

**GSG**

# Labor Supply Certification

Northeast Missouri  
Development Partnership



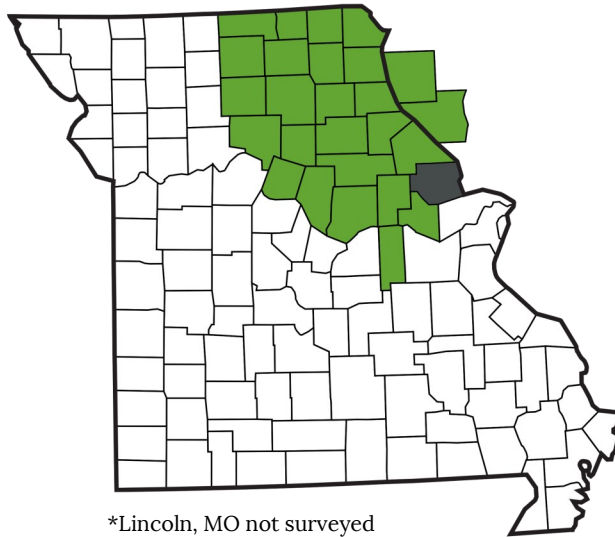
Underemployment

Available Skills

Desired Wages

# Northeast Missouri Development Partnership Labor Supply Certification

## Partners in Economic Development



\*Lincoln, MO not surveyed

### NMDP Counties:

Adair, Adams, IL, Audrain,  
Boone, Callaway, Chariton,  
Clark, Gasconade, Howard,  
Knox, Lewis, Linn, Lincoln\*,  
Macon, Marion, Monroe,  
Montgomery, Pike, IL,  
Pike, MO, Putnam, Ralls,  
Randolph, Schuyler,  
Scotland, Shelby, Sullivan,  
and Warren



## For Opportunity and Growth

November 2018



The questions and the design of the survey instrument are part of the GSG Labor Supply Certification Program, copy-righted and owned by Growth Services Group, LLC. The Growth Services Group is an independent Labor Market Research Consultant. The findings were developed from the data without any outside influence.

## Table Of Contents

<b>Executive Summary</b>	<b>1</b>
Introduction	1
General Findings, Opportunities, and Challenges	1
Workforce Availability Findings	2
<b>Overview</b>	<b>3</b>
Introduction	3
<i>Total Available Workforce (Overview) (table)</i>	3
<b>Available Workforce</b>	<b>4</b>
Total Available Workforce	4
<i>Available Workforce Work Status (table)</i>	4
<i>Summary Workforce Results (table)</i>	4
<i>Sources of Available Workforce in NMDP by County (map)</i>	4
Average Age and Years on Job	5
<i>Average Age by Occupational Clusters (table)</i>	5
<i>Available Workforce Average Age and Years on Job (table)</i>	5
Current and Previous/Other Work Experience	6
<i>Worker Available Work Experience (table)</i>	6
<i>Worker Available Work Experience (chart)</i>	7
Student Debt	8
<i>Student Debt by Age Group (table)</i>	8
<i>Current and Available Workforce Student Debt (chart)</i>	8
Household Income	9
<i>Household Income by Age Group (table)</i>	9
<i>Current and Available Workforce Household Income (chart)</i>	9
Worker Available Workforce	10
<i>Worker Available Breakout (table)</i>	10
<i>Worker Available Population (chart)</i>	10
Underemployed	11
<i>Underemployed Workforce Characteristics (table)</i>	11
Age and Gender	11
Education and Training	11
<i>Underemployed Education Attainment (table)</i>	11
Work Experience and Environment	11
<i>Underemployed Primary Industry Sector/Past Employment (table)</i>	11

Seeking Different Employment	12
<i>Seeking Workforce Characteristics (table)</i>	12
Age and Gender	12
Education and Training	12
<i>Seeking Education Attainment (table)</i>	12
Work Experience and Environment	12
<i>Seeking Primary Industry Sector/Past Employment (table)</i>	12
Willing to Change	13
<i>Willing to Change Workforce Characteristics (table)</i>	13
Age and Gender	13
Education and Training	13
<i>Willing to Change Education Attainment (table)</i>	13
Work Experience and Environment	13
<i>Willing to Change Primary Industry Sector/Past Employment (table)</i>	13
Non-worker Available Workforce	14
<i>Non-worker Breakout (table)</i>	14
<i>Non-worker Population (chart)</i>	14
Unemployed	15
<i>Unemployed Workforce Characteristics (table)</i>	15
Age and Gender	15
Education and Training	15
<i>Unemployed Education Attainment (table)</i>	15
Work Experience and Environment	15
Reason Unemployed	15
<i>Reason Unemployed (table)</i>	15
Reason Can't Find Job	15
<i>Reason Can't Find Job (table)</i>	15
Homemaker	16
<i>Homemaker Workforce Characteristics (table)</i>	16
Age and Gender	16
Education and Training	16
<i>Homemaker Education Attainment (table)</i>	16
Work Experience and Environment	16
Retired	17
<i>Retired Workforce Characteristics (table)</i>	17
Age and Gender	17
Education and Training	17
<i>Retired Education Attainment (table)</i>	17
Work Experience and Environment	17

<b>Desired Wages and Benefits</b>	<b>18</b>
Desired Benefits	18
<i>Desired Benefits by Group (table)</i>	18
<i>Available Workforce Desired Benefits (chart)</i>	18
Desired Wage Rate Ranges	19
<i>Available Workforce Desired Wage Rate Ranges (table)</i>	19
<i>Desired Wage Rate by Available Workforce Group (table)</i>	19
Desired Wage Rate By Industry and Occupation	20
<i>Desired Wage Rate by Industry (table)</i>	20
<i>Desired Wage Rate by Occupation (table)</i>	20
<i>Desired Wage Rate by Percent of Available Workforce (chart)</i>	20
Occupation Actual and Desired Wages	21
<i>Occupation Actual and Desired Wages (table)</i>	21
<b>Commuting Patterns and Preferences</b>	<b>22</b>
Willingness to Commute by Available Workforce Group	22
<i>Preferred Distance/Travel Time One Way (table)</i>	22
<i>Available Workforce Group Preferred Distance/Travel Time (table)</i>	22
Willingness to Commute by Occupation and Industry	23
<i>Commuting by Occupation Group (table)</i>	23
<i>Commuting by Industry Type (table)</i>	23
Changing Primary Employment Field	23
<i>Willing To Change Primary Occupation (table)</i>	23
<i>Willing To Change Primary Industry Group (table)</i>	23
<b>Conclusion</b>	<b>24</b>
<b>Appendices</b>	
Appendix A-Wage and Salary Conversion Rates	A-1
Appendix B-Methodology	B-1

# Executive Summary

## Introduction

The Northeast Missouri Development Partnership (NMDP) commissioned a Labor Supply Study to measure the amount and quality of potential employees in a twenty-six county area labor market (ALM). The twenty-six counties are: Adair, Adams, IL, Audrain, Boone, Callaway, Chariton, Clark, Gasconade, Howard, Knox, Lewis, Linn, Macon, Marion, Monroe, Montgomery, Pike, IL, Pike, MO, Putnam, Ralls, Randolph, Schuyler, Scotland, Shelby, Sullivan, and Warren. Although Lincoln County is part of the NMDP, the county was not surveyed for this study and the county population and workforce is not included in this analysis.

The purpose of this report is to assess the available workforce for NMDP which in aggregate includes twenty-six counties as the Area Labor Market. The **total available workforce** represents those who indicate that they are looking for employment or would consider changing their employment for the right job opportunity. However, on occasion, it is advantageous to compare the **total available workforce** with data from all respondents. At that time the terminology used will be Census Population Estimate, Census 18-64 Population Estimate, Census Male Population Estimate, and Census Female Population Estimate.

## General Findings, Opportunities, and Challenges

The Labor Supply Certification Study shows that NMDP provides a stable and productive workforce. The availability, education, and skills add value and competitiveness to the area labor market. The components of this study quantify the strengths and challenges of this laborforce. The methodology of the research process is presented in Appendix B.

A subset of the **total available workforce** of interest to many employers in a large scale hiring mode are those who are identified as **underemployed**. These individuals are currently working and would take a better job if offered and they possess the skills, education, and experience to qualify them to do so. Of the 322,096 persons in the **total available workforce**, 86,688 are considered **underemployed** (see more on page 11).

**Total Available  
Workforce  
322,096**

**Underemployed  
86,688**

With the right employment opportunities, the NMDP ALM appears positioned to retain and attract the talent necessary for growth of new and existing businesses representing regional, national, and international markets. The NMDP has several advantages. The location provides advantages with rural amenities with easy access to both two and four-year education institutions throughout the ALM. NMDP has a large and diverse workforce talent pool within easy commute to most local and county labor market centers and reflects the cost advantages of a rural setting.

## Workforce Availability Findings

The workforce availability findings reflect the views and perspectives of people between the ages of 18 and 64 who would consider seeking or changing employment. This group represents the supply side of the workforce market. The overall findings are as follows:

- About 54 percent (322,096 persons) of the Census Population Estimate in the Overall NMDP ALM is considered to be in the **total available workforce**.
- It is estimated 57,242 non-worker and 264,854 persons in the **worker available** segments of the **total available workforce** are **seeking different employment** or are **willing to change jobs** if the right opportunity arises.
- The **non-worker available** segment of the **total available workforce** is composed of 5,888 homemakers, 13,602 retirees, and 37,752 unemployed.
- Approximately 27 percent of the **total available workforce** are **underemployed** (86,688).
- Thirtyfive percent of the **total available workforce** would be interested in employment with a wage up to \$15.99 per hour. The average desired wage rate per hour for the occupational clusters shows that the professional/technical group is seeking \$28.08; production/repair/installation, \$22.79; service sector, \$21.64; and the **non-worker available** group, \$17.60.
- The education level of the **total available workforce** includes 83 percent with at least some college education and close to 100 percent with at least a high school diploma.
- The **total available workforce** is willing to commute an average of 25 minutes/miles one way. Of the **total available workforce**, 83.7 percent (269,648 people) would travel more than 10 minutes/miles one way for work while 32 percent (103,515) would commute more than 30 minutes/miles and 4.3 percent (13,943) would travel more than 50 minutes/miles.
- The overall average age of the **total available workforce** is 41. The average age of the **worker available workforce** by occupational cluster is 44 for management, 42 for production/repair/installation, 38 for professional/technical, and 40 for service sector.
- The top motivators for changing jobs among those open for the right opportunities are 71.6 percent salary, 68.96 percent Health Benefits, and 46.2 percent retirement.
- A majority, 87 percent, of the **worker available workforce** stated they are willing to work outside of their primary field of employment (i.e., those in manufacturing would be willing to work in the service sector, etc.).
- The average years on the job for the Overall ALM is 7.6 years which reflects both a stable and mature workforce.
- Approximately 9 percent (22,528) of the **worker available workforce** live inside the NMDP but work outside of the ALM.
- The **underemployed** provide the best opportunity for potential applicants. They represent a subset of the **total available workforce** that is normally more experienced, better educated, and more motivated than the **total available workforce** in general

# Overview

## Introduction

The primary purpose of the Northeast Missouri Development Partnership (NMDP) Labor Supply Study is to determine the number of workers available for employers considering expansions and major investments. The **total available workforce** represents respondents who indicate they are either looking for employment or would consider changing jobs for the right employment opportunities. The key advantage of a Labor Supply analysis is that it expands the pool of potential workers by including workers excluded from the civilian labor force (CLF). It also allows researchers to examine those members of the Area Labor Market (ALM) pool who have a propensity to consider a job opportunity given their employment expectations.

The focus of this study is the NMDP ALM; although Lincoln County, MO belongs to the NMDP, it was not surveyed and is not included or considered in this study. The ALM for the purpose of this study is defined as the area or region from which the labor market draws its commuting workers. The NMDP ALM consists of twenty-six counties which further provides smaller regions and labor markets the opportunity to analyze their labor supply with a common methodology and database as determined by the NMDP. This report also includes workers who are commuting out of the designated ALM to work but would be willing to work closer to home with the right employment opportunities. On occasion, it is advantageous to compare the **total available workforce** with data from all respondents. At that time the terminology used will be **census 18-64 population estimate** and **total available workforce**. The following table provides an overview of the **total available workforce** including the subset groups from the **worker available** and the **non-worker available** population within the ALM.

The findings from this survey are based on a type of stratified random marketing and social media campaign of 989 adults living in the NMDP ALM. The NMDP contracted with Growth Services Group (GSG) to design and administer the Labor Supply Study and Notionfront of Moberly, MO to provide the social media respondents. In 989 of these households an adult who is working or non-working between the ages of 18 and 64 participated in the survey. When all 989 respondents are included in the analysis, the survey aggregate results have a margin of error of +/- 5 percent. Subsets of the study group may have a higher error rate. Very granular data points such as individual Household Income ranges by single Age Groups may have a confidence level of 90% or less. A more detailed description of the survey process and methodology is presented in Appendix B.

### Total Available Workforce (Overview)

Category 18-64	Overall	Percent
<b>Total Available Workforce*</b>	<b>322,096</b>	<b>100.0%</b>
<b>Worker Available (Willing To Change)</b>	<b>264,854</b>	<b>82.2%</b>
Underemployed	86,688	26.9%
Seeking Different Employment	55,644	17.3%
Willing To Change	122,522	38.0%
<b>Non-worker Available (Willing To Work)</b>	<b>57,242</b>	<b>17.8%</b>
Unemployed	37,752	11.7%
Homemaker	5,888	1.8%
Retired	13,602	4.2%

\*While all those in the worker available workforce are willing to change with the right opportunity, 55,644 are seeking different employment and 86,688 are identified as underemployed and willing to change. The 122,522 Willing to Change are willing to change only for the right opportunity.

In the Non-worker 57,242, all are willing to work with the right opportunity. The unemployed (not currently working) includes both unemployed as defined by BLS (those who are seeking employment) as well as those that are not looking but are willing to accept the right opportunity and not covered in the BLS definition.



# Available Workforce

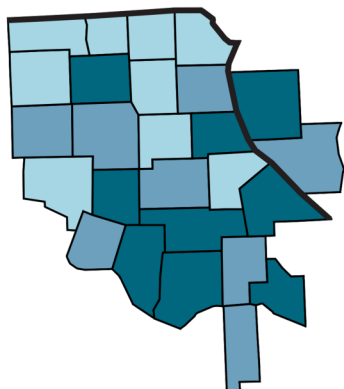
## Total Available Workforce

The following table describes the **total available workforce** in the NMDP ALM. The **total available workforce** for NMDP represents 322,096 people which consists of 264,854 working and 57,242 non-working. This demonstrates the workforce of the region is more than sufficient in scope and diversity to support most employers considering expansion or location in the larger labor markets of the NMDP ALM.

The map shows how each county in the ALM compares to all the other counties in terms of percent of the **total available workforce** in the NMDP ALM. Each county is grouped into one of three categories specified in the legend, each group making up approximately one third of the ALM counties.

The summary table for the NMDP ALM shows a **total available workforce** of 322,096, 54.0 percent of the estimated NMDP census population and 86.6 percent of the NMDP Estimated Census 18-64 Population. The table further presents the subsets of the **total available workforce** and **underemployed** by gender and age groupings. Men make up 50.3 percent and females 49.7 percent of the **total available workforce**. Those in the age 30-54 group consider themselves significantly more underutilized or **underemployed** at 48.3 percent than those in the age 55-64 at 19.2 percent.

## Sources of Available Workforce in NMDP by County



Category	Color
Less than 1.3%	Light Blue
1.3% to 2.8%	Medium Blue
Greater than 2.8%	Dark Blue

## Available Workforce Work Status

Category	Population	Percent
<b>Total Available Workforce</b>	<b>322,096</b>	<b>100.0%</b>
<b>Worker Available</b>	<b>264,854</b>	<b>82.2%</b>
Working Student	24,708	7.7%
Working (withholdings)	220,370	68.4%
Self-employed (no withholdings)	19,776	6.1%
<b>Non-Worker Available</b>	<b>57,242</b>	<b>17.8%</b>
Unemployed	32,944	10.2%
Homemaker	5,888	1.8%
Retired	13,602	4.2%
Non-working Student	4,808	1.5%

## Summary Workforce Results

Characteristics	Overall	Percent
<b>Population and Civilian Labor Force</b>		
Census Population	596,364	100.0%
Census 18-64 Population	371,945	100.0%
Census 18-64 Male Population	185,279	49.8%
Census 18-64 Female Population	186,666	50.2%
<b>Available Workforce</b>		
Total Available Workforce	322,096	100.0%
Male	162,136	50.3%
Female	159,960	49.7%
Age 18-29	90,368	28.06%
Age 30-54	169,834	52.73%
Age 55-64	61,893	19.22%
<b>Underemployed</b>		
Underemployed	86,688	100.0%
Male	39,114	45.1%
Female	47,574	54.9%
Age 18-29	28,245	32.6%
Age 30-54	41,828	48.3%
Age 55-64	16,614	19.2%

Sources: Census and Bureau of Labor Statistics (BLS) Population and Labor Force Estimates

\* Underemployment is a subset and is included in the available workforce statistics

### Average Age and Years on the Job

The average age and years on the job for the various occupational clusters indicate a mature, experienced, and diverse available workforce. The higher median age indicates that the older labor force is participating in work at a higher rate than younger workers. The **non-worker available** has a higher average and median age (45.2 and 49) due primarily to **retired** non-workers not actively seeking but available for the right opportunity. The average age for the **total available workforce** is 40.8 while the median age is 44.

### Average Age by Occupational Clusters

Category	Avg. Age	Med. Age
Management	44.4	48
Production/Repair/Installation	41.6	42
Professional/Technical	38.0	41
Services	39.8	43
Non-Worker Available	45.2	49

The three oldest occupation groups are: Production: Delivery/Drivers/Courier; Maintenance, Installations, and Repairs (Mechanic, Carpenter, Plumber, Electrician) etc.; and Managerial, Executive, Business Owners, Farmers, Supervisory. The three youngest occupation groups are: Consumer Services Retail, Restaurant, Hotel, Food Services, etc.; Teachers, Instructors, Trainers, Writers, Researchers, etc.; and Consumer Services Retail, Restaurant, Hotel, Food Services, etc..

The top three occupation groups by most years on the job are: Maintenance, Installations, and Repairs (Mechanic, Carpenter, Plumber, Electrician) etc.; Administrative Support: Shipping/Receiving, Secretaries, Computer Operators, etc.; and Other Blue Collar: Laborers, Farm Hand, Janitor, Warehouse Workers, etc.. The top three occupation groups by least years on the job are: Business Sales: Finance, Insurance, Real Estate, Wholesale, Industrial etc.; Business Office and Clerical Operations; and Consumer Services Retail, Restaurant, Hotel, Food Services, etc..

### Available Workforce Average Age and Years on Job

	Average Age	Years on Job
Administrative Support: Shipping/Receiving, Secretaries, Computer Operators, etc.	41.9	10.4
Business Office and Clerical Operations	37.2	5.0
Business Sales: Finance, Insurance, Real Estate, Wholesale, Industrial etc.	36.4	4.9
Computer Technology, Science, Math and Engineering	38.1	7.5
Consumer Services Retail, Restaurant, Hotel, Food Services, etc.	33.3	5.1
Delivery/Drivers/Courier	47.2	7.0
Government Office and Clerical Operations	43.8	7.5
Health, Social, Community, Personal Care, and Recreation Services	39.1	6.7
Maintenance, Installations, and Repairs (Mechanic, Carpenter, Plumber, Electrician) etc.	45.6	12.7
Managerial, Executive, Business Owners, Farmers, Supervisory	44.4	9.2
Other Blue Collar: Laborers, Farm Hand, Janitor, Warehouse Workers, etc.	42.9	9.9
Other White Collar Workers	42.2	7.4
Production: Factory Assembly, Fabrication, Construction and Mining	38.9	8.5
Professional: Doctors, Lawyers, Engineers, Accountants, Professors, Consultants, etc.	39.9	6.6
Protective: Police/Fire/ Military/Regulators/investigators and Postal	43.3	8.7
Teachers, Instructors, Trainers, Writers, Researchers, etc.	35.4	7.2

### Current and Previous/Other Work Experience

The following table shows the current work experience, second jobs, currently underutilized, and previously underutilized of the total **worker available workforce**. The table provides a perspective on the types of workers available for employment in the NMDP ALM. The first column in the table shows the number of workers available employed in the various occupational clusters.

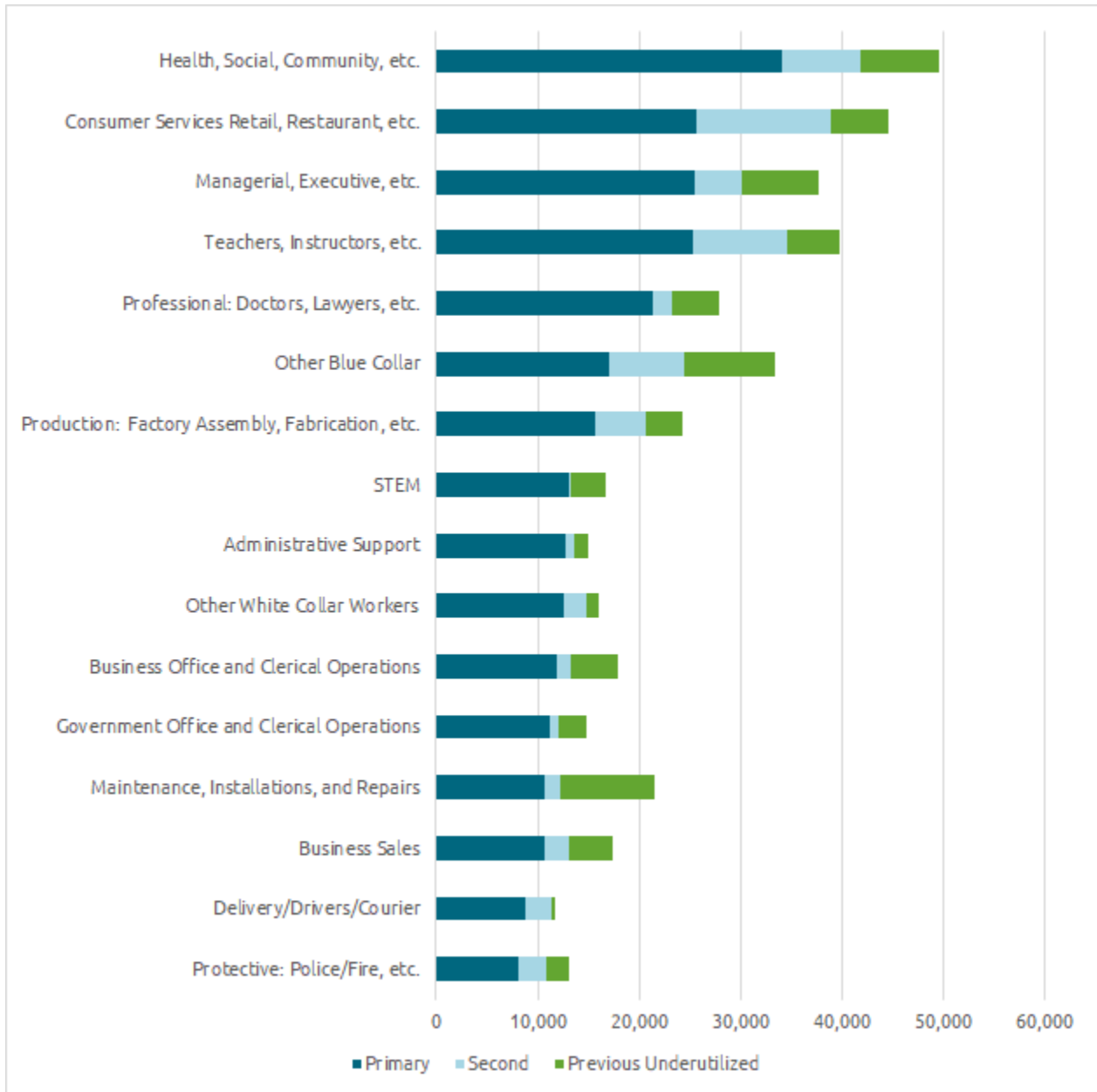
Respondents are indicating a high level of employment availability from the service sector in areas of health, social, and community care and in the retail, hospitality, and food service occupations. However, the survey shows a workforce with skills, education, and experience available across the entire occupational classifications if the right employment opportunities are present.

Of those **workers available** and currently employed, 24.1 percent also have second jobs. 54.4 percent of Business Sales: Finance, Insurance, Real Estate, Wholesale, Industrial etc. reported having a second job, along with 41.2 percent of Protective: Police/Fire/Military/Regulators/Investigators and Postal workers. Nineteen percent of STEM occupations have second jobs with an even higher number (34.3%) identifying themselves as underutilized or underemployed. Over sixty percent of workers in both Administrative Support: Shipping/Receiving, Secretaries, Computer Operators, etc. and Government Office and Clerical Operations are underutilized with seven other occupation groups identifying themselves as highly underutilized or **underemployed** (>30%). The second job, current underutilized, and previous underutilized are all subsets of the worker available.

### Worker Available Work Experience

	Primary	Second	Current Underutilized	Previous Underutilized
Administrative Support: Shipping/Receiving, Secretaries, Computer Operators, etc.	12,786	810	7,813	1,411
Business Office and Clerical Operations	11,837	1,426	5,179	4,746
Business Sales: Finance, Insurance, Real Estate, Wholesale, Industrial etc.	10,680	2,485	4,687	4,193
Computer Technology, Science, Math and Engineering (STEM)	13,123	137	4,504	3,477
Consumer Services Retail, Restaurant, Hotel, Food Services, etc.	25,735	13,178	6,467	5,650
Delivery/Drivers/Courier	8,752	2,584	3,312	444
Government Office and Clerical Operations	11,242	843	7,334	2,823
Health, Social, Community, Personal Care, and Recreation Services	34,061	7,898	10,267	7,724
Maintenance, Installations, and Repairs (Mechanic, Carpenter, Plumber, Electrician) etc.	10,739	1,471	2,844	9,334
Managerial, Executive, Business Owners, Farmers, Supervisory	25,549	4,557	6,078	7,585
Other Blue Collar: Laborers, Farm Hand, Janitor, Warehouse Workers, etc.	17,076	7,422	5,289	9,016
Other White Collar Workers	12,558	2,206	3,069	1,185
Production: Factory Assembly, Fabrication, Construction and Mining	15,731	5,012	4,965	3,645
Professional: Doctors, Lawyers, Engineers, Accountants, Professors, Consultants, etc.	21,421	1,810	4,879	4,697
Protective: Police/Fire/ Military/Regulators/investigators and Postal	8,162	2,773	1,999	2,247
Teachers, Instructors, Trainers, Writers, Researchers, etc.	25,402	9,174	8,004	5,294
<b>Worker Available</b>	<b>264,854</b>	<b>63,785</b>	<b>86,688</b>	<b>73,471</b>

## Worker Available Work Experience



The chart shows the same information as presented in the table on the previous page but in a graphical format and without the currently underutilized. The visual shows a good mix of current and related work experience and those who indicated availability and as currently employed. The Health, Social, and Community occupation type shows opportunities for Health Care industries with almost 50,000 identifying themselves as available.

## Student Debt

Student debt is a growing concern, and along with a necessary educated workforce is a challenge for our local and national economy. According to CNBC, 44 million people, roughly 70 percent of recent graduates, have an average debt load of \$37,172. It is for this reason that student debt is addressed in this study.

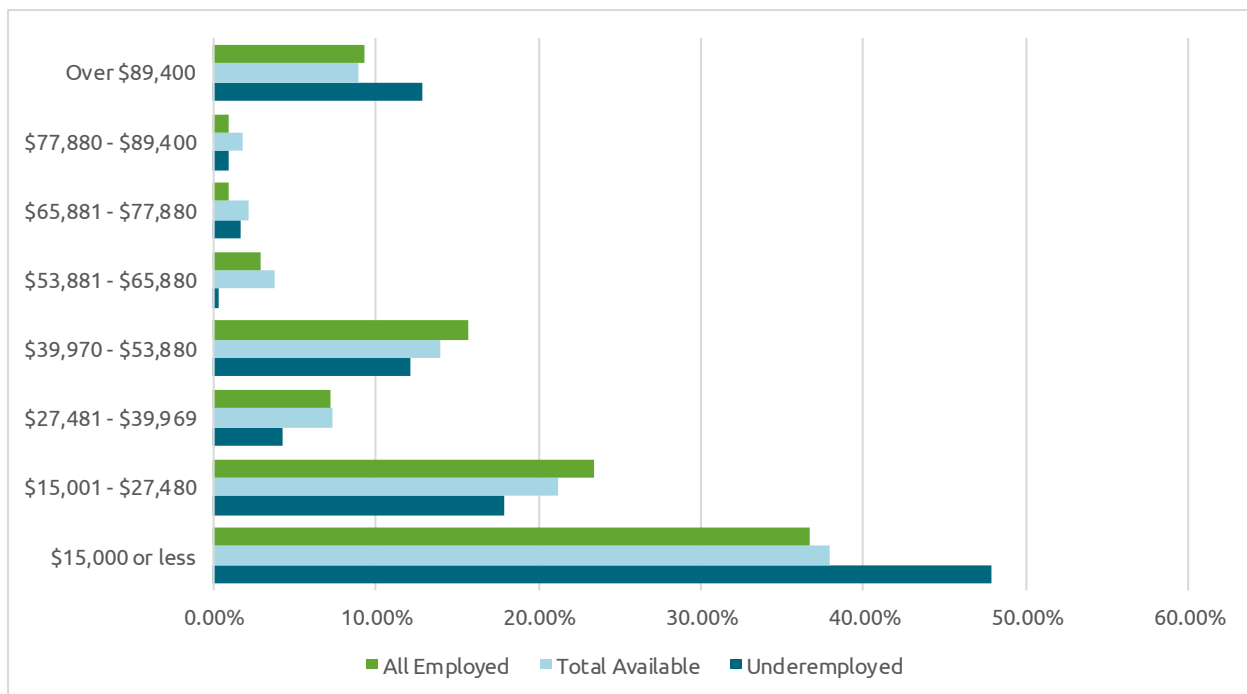
The data indicate that 48.1 percent of the 18-29 year-olds have student debt. This compares to 31.9 percent for the 30-54 year-olds and just 12.4 percent for the 55-64 year-olds. The debt amounts for the younger available workforce and oldest available workforce are skewed towards the lower end of the debt balance spectrum where the distribution of debt is much wider for those in the middle age group. Two thirds of those with Over \$89,400 in debt also report holding an advanced degree.

## Student Debt by Age Group

	18 - 29	30 - 54	55 - 64
Have Debt	<b>48.1%</b>	<b>31.9%</b>	<b>12.4%</b>
\$15,000 or less	50.8%	25.8%	51.1%
\$15,001 - \$27,480	20.9%	22.5%	13.3%
\$27,481 - \$39,969	8.5%	6.8%	3.8%
\$39,970 - \$53,880	12.6%	16.2%	6.9%
\$53,881 - \$65,880	1.4%	5.4%	4.9%
\$65,881 - \$77,880	0.0%	4.1%	0.0%
\$77,880 - \$89,400	0.0%	3.5%	0.0%
Over \$89,400	5.0%	10.5%	19.9%
No Response	0.8%	5.3%	0.0%

\*<https://www.cnbc.com/2018/02/15/heres-how-much-the-average-student-loan-borrower-owes-when-they-graduate.html>

## Student Debt Current and Total Available Workforce



The chart represents the percentage of the various groups of underemployed, total available workforce, and all employed have in debt compared to each other.

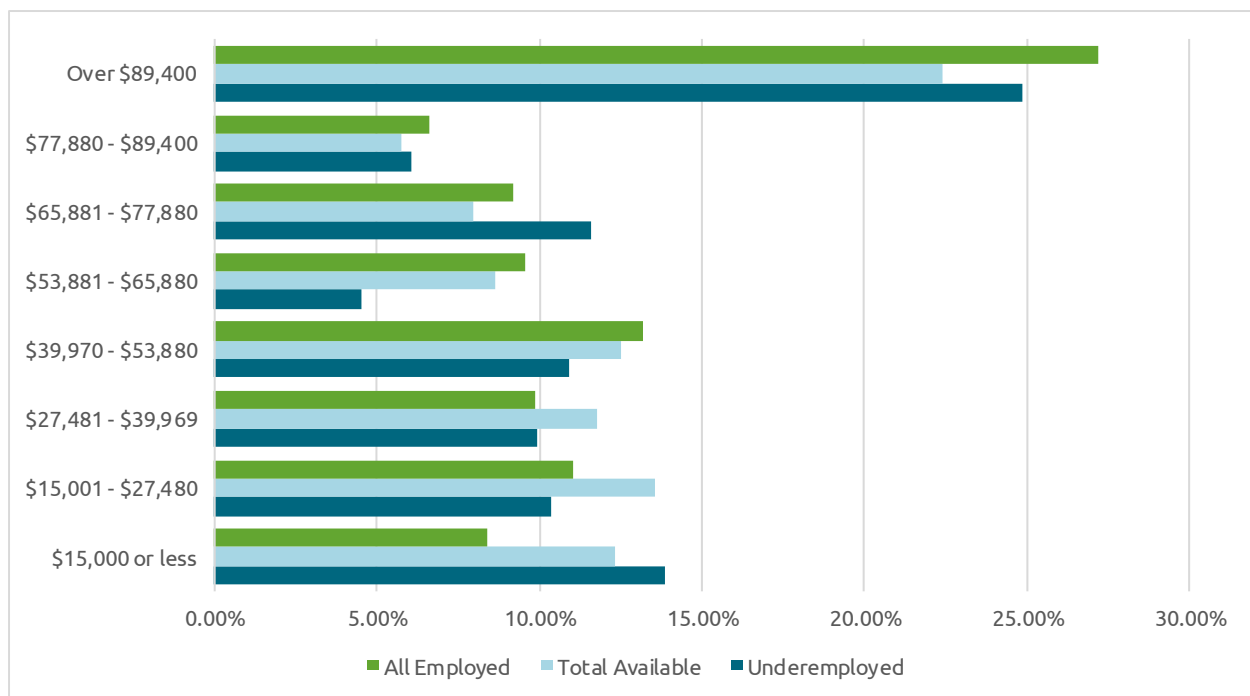
## Household Income

The household income clearly shows the younger 18-29 age group with 19.1 percent having household income of \$15,000 or less compared to the 30-54 age group's 9.8 percent and the 55-64 age group's 9.1 percent. For the 18-29 age group, 8.7 percent have a household income over \$89,400 compared to 28.5 percent of the 30-54 age group and 25.6 percent for the 55-64 age group.

## Household Income by Age Group

	18 - 29	30 - 54	55 - 64
\$15,000 or less	19.1%	9.8%	9.1%
\$15,001 - \$27,480	18.6%	11.4%	12.1%
\$27,481 - \$39,969	14.5%	12.1%	6.9%
\$39,970 - \$53,880	9.8%	13.0%	15.0%
\$53,881 - \$65,880	9.8%	8.3%	7.7%
\$65,881 - \$77,880	6.1%	7.9%	11.0%
\$77,880 - \$89,400	5.4%	5.9%	6.0%
Over \$89,400	8.7%	28.5%	25.6%
No Response	7.9%	3.1%	6.6%

## Household Income Current and Total Available Workforce



The chart represents the percentage of the various groups of underemployed, total available workforce, and all employed have in household income compared to each other. The underemployed appear to be motivated about income with a larger percent responding in the lowest income group.

## Worker Available Workforce

The willingness of the currently employed to change employment with the right opportunity is a key indicator in profiling the characteristics of the **total available workforce** in the Area Labor Market. The employed individuals who are willing or likely to change jobs with an existing or a different employer represent the primary pool of the **total available workforce**.

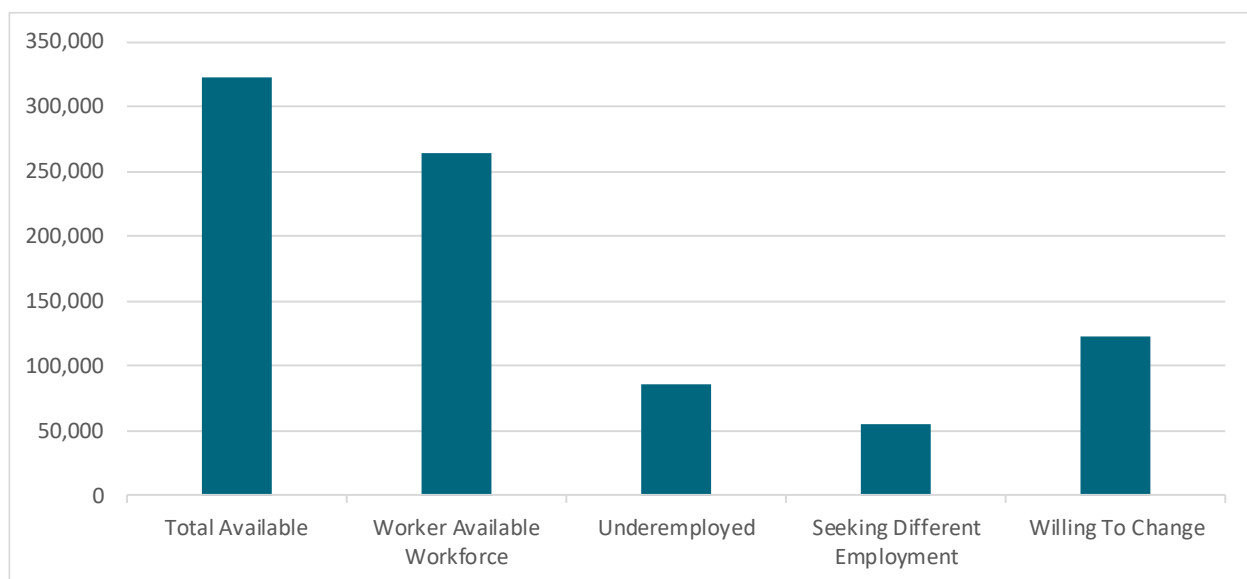
The results of this workforce survey show that 82.2 percent of the respondents identified themselves as part of the **total available workforce** and were **worker available** at the time they were contacted with the other 17.8 percent as **non-worker available**.

It is important to analyze each segment of respondents to identify and respect the differences and contributions to the ALM. Many factors must be considered when evaluating these workers, such as education, unused skills, wages and benefits desired, past experience, and the distance individuals are willing to travel to work. Within the **worker available workforce** are three subsets: those who classify themselves as **underemployed**, those actively **seeking different employment**, and those **willing to change** with the right opportunity. Respondents of these three subsets are counted only once as part of the **worker available workforce**.

## Worker Available Breakout

Category 18-64	Overall	Percent
<b>Total Available</b>	322,096	100.0%
<b><u>Worker Available Workforce</u></b>	<b>264,854</b>	<b>82.2%</b>
Underemployed	86,688	26.9%
Seeking Different Employment	55,644	17.3%
Willing To Change	122,522	38.0%

## Worker Available Population



### Underemployed

The subset of underemployment is identified as those who believe they are currently underutilized in their jobs. This group is a primary source of good employees as these individuals are now working but desire a better job and also possess the skills, education, and experience to qualify for better jobs. They claim to have additional education and/or job training; a previous job that required more skill and/or education; or a current job that does not require the level of training and/or education attained. The key to this definition is education, training, or experience. Current pay or part-time status alone is not a qualifying factor for underemployment status in this study. In addition to the survey definition and self-selection of underemployed by the respondent, GSG has further selected only those who have had some post-high school education.

The 86,688 in this group are included in 264,854 members of the worker available workforce. By looking at the two tables one can see some similarities with seeking and willing to change subset and the underemployed.

### Age and Gender

The average age of this group is 40 years of age. The respondents are distributed among all age ranges: 18 to 29 (32.6%), 30 to 54 (48.3%), and 55 to 64 (19.2%). Males and females represent 45.1 percent and 54.9 percent respectively.

### Education and Training

Forty-two percent of the **underemployed** respondents in the ALM have some college or associate degree, 29.1 percent hold a Bachelor's degree, and the other 28.9 percent have an advanced degree. This compares to 79.6 percent of the **total available workforce** with post-high school education.

Twenty-six percent (26.2%) of the **underemployed** respondents stated that experience, training, and educational opportunities would be important in accepting a new job. Health Care is the most important benefit for this group (71.4%) when considering new employment.

### Work Experience and Environment

To gain perspective on the types of workers available for new or different employment, survey respondents were asked to classify their occupations and industry experience as Goods Producing (manufacturing, construction mining or agriculture), Service Providing (retail, healthcare, etc.), or Government/Education. While the occupations may be similar in different industries, the focus of the work and work culture may be quite different in different types of industry. 46.8 percent of the **underemployed** are in the Service Producing sector.

### Underemployed Workforce Characteristics

Underemployed	86,688
Years on Job	6.6
Willing to Commute One Way	25.5
Current Average Wage	\$19.84
Desired Average Wage	\$25.04
Household Income	\$56,065
Average Age	39.7
Male/Female Ratio	45.1/54.9
Working a Second or Part Time Job	15.2%
Only Job Part Time or Temporary	7.3%
Employer Doesn't Provide Health Insurance	25.4%
Has No Health Insurance	19.8%
Has No Retirement Benefits	38.2%

### Underemployed Education Attainment

Less than high school	0.0%
High school or equivalent	0.0%
Some college or associate's degree	42.0%
Bachelor's degree	29.1%
Advanced degree	28.9%
Underemployed	86,688

### Underemployed Primary Industry Sector/Past Employment

Goods Producing	24.8%
Service Providing	46.8%
Government/Education	28.4%
Underemployed	86,688



## Seeking Different Employment

The subset of **seeking different employment** is identified as those who are actively looking to change jobs but are still currently employed. The 55,644 in this group are included in 264,854 **worker available** group and are not counted twice. By comparing the two different tables **willing to change** and **seeking different employment**, one can see some significant differences. The **seeking different employment** have less years on the job, lower current wages, lower household income, a higher degree of second or part-time jobs, a higher percentage with no health insurance or retirement benefits, and lower levels of education.

### Age and Gender

The mean or average age of this group is 38 years of age. The respondents are distributed among all age ranges: 18 to 29 (39.1%), 30 to 54 (51.1%), and 55 to 64 (9.8%). Males and females are evenly represented (50.5/49.5) among those **seeking different employment**.

### Education and Training

More than half (53.7%) of the subset have post high school education and 21.1 percent have four-year degrees or higher. The **seeking different employment** subset has the lowest education attainment level of all worker groups with 53.7 percent possessing some post-high school education compared to 79.6 percent of the **total available workforce** of 322,096.

Twenty-nine percent (29.3%) of the **seeking different employment** respondents stated that experience, training, and educational opportunities would be an important consideration in accepting a new job. Health Care is the most important benefit for this group (75.6%) when considering new employment.

### Work Experience and Environment

To gain perspective on the types of workers available for new or different employment, survey respondents were asked to classify their occupations and industry experience as Goods Producing (manufacturing, construction mining or agriculture), Service Providing (retail, healthcare, etc.), or Government/Education. While the occupations may be similar in different industries, the focus of the work and work culture may be quite different in different types of industry. Sixty-three percent of the **seeking different employment** are in the Service Producing sector.

## Seeking Workforce Characteristics

Seeking Different Employment	55,644
Years on Job	6.8
Willing to Commute One Way	26.0
Current Average Wage	\$16.65
Desired Average Wage	\$18.72
Household Income	\$46,667
Average Age	37.6
Male/Female Ratio	50.5/49.5
Working a Second or Part Time Job	15.5%
Only Job Part Time or Temporary	7.9%
Employer Doesn't Provide Health Insurance	36.0%
No Health Insurance	21.4%
No Retirement Benefits	50.8%

## Seeking Education Attainment

Less than high school	0.1%
High school or equivalent	46.1%
Some college or associate's degree	32.6%
Bachelor's degree	14.9%
Advanced degree	6.2%
Seeking Different Employment	55,644

## Seeking Primary Industry Sector/Past Employment

Goods Producing	22.4%
Service Providing	63.0%
Government/Education	14.5%
Seeking Different Employment	55,644

### Willing to Change

The **worker available workforce** in the Overall NMDP ALM is 322,096. Those willing to change number 122,522. See the following table for more characteristics of this group.

### Age and Gender

The mean or average age of this group is 41 years. The respondents are distributed among all age ranges: 18 to 29 (26.6%), 30 to 54 (54.3%), and 55 to 64 (19.1%). Males and females represent a 61/39 proportion of those willing to accept different employment.

### Education and Training

Eighty-four percent of the **willing to change** respondents in the ALM have some post high school education and 55.1 percent possess four-year degrees or higher. The **willing to change** subset has a slightly higher education attainment level of 84.0 percent with some post-high school education compared to 79.6 percent of the **total available workforce** of 322,096.

22.3 percent of the **willing to change** respondents stated that experience, training, and educational opportunities would be an important consideration in accepting a new job. Health Care is the most important benefit for this group (72.9%) when considering new employment.

### Work Experience and Environment

To gain perspective on the types of workers available for new or different employment, survey respondents were asked to classify their occupations and industry experience as Goods Producing (manufacturing, construction, mining, or agriculture), Service Providing (retail, healthcare, etc.), or Government/Education. While some occupations may be similar in different industries, the impact of the work and work culture is affected by the type of industry. 37.5 percent of the **willing to change** segment is in the Service Producing sector.

### Willing to Change Workforce Characteristics

	Overall
Willing to Change	122,522
Years on Job	8.6
Willing to Commute One Way	25.5
Current Average Wage	\$24.53
Desired Average Wage	\$28.32
Household Income	\$62,898
Average Age	41.0
Male/Female Ratio	61.1/38.9
Working a Second or Part Time Job	8.2%
Only Job Part Time or Temporary	6.2%
No Employer-Provided Health Insurance	15.9%
No Health Insurance	6.3%
No Retirement Benefits	20.1%

### Willing to Change Education Attainment

	Overall
Less than high school	0.2%
High school or equivalent	15.8%
Some college or associate's degree	28.9%
Bachelor's degree	34.4%
Advanced degree	20.7%
Willing to Change	122,522

### Willing to Change Primary Industry Sector/Past Employment

Goods Producing	26.1%
Service Providing	37.5%
Government/Education	36.4%
Willing to Change	122,522

## Non-Worker Available Workforce

Using only the unemployed persons as determined by the Bureau of Labor Statistics (BLS) would overlook sources of potential labor like homemakers and retirees who would be willing to enter or reenter the workforce if the right opportunity arose. GSG uses non-worker as part of its Area Labor Market (ALM) studies which includes three subsets: **unemployed**, **homemaker**, and **retired** in the non-worker segment.

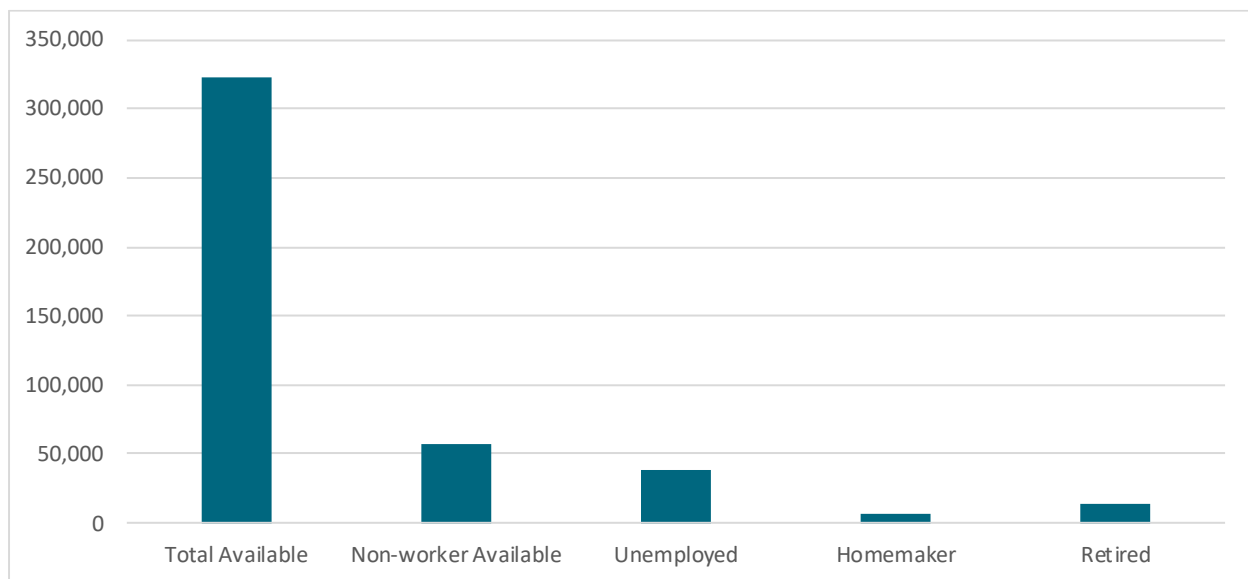
## Non-worker Breakout

Category 18-64	Overall	Percent
<b>Total Available*</b>	322,096	100.0%
<i>Non-worker Available (Willing To Work)</i>	<b>57,242</b>	<b>17.8%</b>
Unemployed	37,752	11.7%
Homemaker	5,888	1.8%
Retired	13,602	4.2%

Including these subsets in the analysis provides a more accurate assessment of the potential workforce in the ALM. Of the respondents interviewed, 17.8 percent stated they were non-working. By questioning these respondents about seeking employment or their willingness to accept an employment offer, the survey identified 57,242 in the **unemployed**, **homemaker**, and **retired** who stated they would accept with the right opportunity.

Analyzing the subsets provides unique characteristics for better understanding the available workforce. A further distinction in the non-working group of those actively seeking employment and those not actively seeking employment but willing to work or accept employment with the right opportunity includes wages, benefits, work culture, transportation, childcare, scheduling, etc.. The following sections provide a profile of the non-working **unemployed**, **homemakers**, and **retired** respondents.

## Non-worker Available Population



## Unemployed

Of those who responded who are **unemployed**, 86.9 percent are actively seeking employment. It is estimated that 4,935 are willing to return to work if presented with the right opportunity. The 37,752 represents both those seeking employment (32,817) and those willing with the right opportunity (4,935). The following table provides the general characteristics of this subdivision.

### Age and Gender

The average age of this group is 42.3 years of age. The respondents are distributed among all age ranges: 18 to 29 (15.5%), 30 to 54 (68.6%), and 55 to 64 (15.9%). Men make up 36.2 percent and females 63.8 percent seeking or willing to accept employment.

### Education and Training

Fifty-six percent of the **unemployed** respondents in the ALM have some post-high school education. In comparing the **unemployed** subset to other subsets, the **unemployed** tend to be some of the least educated with only 56.1 percent having some college compared to the **total available workforce** population at 79.6 percent.

### Reason Unemployed

Of those who identified themselves as **unemployed** (37,752), 21.4 percent stated that it was due to being terminated and another 21.4 percent cite disability. In reality many of those unemployed indicating availability would be less acceptable on the demand side of today's labor market than the other categories of the available workforce.

### Reason Can't Find Job

Of those responding about not finding a job, 46.7 percent state job availability while only 5.3 percent state that it is lacking necessary skills. Transportation and child care combined to account for 22.3 percent and may be limiting factors for some potential workers.

## Unemployed Workforce Characteristics

Unemployed	37,752
Seeking Employment	32,817
Commute One Way	20.2
Desired Average Wage	\$17.11
Average Age	42.3
Male/Female Ratio	36.2/63.8
Household Income	\$35,601

## Unemployed Education Attainment

Less than high school	7.6%
High school or equivalent	36.2%
Some college or associate's degree	35.4%
Bachelor's degree	15.3%
Advanced degree	5.4%
Unemployed	37,752

## Reason Unemployed

Major Layoff or Plant Closing	12.7%
Fired/Released	21.4%
Never Employed	9.6%
Disabled	21.4%
Other Income	5.0%
No Response	30.0%
Unemployed	37,752

## Reason Can't Find Job

Job Availability	46.7%
Lacking Necessary Skills	5.3%
Compatibility/Personality	4.0%
Lack High School Diploma	6.0%
Transportation	16.3%
Child Care	6.0%
Not Interested/Other	7.1%
No Response	8.5%
Unemployed	37,752

### Homemakers

Of those who responded as **homemakers**, it is estimated that 5,888 are willing to enter or return to work if presented with the right opportunity. This also includes those who are actively seeking employment. The following table provides the general characteristics of this subset.

#### Age and Gender

The mean or average age of this group is 36 years of age compared with 40 years of age in the overall working group. The respondents are distributed among all age ranges: 18 to 29 (28.8%), 30 to 54 (64.4%), and 55 to 64 (6.8%). Men make up 10 percent and women 90 percent.

#### Education and Training

67.4 percent of the **homemaker** respondents in the ALM have some post-high school education with 16.9 percent earning four-year degrees or higher. Comparing the **homemaker** subset to the other subsets shows **homemakers** tend to be somewhat less educated with 67.4 percent with some college compared to the **total available workforce** at 79.6 percent.

**Homemakers** rated Experience, Training, and Educational opportunities higher than any other available workforce group (30.3% compared to 25.1%). Health Care is the most important benefit for this group (52.9%) when considering new employment.

### Homemaker Workforce Characteristics

Homemaker Workforce Characteristics	
Homemaker	5,888
Seeking Employment	4,074
Commute One Way	19.9
Desired Average Wage	\$13.62
Average Age	36.2
Male/Female Ratio	9.9/90.1
Household Income	\$29,790

### Homemaker Education Attainment

Homemaker Education Attainment	
Less than high school	0.0%
High school or equivalent	32.6%
Some college or associate's degree	50.5%
Bachelor's degree	9.0%
Advanced degree	7.9%
Homemaker	5,888

## Retired

Of those who responded as being **retired**, it is estimated that 13,602 are willing to enter or return to work if presented with the right opportunity. This includes those who are actively seeking employment. The following table further segments the overall NMDP ALM into age, gender, and education areas.

### Age and Gender

The mean or average age of this group is 57 years of age. 75.0 percent of the respondents belong to the 55 to 64 age range, 21.7 to the 30 to 54 group, and 3.2% in the 18 to 29 range. The majority of respondents outside of the 55 to 64 group who indicated they are retired stated disability as the reason for their retirement status. Men make up 57 percent and women 43 percent seeking or willing to accept employment.

### Education and Training

Eighty-seven percent of the **retired** respondents in the ALM have some post-high school education with 39.4 percent possessing four-year degrees or higher. Comparing retirees to the other subsets shows the retirees have a higher level of education with 87.1 percent having some college compared to the **total available workforce** at 79.6 percent. This group represents a significant pool of experienced and educated workers but also higher opportunity costs to get them back in the labor market.

Only 17.6 percent of the **retired** respondents stated that experience, training, and educational opportunities would be important in accepting a new job. The most important benefit for those in the **retired** group was flexible hours, at 54.0 percent.

## Retired Workforce Characteristics

Retired Workforce Characteristics	
Retired	13,602
Seeking Employment	4,616
Commute One Way	20.4
Desired Average Wage	\$20.92
Average Age	57.1
Male/Female Ratio	42.8/57.2
Household Income	\$41,692

## Retired Education Attainment

Retired Education Attainment	
Less than high school	0.0%
High school or equivalent	12.9%
Some college or associate's degree	47.6%
Bachelor's degree	26.1%
Advanced degree	13.4%
Retired	13,602

## Desired Wages and Benefits

Wages and benefits rank high among workers and non-workers in the **total available workforce** when making an opportunity assessment for potential employment. While wage and benefit costs are important for employers when assessing a workforce market, of equal or greater importance is the quality and availability of the necessary skills and talent of the labor force. The greater the quality and availability of the skills and talent for increased productivity, the more likely higher wages and benefits will follow. Competitiveness in the global economy means producing goods and services competitive in price and quality in the market place.

### Desired Benefits

Salary and Health Care appear to be the top motivators for changing jobs, with retirement and flexible hours following. A Salary Increase rated higher for the **worker available** than the **non-worker available** while those in the **non-worker available** valued childcare and working closer to home more than **worker available**.

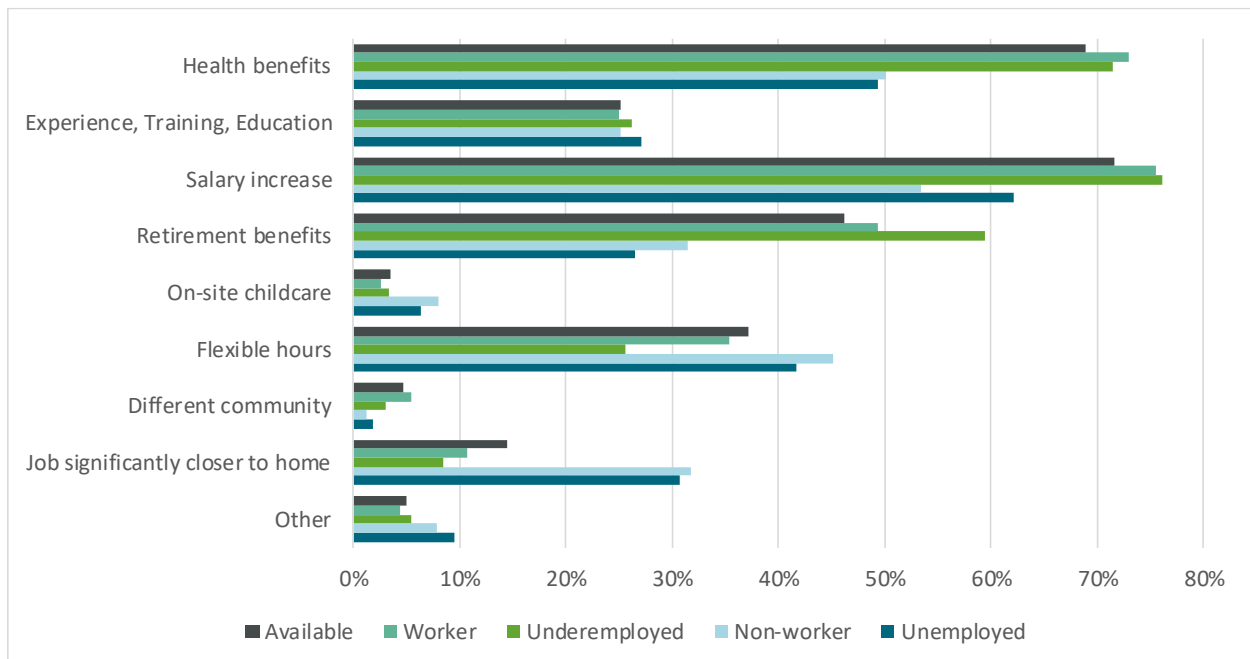
Desired Benefits by Group

Category	Available	Worker	Under-employed	Non-worker	Un-employed
Health Benefits	68.9%	73.0%	71.4%	50.2%	49.4%
Experience, Training, Education	25.1%	25.0%	26.2%	25.1%	27.0%
Salary Increase	71.6%	75.5%	76.1%	53.4%	62.2%
Retirement benefits	46.2%	49.4%	59.4%	31.5%	26.5%
On-site childcare	3.5%	2.6%	3.2%	8.0%	6.4%
Flexible hours	37.1%	35.4%	25.5%	45.1%	41.7%
Different community	4.7%	5.4%	3.0%	1.1%	1.7%
Job significantly closer to home	14.4%	10.6%	8.5%	31.8%	30.7%
Other	5.0%	4.3%	5.4%	7.9%	9.4%

Multi-select options, percentages will not total to 100%

The **underemployed**, which is a subset of the **worker available workforce**, value Retirement Benefits more than any other group and are the least likely to value a job's proximity to their home.

Available Workforce Desired Benefits



## Desired Wage Rate Ranges

All wage and salary requirements expressed by respondents are presented in hourly rates. Appendix A presents an easy conversion table to annual, monthly, or weekly rates. 5.3 percent of the **total available workforce** would be interested in employment with a wage of up to \$9.99 per hour. It is estimated that 189,431 people or 58.8 percent of the **total available workforce** would be interested in a new or different employment with a wage of up to \$24.99. 19.7 percent would require \$35.00 or more for a new job opportunity. Those that currently hold jobs would require a higher desired wage than the non-worker in the available workforce.

## Available Workforce Desired Wage Rate Ranges

\$9.99 or Less	\$10.00 - \$10.99	\$11.00 - \$11.99	\$12.00 - \$12.99
5.3%	3.4%	2.1%	5.7%
\$13.00 - \$13.99	\$14.00 - \$15.99	\$16.00 - \$17.99	\$18.00 - \$19.99
4.0%	15.1%	6.5%	3.5%
\$20.00 - \$21.99	\$22.00 - \$24.99	\$25.00 - \$27.99	\$28.00 - \$30.99
9.9%	3.4%	11.4%	8.3%
\$31.00 - \$33.99	\$34.00 - \$36.99	\$37.00 - \$39.99	\$40.00 or more
1.8%	3.7%	1.0%	15.0%

By comparing the wage rate ranges by area labor market location and by **worker and non-worker available workforce** groups, the various preferences are more focused.

On November 6, 2018—after the survey period for this study—Missourians voted to raise the state’s minimum wage to \$12 an hour by 2023, a 52.9 percent increase over five years from the current \$7.85 minimum wage. This will compress the desired wage ranges presented in this study, as 10.8 percent of respondents indicated a desired wage that is lower than the new 2023 minimum. Members of the **total available workforce** in other desired wage ranges will also likely have higher desired wages in the future, relative to the scheduled increases to the state’s minimum wage.

## Desired Wage Rate by Available Workforce Group

Category	Overall		Worker		Non-Worker		Underemployed	
	Available Workforce	Percent	Available Workforce	Percent	Available Workforce	Percent	Available Workforce	Percent
\$9.99 or Less	16,961	5.3%	8,648	3.3%	8,291	14.5%	6,030	7.0%
\$10.00 - \$14.99	54,579	16.9%	32,516	12.3%	22,011	38.5%	7,803	9.0%
\$15.00 - \$19.99	75,129	23.3%	63,399	23.9%	11,737	20.5%	17,462	20.1%
\$20.00 - \$24.99	42,762	13.3%	37,498	14.2%	5,273	9.2%	15,766	18.2%
\$25.00 - \$29.99	39,339	12.2%	35,041	13.2%	4,309	7.5%	13,500	15.6%
\$30.00 - \$34.99	29,723	9.2%	28,737	10.9%	1,004	1.8%	8,164	9.4%
Over \$35.00	63,602	19.7%	59,015	22.3%	4,616	8.1%	17,963	20.7%
Total:	322,096	100.0%	264,854	100.0%	57,242	100.0%	86,688	100.0%



## Desired Wage Rate By Industry and Occupation

The Government/Education industry sector has the highest desired wage of \$27.85 with the Service Providing industry sector having the lowest at \$22.37. The management occupation group has the highest desired wage at \$37.92 and those currently non-working have the lowest at \$17.60.

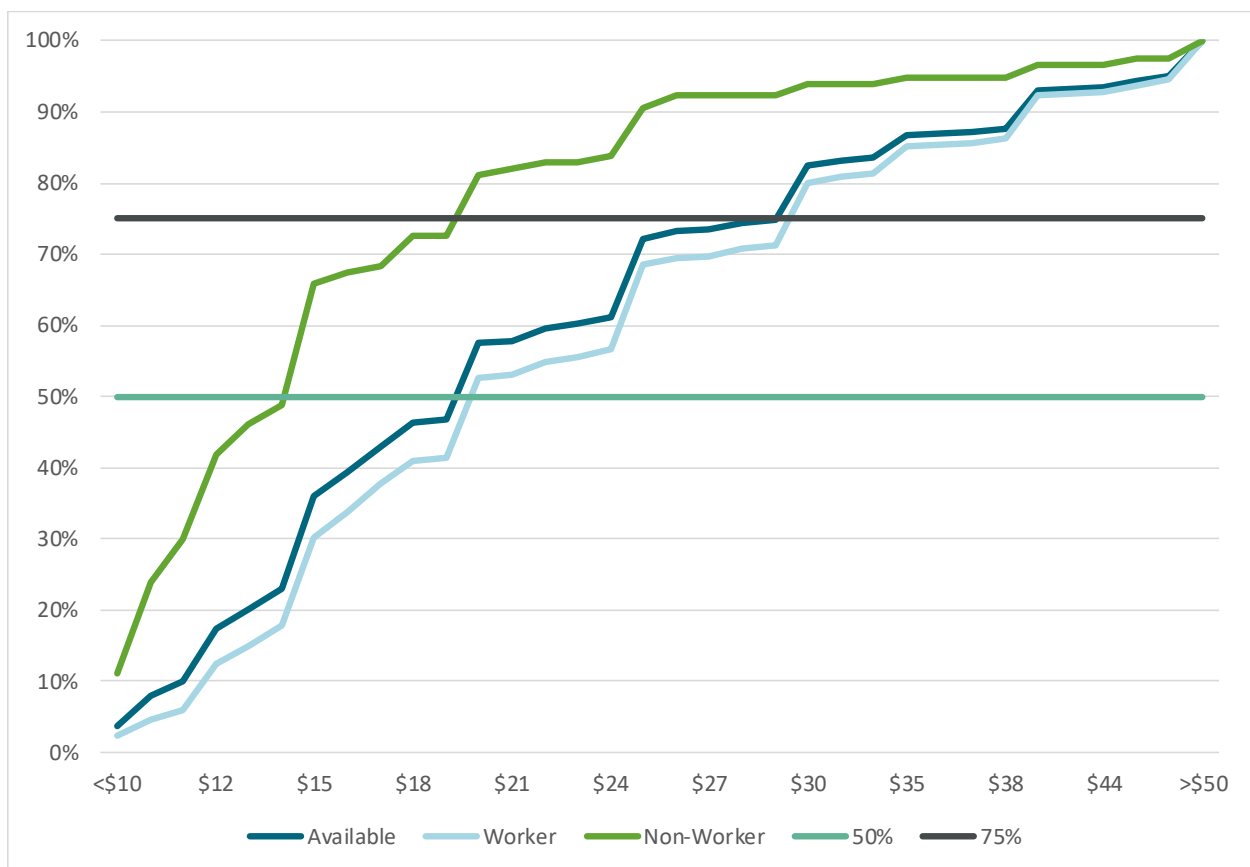
**Desired Wage Rate by Industry**

Category	
Government / Education	\$27.85
Goods Producing	\$27.03
Service Providing	\$22.37

**Desired Wage Rate by Occupation**

Management	\$37.92
Production/Repair/Installation	\$22.79
Professional/Technical	\$28.08
Services	\$21.64
Non-Working Available	\$17.60

**Desired Wage Rate by Percent of Available Workforce**



The higher the level of desired wage, the higher the percentage of the population that would take that wage. About 50 percent of the population would be satisfied with \$20.00 an hour or less and about 75% of the population would be satisfied with \$29.00 an hour or less.

## Occupation Actual and Desired Wages

The following table provides a detailed analysis of the **total available workforce** by occupation, average actual wage, and average desired wage. Comparing the actual average wage with the desired wage shows the expectations of the **worker available workforce** in accepting a new job. The Production/Repair/Installation occupation clusters indicate the lowest desired wage increase (10.3%) compared to the **worker available workforce** (18.6%); those in the Professional/Technical occupation clusters have the highest desired wage increase (23.5%).

The three occupation groups: Managerial, Executive, Business Owners, Farmers, Supervisory; Computer Technology, Science, Math and Engineering; and Teachers, Instructors, Trainers, Writers, Researchers, etc. all report a disparity of more than \$6.00 between their actual and desired wages. These groups are likely to be motivated by new opportunities with higher salaries.

### Occupation Actual and Desired Wages

	Available Workforce	Average Actual Wage	Average Desired Wage
<b>Management</b>	<b>25,549</b>	<b>\$31.89</b>	<b>\$37.92</b>
Managerial, Executive, Business Owners, Farmers, Supervisory	25,549	\$31.89	\$37.92
<b>Production/Repair/Installation</b>	<b>26,470</b>	<b>\$20.66</b>	<b>\$22.79</b>
Maintenance, Installations, and Repairs, etc.	10,739	\$21.29	\$22.82
Production: Factory Assembly, Fabrication, Construction, and Mining	15,731	\$20.29	\$22.77
<b>Professional/Technical</b>	<b>78,788</b>	<b>\$22.74</b>	<b>\$28.08</b>
Business Sales: Finance, Insurance, Real Estate, Wholesale, Industrial, etc.	10,680	\$25.28	\$30.24
Professionals: Doctors, Lawyers, Engineers, Accountants, Professors, etc.	21,421	\$28.88	\$32.91
Computer Technology, Science, Math, and Engineering	13,123	\$25.07	\$31.66
Protective: Police/Fire/Military/Regulators/Investigators and Postal	8,162	\$13.67	\$16.93
Teachers, Instructors, Trainers, Writers, Researchers, etc.	25,402	\$18.60	\$25.00
<b>Services</b>	<b>134,047</b>	<b>\$18.86</b>	<b>\$21.64</b>
Administrative Support: Shipping/Receiving, Secretaries, Computer Operators, etc.	12,786	\$25.22	\$25.39
Business Office and Clerical Operations	11,837	\$18.05	\$20.75
Consumer Services, Retail, Restaurant, Hotel, Food Services, etc.	25,735	\$11.54	\$14.87
Delivery/Drivers/Couriers	8,752	\$18.80	\$18.48
Government Office and Clerical Operations	11,242	\$18.48	\$20.89
Health, Social, Community, Personal Care, and Recreation Services	34,061	\$20.37	\$24.31
Other Blue Collar: Laborers, Farm Hand, Janitor, Warehouse Workers, etc.	17,076	\$20.58	\$22.62
Other White Collar Workers	12,558	\$22.51	\$25.53
<b>Non-Worker Available</b>	<b>57,242</b>	<b>N/A</b>	<b>\$17.60</b>
Homemaker	5,888	N/A	\$13.62
Retired	13,602	N/A	\$20.92
Unemployed	37,752	N/A	\$17.11

Adjustments have been made to reflect anomalies in the survey data

## Commuting Patterns and Preferences

The preferred commute of the **worker available workforce** in the Area Labor Market ALM is 25.6 minutes/miles one way. The overall commute preference of the **total available workforce** is 24.6 minutes/miles one way. The **total available workforce** indicates it is open to commuting for the right employment opportunity. The table shows 267,335 people or 83.0 percent of the **total available workforce** would commute more than 10 minutes/miles, one way, for work. It also shows that 103,515 people or 32.1 percent of the **total available workforce** are willing to travel more than 30 minutes/miles and 13,943 people, 4.3 percent, will commute more than 50 minutes/miles.

### Willingness To Commute By Available Workforce Groups

Where individuals live within the ALM will influence their desire to commute to work. The transportation routes and options to employment centers also have a big influence where people work. The community/city may be the largest economic center for many of the smaller communities in the area. Individuals from the surrounding communities seeking job opportunities and competitive wages/benefits may be resigned to the fact that they will have to commute some distance to a new employer.

The following table illustrates the different commuting preferences of those who are employed and those who are non-employed. Those who are employed show a relative similarity of 25 to 26 minutes/miles one way to work. The three groups in the non-working group show a lower willingness to travel, approximately 20 minutes/miles for all groups.

#### Preferred Distance/Travel Time

Less than 10 miles	52,448
10 - 30 miles	163,820
31 - 50 miles	89,572
51+ miles	13,943
Total Available Workforce	322,096

#### Available Workforce Group Preferred Distance/Travel Time

Total Available Workforce	24.6
Worker Available Workforce	25.6
Underemployed	25.5
Seeking Different Employment	26.0
Willing To Change	25.5
Non-Worker Available Workforce	20.2
Unemployed	20.2
Homemaker	19.9
Retired	20.4

The non-working groups prefer a shorter commute but also are more open to part-time and more flexible work arrangements. In general, **retired** people are not as willing to commute long distances to work; however, those in the ALM are willing to travel 20.4 minutes/miles one way for the right employment opportunities.

There are 8.5 percent, or 22,528, of the **worker available workforce** that commute to work outside the NMDP ALM. Of this number, 49.1 percent identify themselves as **underemployed** and the remaining are **seeking different employment** or are **willing to change** for the right opportunity.

## Willingness to Commute By Occupation and Industry

It is usually easier to change from one major industry group to another than it is from one primary occupation field to another. While skills and occupation may be similar in the different industry groups, personal attitudinal characteristics, sometimes known as soft skills, may be more important to workers and employers where the focus is on people and customer service vs. systems and process. There may also be differences in wages and benefits and other work-related characteristics.

There are three broad categories of interest when working: people, data, and things. Most people have preference for one, but most are adaptable to all three. A primary interest in one of the three may be an indicator of success in certain occupations. A stronger interest in people may lead to occupations in management and services. An interest in working with things may point to occupations in Production. Professional/Technical may require a stronger interest in data and analytical skills. The survey results for NMDP showed interest in People with 55.5 percent, Data with 21.3 percent, and Things with 23.2 percent.

## Changing Primary Employment Field

Changing jobs from one field to a different type of position is one way commuting patterns can change over time. For many individuals changing jobs to another employment field may not be something they are willing to do. The adaptability and flexibility of the workforce is important in the creation of new jobs and may require job training and other type of programs where jobs disappear because of competition and technology. If a large percentage of those employed and non-employed are unwilling to change their occupations or job positions, it could limit the type of employer who can enter the area labor market.

The following table shows the percentage of those in the various available workforce groups willing to change their primary employment field.

### Commuting by Occupation Group

	Minutes/ Miles
Management	27.5
Production/Repair/Installation	29.9
Professional/Technical	23.9
Services	25.4
Non-Working Available Workforce	20.2
Overall Average	24.6

### Commuting by Industry Type

	Minutes/ Miles
Goods Producing	29.7
Government/Education	27.2
Service Providing	22.3

### Willing To Change Primary Occupation

	Available Workforce	Willing To Change	Percent
Worker Available	264,854	224,653	84.8%
Underemployed	86,688	79,893	92.2%
Seeking Different Employment	55,644	50,962	91.6%
Willing To Change	122,522	93,799	76.6%
Non-Worker Available	57,242	48,626	84.9%
Unemployed	37,752	31,006	82.1%
Homemaker	5,888	4,740	80.5%
Retired	13,602	12,880	94.7%

### Willing To Change Primary Industry Group

	Available Workforce	Willing To Change	Percent
Worker Available	264,854	230,154	86.9%
Underemployed	86,688	76,421	88.2%
Seeking Different Employment	55,644	50,665	91.1%
Willing To Change	122,522	103,069	84.1%
Non-Worker Available	57,242	48,030	83.9%
Unemployed	37,752	29,839	79.0%
Homemaker	5,888	4,740	80.5%
Retired	13,602	13,450	98.9%

## Conclusion

This study assesses the supply side of labor and provides information for the NMDP Area Labor Market about commuting patterns, current and desired wages, worker occupation and industry, experience, and education. The **total available workforce** is determined from the workers and non-workers perspective and provides information for the supply side of labor markets. The demand side is determined from the employer's perspective and provides information about the skills, quality, and availability of the labor force.

While considerable information is available surrounding workforce issues at the national and state levels, less information is available at the local and regional levels, resulting in inadequate data to make objective decisions. While employers are concerned about over-employment and workers with deficient skills and who are under-qualified, the worker and community are concerned about underemployment and workers who have excess skills who are over-qualified for those jobs and presents opportunities for expansion and new investments. Although the dynamics of the workplace will not change dramatically, employers will continue to recruit the best employees with the best skills for the best value and workers will continue to seek the best jobs with the best compensation package and work environment. The balance for a competitive workforce is critical with the employer, community, education, and worker all having a major stake in developing a skilled and productive workforce with a goal of a just-in-time skill and talent pool to meet the demand.

With increasing workforce challenges for the future anticipated from the demographic changes in an aging population, the question of a more active approach to increasing the labor pool with productive workers is crucial. Weighing the cost for education and other programs with the social and economic benefits will be key in remaining competitive in a global economy.

## Appendices

## Appendix A-Wage and Salary Conversion Rates

The following data represents pay rates in four different ways. All wage and salary rates reported in the interviews are presented in this report in hourly rates. Selected conversions may add perspective to the hourly rates. Figures presented below are rounded and based on a 40-hour workweek.

Wage and Salary Conversion Chart			
Hourly	Weekly	Monthly	Annually
\$8	\$320	\$1,387	\$16,640
\$9	\$360	\$1,560	\$18,720
\$10	\$400	\$1,733	\$20,800
\$11	\$440	\$1,907	\$22,880
\$12	\$480	\$2,080	\$24,960
\$13	\$520	\$2,253	\$27,040
\$14	\$560	\$2,427	\$29,120
\$15	\$600	\$2,600	\$31,200
\$16	\$640	\$2,773	\$33,280
\$17	\$680	\$2,947	\$35,360
\$18	\$720	\$3,120	\$37,440
\$19	\$760	\$3,293	\$39,520
\$20	\$800	\$3,467	\$41,600
\$21	\$840	\$3,640	\$43,680
\$22	\$880	\$3,813	\$45,760
\$23	\$920	\$3,987	\$47,840
\$24	\$960	\$4,160	\$49,920
\$25	\$1,000	\$4,333	\$52,000
\$26	\$1,040	\$4,507	\$54,080
\$27	\$1,080	\$4,680	\$56,160
\$28	\$1,120	\$4,853	\$58,240
\$29	\$1,160	\$5,027	\$60,320
\$30	\$1,200	\$5,200	\$62,400
\$31	\$1,240	\$5,373	\$64,480
\$32	\$1,280	\$5,547	\$66,560
\$33	\$1,320	\$5,720	\$68,640
\$34	\$1,360	\$5,893	\$70,720
\$35	\$1,400	\$6,067	\$72,800
\$36	\$1,440	\$6,240	\$74,880
\$37	\$1,480	\$6,413	\$76,960
\$38	\$1,520	\$6,587	\$79,040
\$39	\$1,560	\$6,760	\$81,120
\$40	\$1,600	\$6,933	\$83,200
\$41	\$1,640	\$7,107	\$85,280
\$42	\$1,680	\$7,280	\$87,360

## Appendix B-Methodology

A primary goal of any Area Labor Market (ALM) or labor shed analysis is to estimate the potential availability of workers and determine how well the surrounding geographical areas are able to provide a stable supply of workers to the central focused core of the ALM or labor shed.

**A key source of good employees is the category of the underemployed, those individuals who are now working but desire a better job and who possess the skills, education, and experience to qualify for better jobs.** Underemployment or underutilization of skills or experience is a significant issue in many communities and is an important element for employers assessing a community for location or expansion. The availability of highly skilled and experienced labor is among the top three important location factors for businesses considering expansions or relocations (Area Development Annual Surveys).

The key advantage of an Area Labor Market (ALM) analysis is that it expands the pool of potential workers by including workers excluded from the Civilian Labor force (CLF). It also allows researchers to examine those individual members of the ALM pool who have a propensity to consider a job opportunity given their employment expectations. Employers evaluating the labor component are also more likely interested in the population age segment 18-64 than in the CLF representing *the civilian non-institutional population, 16 years of age and over classified as employed or unemployed*. Even with those restrictions, employers should note that, in practice, not all members of the *available labor* would apply for a new job opportunity. The reader is further cautioned that, while the number of workers identified as available with their skills, experience, education, and costs as accurate, all of those individuals may not be acceptable candidates for an employer. Their previous work records, stability, integrity, intelligence, appearance, and other factors are not considered in this report.

Published government statistics report wages and employment for the entire labor of an area, even though most of that labor has no interest in changing jobs. This report, prepared by Growth Services, includes data on those people in the area ***who desire to change jobs and who would be potential workers of employers with the right opportunity***. Whereas, the BLS reports average wages, this report provides the number of available workers for an employer in various desired wage ranges. It includes the unemployed who are actively looking for work as well as those who would enter the labor under the right conditions or opportunities including homemakers, and retirees.

The labor analysis will start with a focus or identification on a central zip code, community, county, or multi-county area to determine the boundaries for the area to be assessed. It can also decide to quantify those outside the central Core *willing to change jobs and to commute and work in the central core area*.

A random household telephone survey and targeted social media surveys have been ways for collecting data within the Area Labor Market. The survey is designed by Growth Services and conducted by call center or social media research firms. The overall goal of the process is to collect a sufficient number of valid surveys completed by respondents 18 to 64 years of age. Validity of a sufficient number of survey results to a confidence of +/-5 percent is necessary with query or drill down validity of +/-10-15 percent. To ensure that an even distribution of respondents is achieved, a proportional number of completions are conducted by county population, age segments, and gender. It is important to note that the projected results are based on a relatively small sample size.



The survey is designed and developed by The Growth Services Group (GSG) and approved by the client, employers, or Economic Development organization.

Survey interviewers pose questions to determine the respondents' gender, age, education level, place of residence, and current employment status. Employed respondents also identifies the location of their employer (not name), place of work, employer type by industry, occupation, years of employment in their occupation, employment status, current salary or wage, number of jobs currently held, and distance traveled to work. Employed respondents are then asked how likely they are to change employers or employment, how far they would be willing to travel for employment, the wage desired for them to change employment, and the benefits required for new employment. *Underemployment* is determined by examining those employees who stated they possessed experience and additional education/skills that are not utilized in their current position.

Respondents in the 18-64 year age range self-identifying themselves as working, unemployed, homemaker, retired, military or student are asked a series of questions to determine what job characteristics and benefits were most important for them when considering employment, the reasons for unemployment, and how far they would be willing to travel to accept employment. Information on previous employers and skills was also gathered for these sectors. The employer type grouped employers into three main categories by *Goods Producing*, *Service Providing*, and *Government/Education*. This allows employers evaluating the labor to view occupations from a work culture perspective as well as skills and experience. Once completed, the results of the survey are compiled and queried or cross-tabulated to determine the relationship between the variables of key interest areas, various internal geographic areas or labor sheds, and the entire surveyed ALM. Documenting and analyzing the ALM survey results by area and characteristics, provides new insight into the area's *available labor* that is currently unavailable in any other form.

A final note, prior to data processing, the GSG applies a proprietary process to the analysis of the data to correct for invalid responses. An individual indicating they would take a new job but also indicating the desire for increased or decreased pay that is unreasonable is not counted in the results. Further the process considers that to be counted as *underemployed* an individual must be currently employed and willing to take another job at a pay rate commensurate with personal skills, education and experience.

Our propriety data applications allow for large multi-county partnerships for cost reductions. Our largest single Labor Availability study consisted of five partners and 27 counties, with each partner receiving its own labor shed breakout report from the same database, making the project more cost effective for all partners. All survey data is retained and available for further analysis on specific areas of interest (pricing may vary). The individual partner report results are proprietary and for your use only and are not shared with other partners. Only the database is common and by a programming application, separate labor shed reports can be developed. The survey questionnaire has to be uniform across the entire project area.

Map images generated with mapchart.net