1% (42)	80.0% (20)	ns

**Table 3**  
**Selected Characteristics of the MIS-EMPLOYED In the**  
**Northeastern Minnesota Laborforce**  
**(Those with a Mis-match of Job and Skills they Want to Use),**  
**2004 BBER Workforce Study**

<i>Selected Characteristics</i>		<i>Employed but Want to Use More Skills<sup>8</sup></i>
Percent women		49.0% (149)
Age/cohort:	mean median range	45.9 47.0 17 - 86
	16 – 33 (born 1971 – 1988)	23.8%
	34 – 45 (born 1959 – 1970)	21.6
	46 – 53 (born 1951 – 1958)	25.6
	54 – 65 (born 1939 – 1950)	16.6
	66 – 95 (born 1909 – 1938)	<u>12.4</u>
		100% (149)
Percent living in the Port Cities		44.6% (149)
Miles respondent lives from Port Cities:	mean median range	72.4 (91) 70.0 1 - 200
Household – Average <i>number</i> of members 16+		2.3 (148)
Average number 16+ working <i>full time</i>		1.2 (148)
Average number 16+ working <i>part-time</i>		0.6 (148)
Average number 16+ <i>looking for work</i>		0.3 (148)
Education	Some technical school or less Graduated tech school to 4 yr college Postgraduate work	19.7%  62.6 <u>17.7</u> 100% (149)

<sup>8</sup> The number in parentheses is the base of the average or percentage.



## **Listing of Skills and Certificates for Workforce Groups**

- Skills, Certificates and Degrees for those Employed Who Want to Work Less
- Skills and Certificates or Degrees of those Employed Who Do Not Want to Change How Much They Work
- Skills, Certificates and Degrees of Those Who Want To Work More
- Skills, Certificates and Degrees of the Unemployed Who Want to Work

## NE MN Skills, Certificates and Degrees , Workforce Survey 2004

### Employed Who Want to Work Less

Skills	Certificates or Degrees	
1. Accounting	1. 2 year degree early child	42. Elementary ed
2. Accounting	2. 2 yr degree AAS	43. Fire fighting cert. lic.
3. Accounting skills	3. 2 yr machine trades	44. Food management
4. Anthropology	4. AA degree	45. High school
5. Banking business dealing with fraud	5. AA degree	46. In-home day care cert.
6. Bartending	6. AA degree	47. Insurance license
7. Communication skills	7. AAS in dental assisting	48. Internet banking
8. Computer skills	8. Accounting 4 year degree	49. Journeyman electrician
9. Computer skills	9. Accounting degree	50. Lawyer
10. Computer work	10. Arta programming	51. Lic. childcare provider
11. Credit analyst	11. Assoc degree	52. M.A.
12. Degree skills	12. Automotive related	53. Management
13. DK	13. B.A.S.	54. Masters degree
14. Drafting	14. BA general education	55. Masters health science
15. Electrical work-repair	15. Bachelor of science	56. MD
16. Factory work	16. Bachelors degree	57. Medical license
17. Fraud analyst	17. Bachelors of Art	58. Microsoft certified
18. Geography	18. Bachelors of Science	59. Mortgage lender lic.
19. History	19. Boiler license	60. Nursing
20. Math skills	20. Broker certificate	61. Nursing license
21. Medical	21. BS mechanical engineer	62. Operating computer
22. More office skills	22. BS, Accounting degree	63. Real estate license
23. Musical skills like playing the piano	23. BS-education	64. Real estate license
24. My physical abilities	24. Business management	65. Receptionist cert.
25. None	25. Business mortgage	66. Reg. MN dental assistant
26. None	26. CDL	67. RN
27. Nursing skills	27. Cert. comp. software prog	68. RW for life light
28. Patient oriented contact	28. Cert. logging profession	69. Salon managing license
29. RA	29. Cert. nurse assistant	70. Salon stylist license
30. RA	30. Cert. occupancy mgr	71. School instructor lic.
31. Research	31. Cert. to teach K-12	72. Secretarial cert.
32. Social skills	32. Certified dental tech	73. Socio degree
33. Statistical analysis	33. Certified diesel mechanic	74. Special ed masters degree
34. Supervision	34. Certified NP	75. Teach lic media generalis
35. Teaching	35. CNA certificate	76. Teaching
36. Teaching	36. College degree	77. Welding
37. To use my intellectual abilities more	37. Comm. vehicle inspector	
38. Transportation director	38. Computer class cert.	
39. Woodworking	39. Contractors license	
40. Would like to use my college degree	40. Degree in accounting	
	41. Dental assistant	



## Employed Who Do Not Want to Change How Much They Work

Skills	Certificates or Degree	
1. Agricultural skills	1. 4 year degree	67. Freon lic. air condition
2. Athletic training	2. 4 yr degree-criminal just	68. Hazardous materials
3. Auto repair	3. AA degree	69. Histology
4. Automotive repair	4. AA degree	70. Hwy dept. cert. MNDOT
5. Background w/Russian language	5. Adult basic educ. lic.	71. Insurance license
6. Banking	6. Am. welding society	72. Journeyman cert.
7. Business applications	7. Attorneys license	73. Labor foreman cert.
8. Cabinet making	8. Auto mechanic	74. Legal degree law school
9. Carpentry	9. B.A.	75. License in field
10. College degree-manager	10. B.S.	76. License law enforcement
11. Computer	11. BA	77. LPN (lic practical nurse)
12. Computer	12. BA	78. LPN license
13. Computer related skills	13. BA	79. Machine journeyman
14. Construction	14. BA	80. Master of Divinity
15. Customer service	15. BA	81. Master of Education
16. DK	16. BA	82. Certificates or Degrees (continued)
17. DK I can't say until I try a new job	17. BA	83. Masters
18. I would like to use more planning skills	18. BA & minor	84. Masters
19. Industrial freehand drawing	19. BA education	85. Masters lic. pest control
20. Intuitive skills	20. BA of Arts	86. Military leadership cert.
21. Leadership skills	21. Bachelor Art	87. Millwright degree
22. Lumberjack skills	22. Bachelor degree	88. MLT
23. Managing documentation	23. Bachelor degree	89. Certificates, continued
24. Manufacturing (design engineer)	24. Bachelor music & educ.	90. Network hardware
25. Metal work	25. Bachelor of Arts	91. Nuclear welding cert.
26. More technical things	26. Bachelor of Science	92. Nurses aid certificate
27. Nursing skills	27. Bachelor of Science	93. Nurses aid license
28. Painting	28. Bachelors degree	94. Nurses license
29. Plumbing	29. Bachelors degree	95. Nursing assist
30. RA	30. Bachelors in history	96. Pharmacy tech. cert.
31. RA	31. Bachelors of Comm.	97. Real estate license
32. RA	32. Boiler license	98. Reg. dental hygienist
33. RA	33. Boiler license	99. Registered nurse
34. Social work	34. BS	100. Registered nurse license
35. Teaching	35. BS	101. RN
36. Teaching	36. BS	102. RN Assistant cert.
37. Teaching (I was a teacher)	37. BS medical tech bio.	103. RN license
38. Training horses	38. Business mgmt	104. Safe driving awards
39. Transportation specialist	39. Business school degree	105. Security personnel
40. Typing	40. Business teachers license	106. Stationary eng. license
	41. CDL	107. Teacher license
	42. Cert. computer program	108. Teachers certification
	43. Cert. medical technology	109. Teaching
	44. Cert. of carpentry	110. Teaching license
	45. Classify permit	111. Teaching license
	46. CNA	112. Teaching license
	47. CNA degree	113. Technical degree
	48. Coaching license	114. Technician cert.
	49. Comm. drivers license	115. Vibration tech degree
	50. Commercial driver	116. Votech
	51. Comp. tech cert.	117. Welding
	52. Contractors license	118. Welding & lubrication
	53. CPA	
	54. CPR	
	55. Defensive driving	
	56. Degree in marketing	
	57. Degree in nursing	
	58. Degree in safety	
	59. Doctorate of Pharmacy	
	60. Early childhood educ.	
	61. Electronics design eng.	
	62. EMT	
	63. Engineering & drafting	
	64. English education BS	
	65. Fire arms training	
	66. Food safety	

## Who Want To Work More

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### Skills

1. Computer skills
2. Construction
3. Critical thinking skills
4. Education
5. Entreprenurial growth
6. Laboratory skills
7. Library
8. Management
9. Managment experience
10. Masters level psychology skills
11. Printing
12. RA
13. Social work degree
14. Teaching music
15. Use my vocal skills

### Certificates or Degrees

1. AMT
2. Bachelors in social work
3. Business degree
4. Cert. nursing asstistant
5. Certificate of massage
6. Chef training
7. CNA certificate
8. College (4 year)
9. CPA license
10. CPR certificate
11. Fire fighting
12. Food management
13. Give our meds certificate
14. Graphic arts
15. Health info management
16. Heavy Equipment
17. Library tech.
18. Master (music)
19. Masters degree
20. Mechanics degree
21. Natl cert. teaching piano
22. Ordination

## 23. Unemployed Who Want to Work

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### Skills

1. Account skills
2. Administrative skill
3. Aircraft mechanic
4. Answering phone
5. Artist
6. Artist
7. Auto mechanics
8. Bookkeeping
9. Bookkeeping
10. Building homes
11. Business confrontation counsel
12. Business skills
13. Calculation programs
14. Carpentry
15. Carpentry
16. Carpentry
17. Carpentry
18. Child care
19. College degree
20. Communication skills
21. Communication skills
22. Computer design
23. Computer repair
24. Computer skills
25. Computer skills
26. Computer skills
27. Computer skills (digital art)
28. Computers
29. Computers
30. Computers
31. Computers
32. Construction work
33. Cooking
34. Cooking skills
35. Counseling skills
36. Detailed
37. DK
38. DK
39. DK
40. Dog handling
41. Doing paper work
42. Drafting
43. Dress buyer skill
44. Drums
45. Electrician by trade
46. Electrician licensed
47. Family resources/advocate
48. Forensic photography
49. Gardening
50. Helping people (i.e., social work)
51. Hotel/motel management
52. Industrial safety
53. Insurance sales
54. Internet
55. Interpreter
56. IT technology
57. Listening
58. Machine operating
59. Manager skills
60. Masters in counseling
61. Mechanical
62. Mechanical
63. Mechanics
64. Medical skills
65. Merchandising skills

66. Motorcycle mechanics
67. Multi-task office - phones
68. Natural resources management
69. Negotiating
70. None
71. Nothing (retired)
72. Nursing
73. Nursing
74. Office
75. Office work
76. Ordering
77. Painting
78. People skills
79. Phone skills
80. Planting (growing things)
81. Printing press operator
82. RA
83. RA
84. Real estate selling
85. Refractory
86. Retail
87. Sales
88. Sculpture (anything out of clay)
89. Secretarial skills
90. Sewing
91. Speaking
92. Talking to people
93. Teacher
94. The internet
95. Translator
96. Using Internet
97. Using the internet
98. Using the internet
99. Volunteering
100. Welding
101. Welding
102. Welding
103. Wood worker
104. Work with people/children

### Certificates or Degrees

1. Accounting degree
2. Administration
3. AMP license
4. Apprenticeship US Steel
5. Associate of Arts
6. Associate of Science
7. Associate of Science
8. Associates Degree
9. Beautician
10. Boiler license
11. Cert. child psychology
12. Cert. for family advocate
13. Cert. forensic photogr.
14. Cert. forklift operator
15. Cert. nursing assistant
16. Cert. work w/children/eld
17. CIS
18. Clerical certificate
19. College degree
20. College Degree BA
21. College degree elem ed.
22. Computer software
23. Computer training
24. Computers
25. DBA
26. Dental assisting
27. Dental Hygiene
28. Emergency med. technician
29. Finance
30. Fishers of MN
31. Heating certificate
32. Hennepin Votech
33. Lic. Alaskan hunting guid
34. Lic. repair gov. equip
35. License for electrician
36. Lifting devices cert.
37. Masters degree
38. Masters degree
39. Masters industrial safety
40. MCSE
41. Mechanical Engineering
42. Mn license for electrical
43. Motorcycle repair cert.
44. MSHA
45. MSHA safety training
46. Nurse
47. Nurses aid certificate
48. Nursing assistant cert.
49. Offset press operation
50. Ordination certificate
51. OSHA safety training
52. Sales & service mgr
53. Secretarial
54. Spec. ed. license
55. Teaching license
56. Tire repair
57. Translation/interpretor
58. Waste water cert.

## **BBER's Workforce Survey Project**

The Bureau of Business and Economic Research at University of Minnesota Duluth's School of Business and Economics has conducted a series of surveys of the workforce in Northeast Minnesota starting in 1998 and continuing through 2004. The survey uses a random sample of households in the seven counties of the Northeast Minnesota region, plus Crow Wing County, and Douglas County, Wisconsin, stratified by Port Cities and Range. The weighted sample provides individual or household level estimates on a range of workforce-related topics for the region.

Important survey features include:

- direct responses of workers and potential workers, rather than perceptions of various outside observers of the Northland's workers.
- including the whole potential workforce aged 16 and older
- provides for multiple jobs and multiple work skills rather than assuming respondents have a single main job and related job skills.
- inquires about work skills and valid certificates or training that respondents would like to use whether employed or not.
- field work is conducted by a Minnesota academic research organization employing high-quality, state-of-the-art telephone interviewing with multiple follow-up calls and quality controls.

A relatively wide range of topics are included to provide a detailed picture of the regional labor force. Topics included in the survey include worker and family characteristics, skills and certifications, regional preferences and intentions to change jobs, self-assessment of technical and scientific skills, pursuit of job training, a work-ethic scale, interest in changing how much they work, job fluidity, serious interest in starting a new business, job search and difficulty in finding a job, criteria for taking a different job (salary, benefits, travel, etc.), and information about area of residence, family characteristics, cohort, age, gender, etc.

Sample size and length of the interview varies for different years, depending upon the availability of funding.

The Bureau of Business and Economic Research was established in 1967. Over the years we have conducted two general types of research. One type is the project specific study in response to requests from an organization in the region. Examples are:

- Tax Revenue Impacts and Marketing Northern Minnesota's Iron Trail 2003
- BWCAW Land Valuation Report 2003
- Forestry Bottleneck Analysis 2002

Other reports are specific regional lines of inquiry conducted over several years. Examples include:

- The Workforce Study
- Tracking regional economic data

- Maintaining a web site providing updated economic data for regional business and policy reference and research.
- Periodic analysis of industry data for the region (IMPLAN analyses) to describe the impact of actual or proposed industrial development and to identify potential opportunities for future business development which builds upon the region's strength.
- A research report series and detailed analyses.

The Bureau includes regional economics experts and we draw upon the varied regional, national and international experts at the University of Minnesota Duluth, including financial, economics, marketing, business development and other areas of study. The Bureau also collaborates with other specialists in the region, including those in labor force and business development, special research and survey methodologies.

For further information, contact Jim Skurla, Director of the Bureau of Business and Economic Research.

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