Wichita Labor Basin Labor Availability Analysis - 2006

Butler, Cowley, Harper, Harvey, Kingman, Marion, McPherson, Reno, Sedgwick, and Sumner Counties in Kansas



Prepared For

The Center for Economic Development and Business Research Wichita State University

By

The Docking Institute of Public Affairs

Copyright © June 2006 All Rights Reserved



Fort Hays State University 600 Park Street Hays, Kansas 67601-4099 Telephone: (785) 628-4197

FAX: (785) 628-4188 www.fhsu.edu/docking

Brett A. Zollinger, Ph.D.

Director

Leslie Paige, M.S., EdS Grants Facilitator Michael S. Walker, M.S.

Assistant Director

Joyce Wolfe, M.S UCSR Manager

Laure Gross Administrative Assistant

Mission:

To Facilitate Effective Public Policy Decision-Making.

The staff of the Docking Institute of Public Affairs and its University Center for Survey Research are dedicated to serving the people of Kansas and surrounding states.

Wichita Labor Basin Labor Availability Analysis - 2006

Prepared By:

Michael S. Walker, M.S. Lead Researcher, Docking Institute of Public Affairs

and

Brett Zollinger, Ph.D.
Director,
Docking Institute of Public Affairs

Prepared For:

The Center for Economic Development and Business Research

Wichita State University

Copyright © June 2006 All Rights Reserved

Table of Contents

| List of Tables | ii |
|---|-----|
| List of Figures | iii |
| List of Maps | iv |
| Executive Summary | 1 |
| The Wichita Labor Basin | 2 |
| The Wichita Labor Basin's Available Labor Pool | 3 |
| Current Skills and Experience | 7 |
| Considerations for Employment | 15 |
| Wage Demands | 18 |
| Underutilization Among Available Labor Pool Workers | 22 |
| Entrepreneurship Among Available Labor Pool Non-Business Owners | 25 |
| Union Membership | 27 |
| Methodology | 29 |
| Explaining the Civilian Labor Force | 29 |
| Defining the Available Labor Pool | 29 |
| Survey Research Methods | 30 |
| Appendix I: Current Employment Status of Available Labor Pool | 31 |
| Appendix II: Open-Ended Responses to Technical Degree Question | 32 |
| Appendix III: Hourly Wage to Annual Salary Conversion Chart | 33 |

List of Tables

| Table 1: Age, Gender, and Education Levels of Available Labor Pool | 5 |
|--|----|
| Table 2: Major Occupational Categories of Available Labor | 6 |
| Table 3: Current Work Experience plus Previous Work or Training Experience | 8 |
| Table 4: Available Labor by Commute Minutes | 15 |
| Table 5: Desired Benefits and Current Benefits Offered | 16 |
| Table 6: Cumulative Wage Demands for Occupational Sectors | 19 |
| Table 7: Cumulative Wage Demands Allowing Mobility between General Labor and Service | |
| Sector | 20 |
| Table 8: Highest Level of Education Achieved Among Underutilized | 23 |
| Table 9: Highest Level of Education Achieved Among Potential Entrepreneurs | 25 |
| Table 10: "Why Do You Belong to a Union?" | 28 |
| Table 11: "Why Do You Not Belong to a Union?" | 28 |

List of Figures

| Figure 1: The Available Labor Pool for the Wichita Labor Basin | ა |
|--|----|
| Figure 2: Occupational Sectors of Available Labor (Employed Only) | 6 |
| Figure 3: Strong Work Skills | 7 |
| Figure 4: Current Work Experience plus Previous Work or Training Experience | 9 |
| Figure 5: Work Experience / Willing to Work in Field | 10 |
| Figure 6: Work Experience in Distribution Center or Warehouse | 11 |
| Figure 7: Work Experience in Manufacturing or Processing Plant | 11 |
| Figure 8: Undergraduate College Major | 12 |
| Figure 9: "Are You Attending Technical School?" | 13 |
| Figure 10: Technical Degree Field | 14 |
| Figure 11: Willing to Work Outside of Primary Field | 15 |
| Figure 12: Available Labor by Commute Minutes | 15 |
| Figure 13: Benefits Very Important to Change Employment | 16 |
| Figure 14: Willingness to Work 2 nd Shift | |
| Figure 15: Willingness to Work Weekend Shift | 17 |
| Figure 16: Available Labor by Hourly Wage (Controlling for Willing to Commute) | 18 |
| Figure 17: Employed Members of the Available Labor Pool | 22 |
| Figure 18: Underutilized Workers | 22 |
| Figure 19: Reasons for Underutilization | 23 |
| Figure 20: Occupational Sectors of Underutilized Workers | 24 |
| Figure 21: Willing to Change Job to Better Use Skills/Education | 24 |
| Figure 22: Business-Ownership | 25 |
| Figure 23: "Seriously Thought About Starting Own Business?" | 25 |
| Figure 24: Occupational Sectors of Potential Entrepreneurs | 26 |
| Figure 25 Strength of Desire to Own Business | 26 |
| Figure 26: "Do You Currently Belong to a Labor Union?" | 27 |
| Figure 27: Union Members and Non-Union Workers | 28 |

List of Maps

| Map 1: Wichita Labor Basin | 2 |
|--|----|
| Map 2: Percent of Total Available Labor in Basin by Zip Code | |
| Map 3: Percent of Total Available Labor in Basin by Zip Code (Controlling for Willing to | |
| Commute) | 21 |

Wichita Labor Basin Labor Availability Analysis

Executive Summary

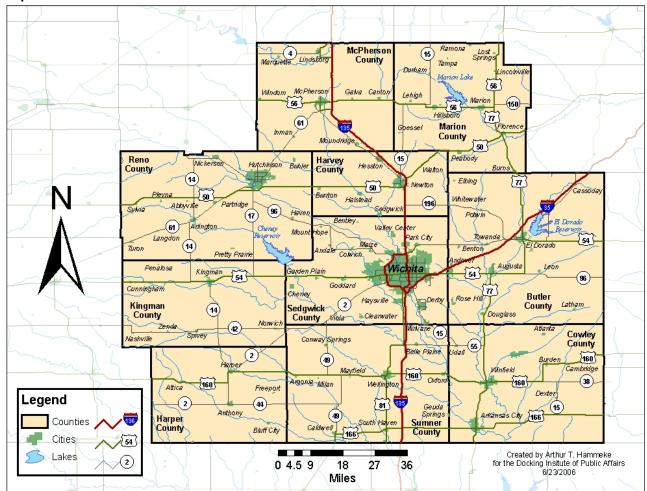
The Wichita Labor Basin includes Butler, Cowley, Harper, Harvey, Kingman, Marion, McPherson, Reno, Sedgwick, and Sumner Counties in Kansas. The purpose of this report is to assess the "Available Labor Pool" in this labor basin. The "Available Labor Pool" represents those who indicate that they are looking for employment or would consider changing their jobs for the right employment opportunity.

The Docking Institute's independent analysis of this labor basin shows that:

- The population of the Wichita Labor Basin is estimated to be 706,709. About 22% of the population (or 153,719 individuals) are considered to be part of the Available Labor Pool (ALP).
- Of the ALP, an estimated 11,994 (7.8%) non-working and 35,737 (23.2%) working individuals are *looking* for new employment, while 8,322 (5.2%) non-working and 97,665 (63.5%) working individuals would *consider* new and/or different employment for the right opportunities.
- Almost 78% of the ALP has at least some college experience and more than 97% has at least a high school diploma. The average age for members of the entire ALP is about 43 years old.
- Majorities of ALP members report having "strong work skills" when it comes to working in groups and interpersonal relations (94.9%), writing (79.8%), management and supervision (72.9%), math (71.1%), computers (68.6%), and public speaking (54.7%).
- Approximately 5,692 members of the ALP are currently employed as general laborers, construction workers, or cleaners. An additional 6,845 report having experience or training in these fields.
- About 82% of the ALP indicates that they are "willing to work outside of their primary field of employment for a new or different employment opportunity."
- About 30% of the members of the ALP will commute up to 45 minutes, one way, for an employment opportunity. Almost 79% will commute up to 30 minutes for employment.
- The most important desired benefits in order are good salary or hourly wage, good retirement benefits, good health benefits, on-the-job or paid training, and good vacation benefits.
- Among the ALP that are willing to commute the necessary distance to the labor basin center, an estimated 46,711 people (30.4%) are interested in a new job at \$16 an hour, 27,741 (18.0%) are available at \$12 an hour, and 7,083 (4.6%) are available at \$8 an hour.
- Of the 133,450 members in the subset of employed members of the ALP, 54,713 (41%) consider themselves underutilized.
- Of the 136,648 members in the subset of *non-business owning members* of the ALP, 50,867 (37%) have seriously considered starting their own business.
- Eleven percent of the working respondents and the unemployed respondents seeking employment are members of labor unions. Almost 10% of the non-union members that work in union shops plan to join a labor union.

The Wichita Labor Basin

The Wichita Labor Basin includes ten counties located in south central Kansas_(see Map 1 below). The criterion used to include a county in this labor basin is whether it contains communities from which, it can be reasonably assumed, individuals may commute to the center of the labor basin (Wichita) for an employment opportunity. In the case of the Wichita Labor Basin, it can be reasonably assumed that individuals may commute from one of the nine neighboring counties (and within Sedgwick) because these counties contain: 1) communities that are sufficiently isolated but with adequate transportation access leading to Wichita, and 2) communities that are within an hour's commute time to the center of the labor basin.



Map 1: Wichita Labor Basin

The Wichita Labor Basin has a total population of approximately 706,709, and a Civilian Labor Force (CLF) of 382,541. There is an unemployment rate of 3.61%, and this research effort suggests that there is an ample supply of available labor for a new employer and/or expanded employment.

The Docking Institute's analysis suggests that the basin contains an Available Labor Pool (ALP) of 153,719 individuals.

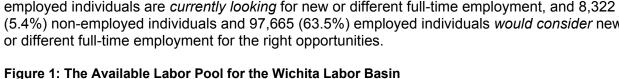
The Available Labor Pool is composed of workers categorized as either 1) currently not working but looking for full-time employment, 2) currently employed (full- or part-time) and looking for other full-time employment, 3) currently not working in any manner but willing to consider full-time employment for the right opportunity, and 4) currently employed and not looking, but willing to consider different full-time employment for the right opportunity. Please see the Methodology section – page 29 – for more information about the Institute's ALP analysis methodology and the survey research methods used for this report.

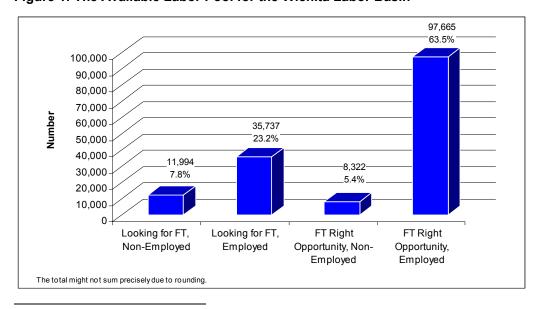
The Wichita Labor Basin's Available Labor Pool

This section of the report assesses the characteristics of the Available Labor Pool in the Wichita Labor Basin by answering the following questions:

- What proportion of the labor force employed, unemployed, homemaker, student, retired, and disabled – would seriously consider applying for a new full-time employment opportunity?
- What skills do those who would consider a new employment opportunity have?
- What type of jobs have these workers and potential workers had in the past?
- What types of considerations (pay, benefits, commute time) shape their decision-making?
- What are some of the characteristics of the general laborers, skilled blue-collar workers, service and support workers, and professional white-collar workers?
- What proportion of those workers among the Available Labor Pool is considered "underutilized"?
- What are some of the characteristics of those underutilized workers?
- What proportion of available labor pool members desire to pursue their own business?
- What are some of the characteristics of these "potential entrepreneurs"?
- What is the prevalence of union membership in the labor basin?

It is estimated that 11,994 (7.8% of the ALP) non-employed and 35,737 (23.2%) employed individuals are *currently looking* for new or different full-time employment, and 8,322 (5.4%) non-employed individuals and 97,665 (63.5%) employed individuals would consider new





¹ The terms "non-employed" and "non-working" refer to officially unemployed members of the Civilian Labor Force as well as any non-employed/non-working full-time students, homemakers, retirees, and disabled individuals.

Map 2 shows how each zip code in the basin compares to all other zip codes in terms of the percent of total available labor in the Wichita Labor Basin. Each zip code is grouped into one of five categories specified in the legend. The zip codes containing the most available labor in the Wichita Labor Basin are located in Sedgwick County. Up to 4% of the available labor is also located in zip code areas in Cowley, Harvey, Marion, McPherson, and Reno Counties. Up to 2% of the available labor is located in zip code areas in Sumner County.

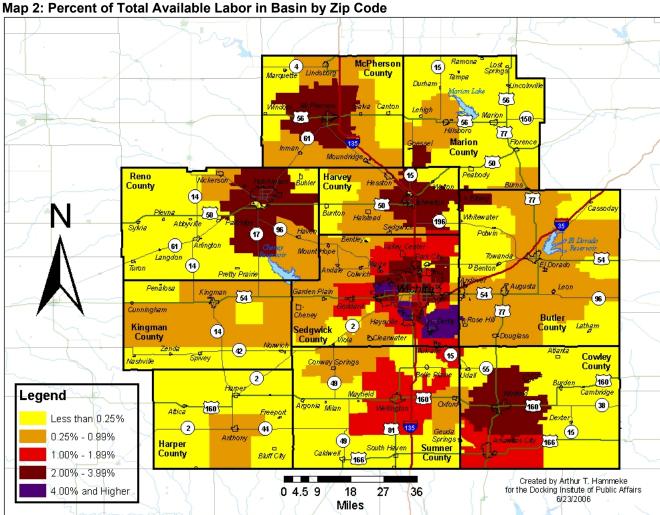


Table 1 shows the gender, age, and education levels of the 153,719-member ALP. Almost 54% percent are women, and the average age is about 43. Many (97.4%) have at least a high school diploma, more that three-quarters (78.1%) have at least some college education, and more than two-fifths (41.5%) have at least a bachelor's degree.

Table 1: Age, Gender, and Education Levels of Available Labor Pool

| Age | Age in 2006 | | |
|---|-------------|---------|--------------------|
| Range | 18 to 76 | | |
| Average | 43 | | |
| Median | 44 | | |
| Gender | Number | Percent | |
| Female | 82,163 | 53.5 | |
| Male | 71,556 | 46.5 | |
| Total | 153,719 | 100.0 | |
| | | | Cumulative |
| Highest Level of Education Achieved | Number | Percent | Percen |
| Doctoral Degree | 2,822 | 1.8 | 1.8 |
| Masters Degree | 17,992 | 11.7 | 13.5 |
| Bachelors Degree | 42,970 | 28.0 | 41. |
| Associates Degree | 19,320 | 12.6 | 54.1 |
| Some College (including current students) | 36,873 | 24.0 | 78. |
| High School Diploma Only | 29,758 | 19.4 | 97.4 |
| Less HS Diploma | 3,983 | 2.6 | 100.0 |
| Total | 153,719 | 100.0 | |
| "Do you speak Spanish?" | Number | Percent | |
| "Yes" | 30,676 | 20.0 | |
| Speak Very Well | 2,817 | 9.2 | These percentage |
| Speak Fairly Well | 4,168 | 13.6 | represent portions |
| Speak Only a Little | 23,691 | ر 77.2 | 20.0% |
| | | 100.0 | |

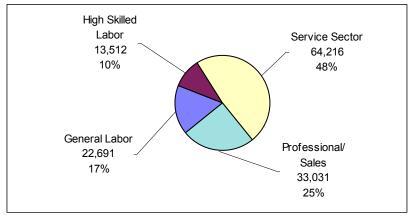
Table 2 (next page) shows the various occupational categories of the 153,719 members of the ALP. General labor occupations represent 14.8% of the entire ALP, while high-skilled blue-collar jobs make up 8.8%. Traditional service-related occupations represent 41.8% of the ALP, while professional occupations represent 21.5% of the ALP.

Table 2: Major Occupational Categories of Available Labor

| | | | Years | at Job |
|--|---------|---------|-------|--------|
| | Number | Percent | Mean | Media |
| General Labor/Cleaning/Farm Labor/Delivery | 10,154 | 6.6 | 6.0 | 4. |
| Maintenance/Factory Work | 9,993 | 6.5 | 10.2 | 7. |
| Trucking/HEO/Other BC | 2,543 | 1.7 | 11.7 | 9. |
| Total General Labor | 22,691 | 14.8 | 9.3 | 7.2 |
| Gov't Service/Protective Service | 3,683 | 2.4 | 8.5 | 6. |
| Technician/Mechanic/Welder | 9,829 | 6.4 | 13.6 | 10. |
| Total Highly-Skilled Labor | 13,512 | 8.8 | 11.0 | 8.6 |
| Customer Service/Receptionist/Food Service | 20,237 | 13.2 | 5.3 | 3. |
| Clerical/Secretarial | 15,754 | 10.2 | 7.9 | 5. |
| Social Service/Para-Professional/Nursing | 19,029 | 12.4 | 7.3 | 5. |
| Office Manager/Small Business Owner/Other WC | 9,196 | 6.0 | 13.0 | 11. |
| Total Service Sector | 64,216 | 41.8 | 8.4 | 6.2 |
| Gov't & Business Professional/Sales | 11,022 | 7.2 | 10.9 | 7. |
| Educator/Researcher/Doctor | 22,009 | 14.3 | 11.8 | 9. |
| Total Professional | 33,031 | 21.5 | 11.3 | 8.3 |
| Homemakers/Unemployed | 12,903 | 8.4 | n/a | n/ |
| Students | 4,850 | 3.2 | n/a | n/ |
| Retired/Disabled | 2,516 | 1.6 | n/a | n/ |
| Total Non-Employed | 20,269 | 13.2 | | |
| Total | 153,719 | 100 | | |

Figure 2 shows the occupational sectors of the *employed members* of the ALP only². The *percentages* shown in Figure 2 differ from those presented in Table 2 because the table includes non-working ALP members. Appendix I provides a detailed list of occupations.

Figure 2: Occupational Sectors of Available Labor (Employed Only)



² The total employed shown here differs slightly from those shown in Figure 1 due to rounding.

Current Skills and Experience

To gain perspective on the types of workers that are available for new and/or different employment in the Wichita Labor Basin, survey respondents were asked questions assessing work skills and previous work experience.

Figure 3 shows that 145,952 (or 94.9%) members of the Available Labor Pool report having "strong work skills" when it comes to working in groups and interpersonal relations. More than 70% of the members of the Available Labor Pool also report having "strong work skills" in writing, management and supervision, and math.

Almost 69% (representing 105,384 individuals) report having "strong work skills" in computer operations, while nearly 55% (84,054 individuals) report "strong work skills" in public speaking.

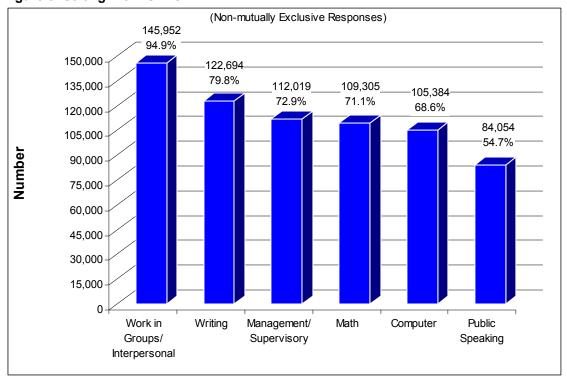


Figure 3: Strong Work Skills

Table 3 and Figure 4 (next page) show the results regarding the current employment status and previous work or training experience of ALP members. Table 3 shows the number of workers currently employed in various job categories, as well as the number of workers that have previous work or training experience. The table also shows the sum of working ALP members currently employed in a job category *plus* those that indicate previous training or experience in that particular field.

It is estimated, for example, that 5,692 members of the ALP in the Wichita Labor Basin are currently employed as general labor, construction, cleaners, and similar positions. An additional 6,845 ALP members in the basin indicate previous employment experience or training in one of those jobs, for a total of 12,537 individuals.

Table 3: Current Work Experience plus Previous Work or Training Experience

| | Current | Previous | Current plus Previous |
|--|-------------|----------------|-----------------------|
| | Employment* | Work/Training* | Work or Training** |
| | Number + | Number = | Number |
| General Labor/Construction/Cleaning | 5,692 | 6,845 | 12,537 |
| Farm Labor/Ranch Hand/Landscaping | 2,301 | 478 | 2,779 |
| Delivery/Driver/Courier | 2,161 | 2,460 | 4,622 |
| Maintenance/Wiring/Plumbing | 5,712 | 3,715 | 9,428 |
| Factory Worker/Grain Elevator/Meat Packer | 4,281 | 5,831 | 10,112 |
| Truck Driver/Heavy Equipment Operator | 2,543 | 2,314 | 4,857 |
| Police/Fire/Postal/Military Enlisted | 3,683 | 4,673 | 8,357 |
| Mechanic/Welder/Carpenter/Electrician | 5,605 | 3,140 | 8,745 |
| Lab or Medical Tech/Comp Tech/Programmer | 4,224 | 3,380 | 7,604 |
| Other Blue Collar | 0 | 0 | 0 |
| General Customer Service/Retail/Reception/Waitress | 20,237 | 17,691 | 37,928 |
| Clerical/Secretary/Book-Keeper/Bank Teller | 15,754 | 17,782 | 33,536 |
| Para-legal/Para-pro/CNA/Care Assistance | 7,916 | 5,033 | 12,949 |
| Nurse/LPN/RN/Semi-skilled Social Service | 11,113 | 3,852 | 14,965 |
| Office Manager/Small Business Owner | 9,196 | 17,248 | 26,443 |
| Teacher/Counselor/Social Worker/Researcher | 12,577 | 5,312 | 17,889 |
| Sales/Marketing/Accounting | 6,924 | 6,994 | 13,917 |
| Govt., Non-Profit, or Bus Exec/Farm Owner/Military Officer | 4,098 | 921 | 5,019 |
| Professor/Doctor/Engineer/Attorney | 9,432 | 4,071 | 13,503 |
| Other White Collar | 0 | 0 | 0 |
| Total | 133,450 | | |

^{*} Retired, disabled, non-working students, homemakers are not included.

The total might not sum precisely due to rounding.

^{**} An individual member of the ALP is counted only once within a training/experience category.

Figure 4 shows the same information as that presented in Table 3, but in graphic format. Many ALP members report current work experience or previous work/training as general customer service workers, retail sales clerks, receptionists, waitresses, and similar positions that often require face-to-face interaction with the public. There are 20,237 working ALP members currently employed in this category and 17,691 previously employed/trained in this category, for a total of 37,928 individuals.

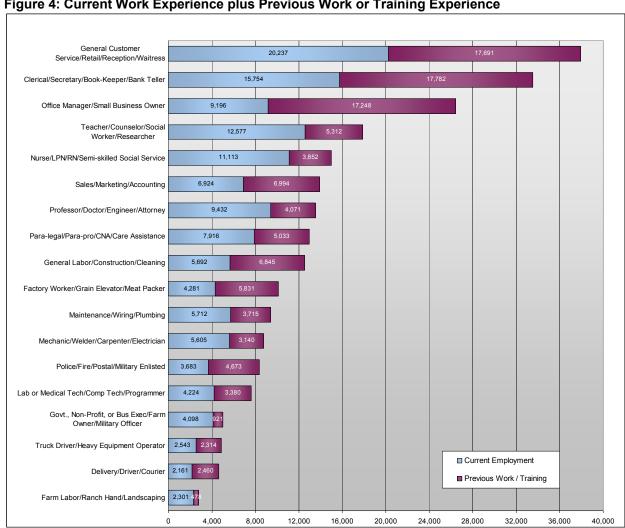


Figure 4: Current Work Experience plus Previous Work or Training Experience

In addition to collecting data regarding the current employment status and previous work or training experience through a series of "open-ended" survey questions (the results of which are shown in the previous table and figure), respondents were asked about the four specific employment areas listed in Figure 5. Respondents were first asked if they had training or work experience in a specific field and then if they would take a job in that field regardless of their prior training or experience.

The figure indicates that 94,603 (62%) ALP members report having training and/or experience in data entry with telephone operation, while fewer (57,164 or 37%) would consider employment in that field. Slightly more than half (52%) of ALP members also have training and/or experience as office workers or administrative assistants, while 58% indicate that they would take a job in that field.

Forty-two percent of ALP members suggest that they have training or experience working in a distribution center or warehouse, while 42% also suggest that they would consider employment in that field³. Fewer, but more than a third, have training or experience in manufacturing.

The third column is derived by taking three conditions into consideration. The column represents only those ALP members that 1) have experience or training in a field, 2) are willing to work in that field again, **and** 3) are willing to commute the *necessary travel time*⁴ for a new or different job.

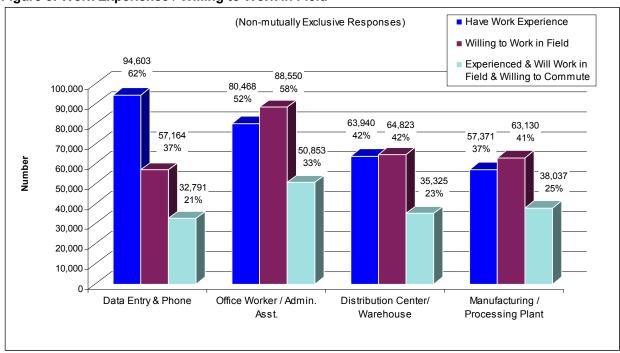


Figure 5: Work Experience / Willing to Work in Field

³ The number figures shown for these two bars differ slightly due to rounding.

⁴ "Necessary travel time" is defined as a travel time stated by the respondent that is equal to or greater than the travel time necessary for the respondent to commute to the center of the labor basin. See page 18 for more details.

Figures 6 and 7 show the results of follow-up questions regarding employment experience in distribution or warehousing and manufacturing or processing. Respondents indicating employment experience "working in a warehouse or distribution center" were asked if their experience was "mostly in either 1) moving materials or loading trucks, 2) inventory control, or 3) administration, management, or sales." Figure 6 shows the results of this question.

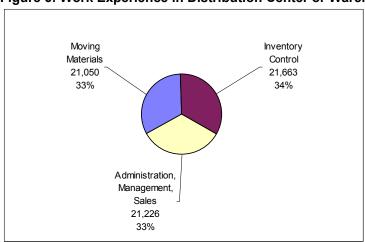


Figure 6: Work Experience in Distribution Center or Warehouse

Respondents indicating employment experience "working in a manufacturing plant or processing plant" were asked if their experience was "mostly in either 1) production, fabrication, or assembly, 2) production support, maintenance, and shipping and receiving, or 3) administration, management, or sales." Figure 7 shows the results of this question.

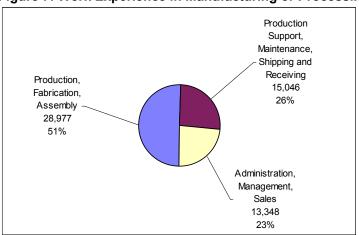


Figure 7: Work Experience in Manufacturing or Processing Plant

Respondents that have completed college or are currently enrolled in a college or university were asked to provide their undergraduate college major. Answer options included:

Social Sciences: Sociology, Psychology, Anthropology, Politics, and Social Work

Biological Sciences and Health: Biology, Agriculture, Nursing, Pre-med, Pre-vet, and Human Performance

Physical Sciences and Engineering: Physics, Geology, Chemistry, and Engineering

Business and Economics: Management, Accounting, Finance, Marketing, and Economics

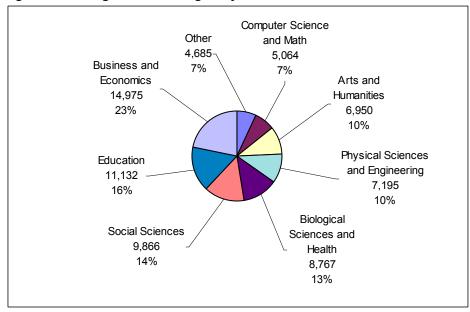
Arts and Humanities: Art, Music, History, Philosophy, and Languages

Computer Science and Math: Computer Programming or Technology, Networking, Web design, and Math

Education: Elementary and Secondary Teaching

Figure 8 below shows that most college-educated ALP members majored in Business and Economics (23%), while Education, Social Sciences, Biological Sciences and Health follow with 16%, 14%, and 13%, respectively.





All respondents that had completed at least some college were asked: "Are you attending technical school now or have you received a technical degree?" Figure 9 shows that 21% of the respondents hold a technical degree or are working on one at the present time. A clear majority (70%) of the respondents have not received a technical degree.

Nine percent of the respondents answered "yes" to the question above, but provided a non-technical degree to an open-ended follow-up question inquiring about the title of that degree. Taken together, 79% of the respondents do not have technical degrees.

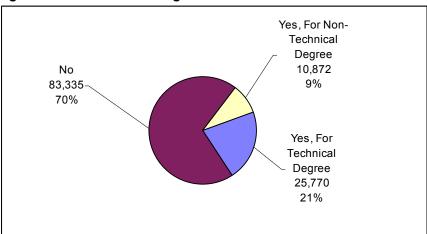


Figure 9: "Are You Attending Technical School?"

Respondents answering "yes" to the above question were asked if their degree or education was in one of the following fields:

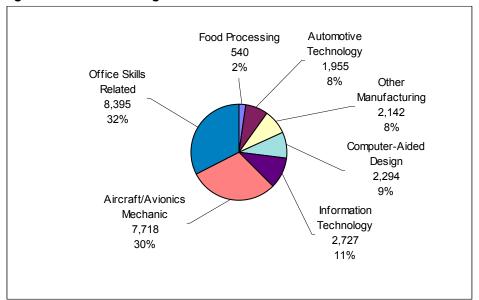
Office Skills Related Plastics or Composites Manufacturing
Automotive Technology Food Processing or Handling
Aircraft/Avionics Mechanic or Technician Other Manufacturing Technology
Information Technology (Computer or electronics services or repair)
Computer-Aided Design or Manufacturing

Figure 10 (next page) shows data from respondents holding (or currently seeking) technical degrees⁵. Most respondents have (or are seeking) office skills degrees (31%) or aircraft/avionics mechanic degrees (30%). Information technology follows at a distant third at 12%. Computer-aided design, other manufacturing, automotive technology, and food processing received 9%, 8%, 8%, 8%, and 2%.

⁵ The most popular answer option for this question was "Other" at 34%. Most of the answers provided to an openended follow-up question for respondents selecting "Other" were for non-technical degrees. Therefore, the "Other" category is not included in Figure 10. Please see Appendix II for a table of the open-ended responses to the "Other" answer option.

⁶ The number figures shown for these two fields differ slightly due to rounding.

Figure 10: Technical Degree Field



Considerations for Employment

An important consideration for many employers looking to locate or expand operations is whether workers are willing to pursue new employment opportunities. Some workers may be available for new employment but are unwilling to switch from their current job to a different type of position. A <u>region with a large</u> percentage of <u>individuals</u> unwilling to change their jobs_might limit the types of employers that can enter the labor basin. This does not seem to be the case in the Wichita Labor Basin, however. Figure 11 indicates that 125,459 (82%) members of the ALP are willing to accept positions outside of their primary fields of employment.

Table 4 and Figure 12 suggest that the Available Labor Pool in the Wichita Labor Basin is open to commuting. Slightly more than 30% of the members (or 46,589 individuals) of the Available Labor Pool will commute up to 45 minutes, one way, for an employment opportunity. Almost 79% will commute up to 30 minutes for employment, and more than 97% will travel up to 15 minutes for employment.

Figure 11: Willing to Work Outside of Primary Field

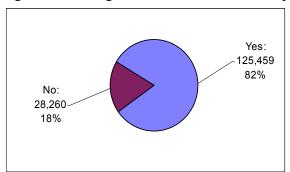


Table 4: Available Labor by Commute Minutes

| | C | Cumulative | | | | |
|--|---------|------------|--|--|--|--|
| | Number | Percent | | | | |
| More than 60 Minutes | 2,553 | 1.7 | | | | |
| Up to 60 Minutes | 21,185 | 13.8 | | | | |
| Up to 55 Minutes | 21,466 | 14.0 | | | | |
| Up to 50 Minutes | 22,633 | 14.7 | | | | |
| Up to 45 Minutes | 46,589 | 30.3 | | | | |
| Up to 40 Minutes | 52,882 | 34.4 | | | | |
| Up to 35 Minutes | 55,424 | 36.1 | | | | |
| Up to 30 Minutes | 120,869 | 78.6 | | | | |
| Up to 25 Minutes | 125,784 | 81.8 | | | | |
| Up to 20 Minutes | 144,325 | 93.9 | | | | |
| Up to 15 Minutes | 149,469 | 97.2 | | | | |
| Up to 10 Minutes | 151,930 | 98.8 | | | | |
| Up to 5 Minutes | 153,719 | 100.0 | | | | |
| | | | | | | |
| The total might not sum precisely due to rounding. | | | | | | |

Figure 12: Available Labor by Commute Minutes

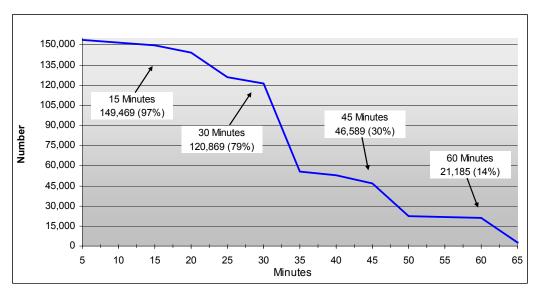


Figure 13 shows various benefits affecting the decisions of current workers to take a different job and potential workers to take a new job. The five most important benefits are good salary or hourly pay, good retirement benefits, good health benefits, on-the-job or paid training, and good vacation benefits. Each of these five benefits received 80% or more support from survey respondents.

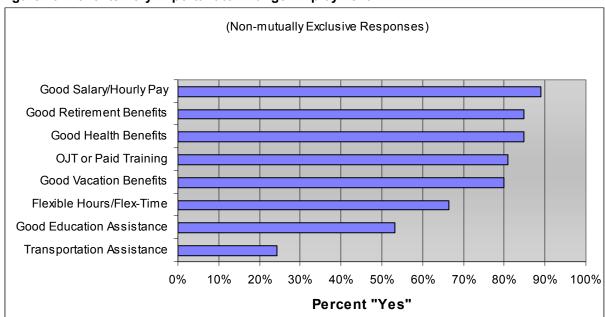


Figure 13: Benefits Very Important to Change Employment

Table 5 lists some of these benefits, as well as percentages of ALP members that are currently offered these benefits. The figures in the left percent column indicate the percentages of all ALP members that suggest a benefit is an *important* consideration in taking a new or different job, while the figures on the right show the percentages of *working members* of the ALP that have been offered the benefit by their employers.

Table 5: Desired Benefits and Current Benefits Offered

| Table 5. Desired Bellents and Current Bellents Offered | | | | | | |
|--|----------|-------------------|--|--|--|--|
| | | | | | | |
| Benefit I | mportant | Benefit Currently | | | | |
| to Cha | nge Jobs | Offered* | | | | |
| | Percent | Percent | | | | |
| Good Retirement Benefits | 84.9 | 81.2 | | | | |
| Good Health Benefits | 84.9 | 86.5 | | | | |
| OJT or Paid Training | 81.0 | 74.5 | | | | |
| Flexible Hours/Flex-Time | 66.4 | 57.2 | | | | |
| Good Education Assistance | 53.3 | 53.2 | | | | |
| Transportation Assistance | 24.2 | 16.0 | | | | |
| | | | | | | |
| * This column respresents responses from working ALP members only. | | | | | | |

Figures 14 and 15 show responses to two questions regarding work shifts. Respondents were asked if they would be willing to work a 2nd or night shift for the right opportunities, and if they would be willing to work on weekends for the right opportunities. Figure 14 shows the responses to the first question, with 56% suggesting that they are *not* willing to work a 2nd or night shift, while 46% indicate that they are willing to do so.

Figure 15 shows the response to the second question – whether or not respondents are willing to work weekend shifts. The percentages are virtually the same as in Figure 14, with 55% suggesting that they are *not* willing to work weekend shifts and 45% indicating that they are willing to do so for the right opportunities.

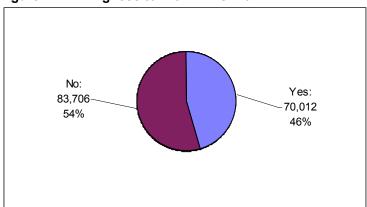
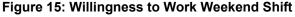
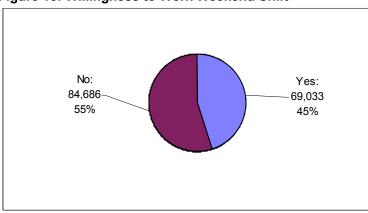


Figure 14: Willingness to Work 2nd Shift





Wage Demands

To present an even more refined picture regarding the number of workers who would seriously consider a new employment opportunity, the data in this section includes *only those respondents* that are determined to be "willing to commute the necessary travel time" for a new or different job opportunity. "Necessary travel time" is defined as a travel time stated by the respondent that is equal to or greater than the travel time necessary for the respondent to commute to the center of the labor basin. For example, a respondent that is willing to travel for 30 minutes, one-way, for a new or different job opportunity and that lives an estimated 15 minutes from Wichita is considered "willing to commute the necessary travel time" for a new job. Data from these respondents are included in this section of the report.

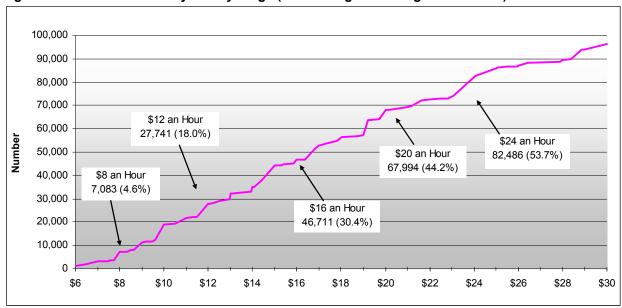


Figure 16: Available Labor by Hourly Wage (Controlling for Willing to Commute)

Figure 16 shows the wage demands for the ALP members that are "willing to commute." It is estimated that 82,486 people (or about 53.7%) are interested in a new job at \$24 an hour. Approximately 67,994 (or about 44.2%) members of the labor pool are interested in new employment opportunity at \$20 an hour, while 46,711 (30.4%) are interested at \$16 an hour. Additionally, about 27,741 people (about 18.0%) are interested in a new job at \$12 an hour and 7,083 (4.6%) at \$8 an hour.

Figure 16 suggests the obvious: that the higher the wage, the larger the pool of available labor. For example, 11,254 members of the ALP are available for a new or different job at \$9.00 an hour. At \$10.00 an hour, however, the size of the available labor increases to 19,094 members. This represents an increase of 7,840 individuals.

The graph also highlights various "wage preference plateaus" that may be of interest to current and potential employers. A wage preference plateau is a situation in which an increase in wage results in an insignificant or small increase in available labor. For example, as previously noted, 11,254 members of available labor are interested in a job at \$9.00 an hour. At \$9.50 an hour there are an estimated 11,640 individuals available. So, while there is certainly

_

⁷ See Appendix II for an hourly wage/annual salary conversion chart.

an increase in the number of available workers at this higher wage rate, the increase is estimated to be only 386 individuals. Similarly, there are about 32,100 individuals available at \$13.00 an hour but only about 390 more available at \$13.50 an hour. Additional wage plateaus can be seen between \$11 and \$11.50 (a 500-individual increase) and between \$12 and \$12.50 (an 897-individual increase).

Table 6 shows the four main occupational sectors⁸ of the ALP. The table shows that 6% of the general laborers will take a new or different job at a wage of \$9 an hour. More than a third (36%) is available for new employment at a wage of up to \$15 an hour. Of the skilled laborers, 6% are available at \$15 an hour, while no skilled blue-collar workers that are willing to commute the necessary distance are available at \$9 an hour or less.

Seven percent of the service workers are available at \$9 an hour, while 43% are available at \$15 an hour. Conversely, only 1% of the professional workers are available at \$15 an hour, while none are available at \$9 an hour.

Table 6: Cumulative Wage Demands for Occupational Sectors

| | Gener | al Labor | High S | killed Labor | Servi | ce Sector | Profess | ional/Sales |
|--------------|---------|-----------------|---------|-----------------|----------|----------------|----------|----------------|
| | (N= 70) | (+/- 11.7% MoE) | (N= 43) | (+/- 15.0% MoE) | (N= 198) | (+/- 7.0% MoE) | (N= 101) | (+/- 9.7% MoE) |
| | Number | Cumulative | Number | Cumulative | Number | Cumulative | Number | Cumulative |
| \$30 or More | 19,634 | 100% | 12,118 | 100% | 55,821 | 100% | 28,626 | 100% |
| Up to \$30 | 18,697 | 95% | 8,618 | 71% | 51,002 | 91% | 13,735 | 48% |
| Up to \$27 | 17,824 | 91% | 7,163 | 59% | 48,679 | 87% | 11,989 | 42% |
| Up to \$24 | 15,306 | 78% | 5,417 | 45% | 42,565 | 76% | 7,424 | 26% |
| Up to \$21 | 13,878 | 71% | 3,932 | 32% | 40,814 | 73% | 5,238 | 18% |
| Up to \$18 | 11,550 | 59% | 2,192 | 18% | 33,176 | 59% | 2,619 | 9% |
| Up to \$15 | 7,020 | 36% | 737 | 6% | 24,025 | 43% | 291 | 1% |
| Up to \$12 | 3,772 | 19% | 291 | 2% | 11,304 | 20% | 291 | 1% |
| UP to \$9 | 1,164 | 6% | 0 | 0% | 3,661 | 7% | 0 | 0% |
| Up to \$6 | 291 | 1% | 0 | 0% | 577 | 1% | 0 | 0% |

-

⁸ These sectors represent *employed* members of the ALP only.

Table 7 shows wage demand data for general labor and service sector workers that are willing to change fields of employment and thus, are presumably potential workers for either of these two sectors. Specifically, the table *includes* data from respondents that:

- 1 are willing to commute the necessary distance from his/her community to the center of the labor basin, *and*
- are willing to change their primary field of employment (for example: service sector employment to general labor employment), *and*
- 3a are currently non-employed, or
- 3b are employed as general laborers or service sector employees.

Table 7: Cumulative Wage Demands Allowing Mobility between General Labor and Service Sector

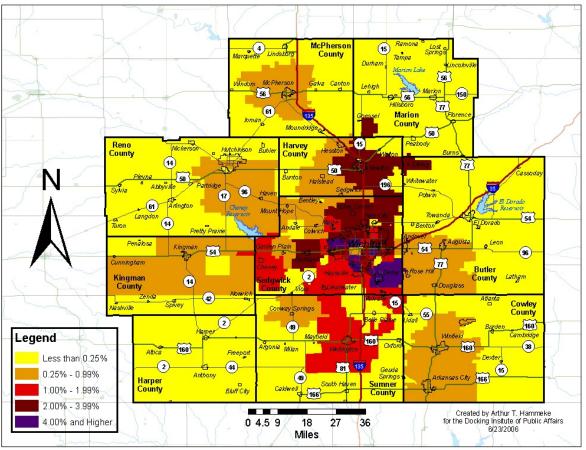
| ı | Mahila C | eneral Labor | l Mabila (| Service Sector |
|--------------|----------|---------------|------------|----------------|
| | Mobile G | eneral Labor | Wiobile 3 | service sector |
| | (N= 295) | +/- 5.7% MoE) | (N= 313) | (+/- 5.5% MoE) |
| | Number | Cumulative | Number | Cumulative |
| \$30 or More | 72,281 | 100% | 76,567 | 100% |
| Up to \$30 | 68,287 | 94% | 71,627 | 94% |
| Up to \$27 | 65,514 | 91% | 68,601 | 90% |
| Up to \$24 | 58,049 | 80% | 60,353 | 79% |
| Up to \$21 | 55,795 | 77% | 57,594 | 75% |
| Up to \$18 | 47,147 | 65% | 48,667 | 64% |
| Up to \$15 | 34,675 | 48% | 36,164 | 47% |
| Up to \$12 | 21,042 | 29% | 21,547 | 28% |
| UP to \$9 | 8,228 | 11% | 7,975 | 10% |
| Up to \$6 | 1,258 | 2% | 1,006 | 1% |

Table 6 (previous page) presents data representing each occupational sector *independently* and Table 6 does not include non-working ALP members. Table 7, on the other hand, allows a general laborer or service sector worker to be classified in both sectors *if* he or she indicates a willingness to change fields of employment (see Figure 11). Additionally, it is assumed that a non-working ALP member will take a job (all things being equal) in either the general labor sector or the service sector.

High-skilled blue-collar workers and professional white-collar workers are excluded from Table 7 because it is presumed that, as a general rule, people in occupations such as Doctors, Lawyers, Engineers, Professors, Machinists, Electricians, etc... are unlikely to transfer into lower-skilled general labor and service/support occupations. It is also presumed that, because professional and highly skilled occupations require extensive education and/or training, lower-skilled general laborers and service sector workers are unable to transfer to higher-skilled labor or professional positions - at least in the near term.

Map 3 shows how each zip code in the basin compares to all other zip codes in terms of the percent of available labor in the Wichita Labor Basin that are willing to travel the necessary commute time for a new or different job. Each zip code is grouped into one of five categories specified in the legend. The zip codes containing the most available labor that is willing to travel the necessary commute time in the Wichita Labor Basin are located in Sedgwick, Harvey, and Sumner Counties.

Map 3: Percent of Total Available Labor in Basin by Zip Code (Controlling for Willing to Commute)



Underutilization Among Available Labor Pool Workers

Underutilization — individuals possessing skills and/or training levels that exceed the responsibilities of their current job — is a significant issue in many communities. To assess underutilization in the Wichita Labor Basin, *employed members of the ALP* were presented with a scenario describing underutilization⁹. They were then asked a series of questions assessing if they perceived themselves as underutilized because: 1) their skill level is greater than their current job requires, 2) they possess higher levels of education than is required on the job, 3) they earned a higher income at a similar job previously, or 4) they were limited in the number of hours that they could work.

Of the 133,450 *employed members* of the ALP (shown in Figure 17), slightly less than half answered "yes" to one or more of the questions presented above and are considered underutilized. Figure 18 shows that the underutilized workers represent 41% (or 54,713 individuals) of the employed members of the ALP.

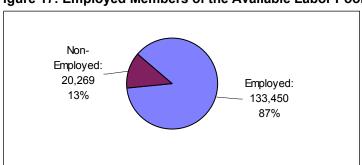
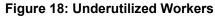
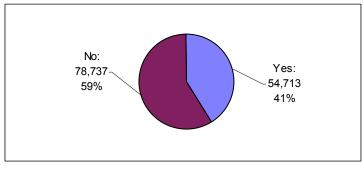


Figure 17: Employed Members of the Available Labor Pool¹⁰





⁹ "Because of circumstances, some workers have jobs that do not fully match their skills, education, or experiences. For example, a master plumber taking tickets at a movie theater would be a mismatch between skill level and job requirements. Do you consider yourself an underutilized worker because....?"

¹⁰ The number figures shown here may differ slightly from those shown in other figures and tables due to rounding.

Figure 19 shows the percentages of the positive responses (i.e., "yes" answers) to the various measures of underutilization. About 33% of this subset of the ALP consider themselves as possessing education levels exceeding those needed for their current jobs, while about 28% consider themselves underutilized because they have skills that are not being used on the job. Twenty-one percent had a previous but similar job that provided more income, while about 12% suggest they are not able to work enough hours.

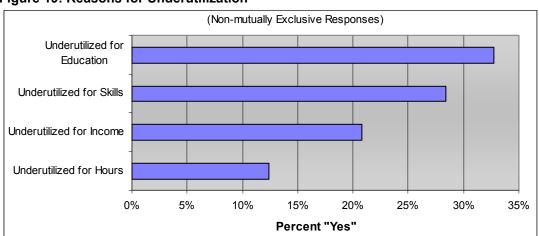


Figure 19: Reasons for Underutilization

Table 8 and Figure 20 (next page) show some characteristics of the underutilized members of the Available Labor Pool. Table 8 indicates that the education level of the underutilized workers compares to the overall ALP with almost 81% having at least some college education and almost 53% having completed associates degrees. (Table 1 shows that 78% of the entire ALP have some college experience and 54% having completed an associate's degree).

Table 8: Highest Level of Education Achieved Among Underutilized

| | | | Cumulative |
|--|--------|---------|------------|
| | Number | Percent | Percent |
| Doctoral Degree | 222 | 0.4 | 0.4 |
| Masters Degree | 6,381 | 11.7 | 12.1 |
| Bachelors Degree | 14,782 | 27.0 | 39.1 |
| Associates Degree | 7,413 | 13.5 | 52.6 |
| Some College | 15,414 | 28.2 | 80.8 |
| High School Diploma Only | 9,185 | 16.8 | 97.6 |
| Less HS Diploma | 1,317 | 2.4 | 100.0 |
| Total | 54,713 | 100 | |
| | | | |
| The total might not sum precisely due to rounding. | | | |

Figure 20 shows that 23% (12,844 individuals) of the underutilized workers are employed as general laborers and 9% (4,813) are employed as skilled blue-collar workers. Most underutilized workers are employed as service sector and support workers (55% or 29,905 individuals), while 13% (7,152) hold professional positions.

Comparing Figure 20 to Figure 2 suggests that more general laborers and service workers consider themselves as underutilized than do skilled laborers and professional workers. Figure 2 shows that the ALP consists of: 17% general laborers, 10% skilled-laborers, 48% service workers, and 25% professionals. Figure 20 shows 23% general laborers, 9% skilled-laborers, 55% service workers, and 13% professionals.

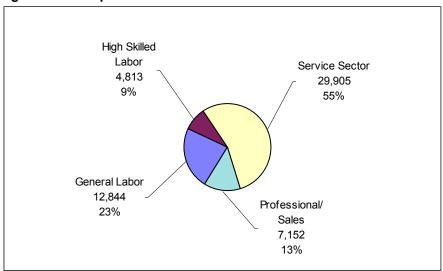


Figure 20: Occupational Sectors of Underutilized Workers

Respondents indicating that they were underutilized were also asked a follow-up question addressing the willingness to change jobs in order for them to better utilize their skills and/or education. Figure 21 suggests that many -82% (or 44,792 individuals) - of the underutilized workers are willing to change jobs to address underutilization.

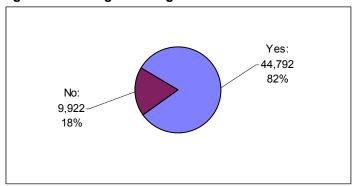


Figure 21: Willing to Change Job to Better Use Skills/Education

Entrepreneurship Among Available Labor Pool Non-Business Owners

The desire for self employment may be another indicator of the types of workers available in the labor basin. Figure 22 shows that of the 153,719-member Available Labor Pool, 11% own their own businesses.

Figure 22: Business-Ownership

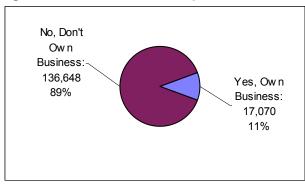
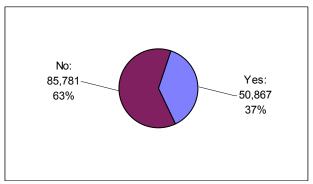


Figure 23: "Seriously Thought About Starting Own Business?"



The non-business owning members of the ALP (estimated to be 136,648 or 89% of the entire ALP) were asked the question: "In the last few years have you seriously thought about starting your own business?" Figure 23 shows that more than a third (37% or 50,867) of the non-business-owning members of the ALP indicate that they had seriously considered this option for new employment. This subset of the ALP can be considered potential entrepreneurs.

Table 9 and Figures 24 and 25 (next page) show some characteristics of the *potential* entrepreneurs. Table 9 indicates that the education level of the potential entrepreneurs is the same the overall ALP, with more than a third (38.7%) holding at least a bachelor's degree and 98% as having high school diplomas (whereas Table 1 shows 41.5% and 97.4% for bachelor's degree and high school diploma, respectively).

Table 9: Highest Level of Education Achieved Among Potential Entrepreneurs

| | | | Cumulative |
|--|--------|---------|------------|
| | Number | Percent | Percent |
| Doctoral Degree | 556 | 1.1 | 1.1 |
| Masters Degree | 6,292 | 12.4 | 13.5 |
| Bachelors Degree | 12,861 | 25.3 | 38.7 |
| Associates Degree | 6,728 | 13.2 | 52.0 |
| Some College | 14,659 | 28.8 | 80.8 |
| High School Diploma Only | 8,794 | 17.3 | 98.1 |
| Less HS Diploma | 977 | 1.9 | 100.0 |
| Total | 50,867 | 100.0 | |
| | | | |
| The total might not sum precisely due to rounding. | | | |

Figure 24 shows that 22% of the potential entrepreneurs are currently employed as general laborers and that 11% are currently employed as skilled blue-collar workers. Most are employed as service sector and support workers (44%), while 23% hold professional positions¹¹.

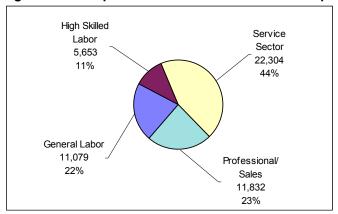


Figure 24: Occupational Sectors of Potential Entrepreneurs

Figure 25 suggests the strength of desire to own a business. About 64% of this subset of the ALP indicate that they "Strongly Agree" with a statement asking if they "are willing to work evenings or on weekends to make their business a success," while almost 20% indicate that they "Mildly Agree." About 32% "Strongly Agree" with a statement asking if they "would rather own their own business than pursue a promising career elsewhere," while 43% "Mildly Agree."

Twenty-five percent "Strongly Agree" with the statement "I would rather own my own business than earn a higher salary working for someone else," while another 33% "Mildly Agree" with that same statement. When presented with the statement, "I am willing to have less security for my family in order to operate my own business," 18% strongly agreed and 22% mildly agreed. More respondents disagreed with this statement than any other, with 19% mildly disagreeing and 41% strongly disagreeing, for a total of 60% disagreement.

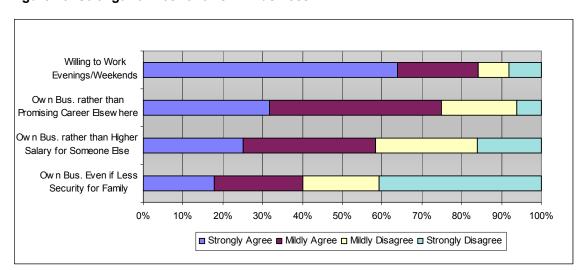


Figure 25: Strength of Desire for Own Business

¹¹ Figure 2 shows: 17% general laborers, 10% skilled-laborers, 48% service workers, and 25% professionals.

Union Membership

Union membership is an important issue for Wichita Labor Basin. The data presented in this section represents all *working respondents and unemployed respondents seeking employment*. Figure 26 shows that 11% of the respondents belong to a union. Nearly 90% of the respondents do not belong to a labor union.

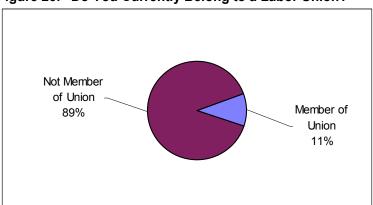


Figure 26: "Do You Currently Belong to a Labor Union?"

Figure 27 (next page) shows the responses to various contingency questions stemming from the one shown in Figure 26. The questions and responses show in green correspond with union members, while the questions and responses shown in grey correspond to workers that do not currently belong to labor unions.

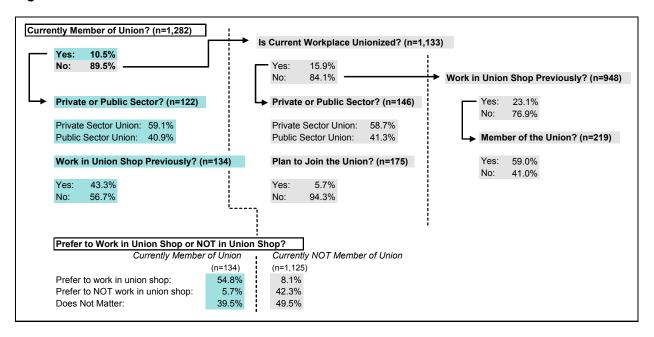
Of the 11% that currently belong to unions, 59% are members of private sector unions and 43% have worked in a union before. Additionally, 55% percent prefer to work in a union shop, 6% prefer to work in a non-union shop, and 39% suggest that it does not matter if they work in a union shop or not.

Of the workers that *do not* currently belong to unions, 16% work in union shops or workplaces, and 59% of these workers work in shops/workplaces represented by private sector unions. Six percent of these workers plan to join a union.

Of the workers that *do not* currently belong to unions and *do not* work in union shops, 23% have worked in union shops previously, and 59% of these workers were members of a union in those shops.

Of the workers that *do not* currently belong to unions, 8% prefer to work in union shops, 42% prefer not to work in union shops, and half (50%) indicated that it does not matter if they work in unions shops or not.

Figure 27: Union Members and Non-Union Workers



Finally, respondents were asked open-ended questions inquiring as to why they do or do not belong to a labor union. Tables 10 and 11 shows the responses to these questions, with answer sets collapsed into seven answer options each.

Table 10: "Why Do You Belong to a Union?"

| | Frequency | Valid Percent |
|---|-----------|---------------|
| Protects/Provides Benefits and Wages | 38 | 29.8 |
| Provides Legal Representation | 6 | 4.8 |
| Provides Worker Protection/Job Security | 18 | 13.8 |
| Fights for Better Working Conditions | 7 | 5.3 |
| Provides Good Representation/Political Power | 34 | 26.6 |
| Peer Pressure of Other Workers | 9 | 7.3 |
| Tradition/Personal Belief in Supporting Labor | 16 | 12.5 |
| Total | 128 | 100 |

Table 11: "Why Do You Not Belong to a Union?"

| | Frequency | Valid Percent |
|--|-----------|---------------|
| Membership is Too Expensive | 17 | 10.4 |
| Union Not Needed at Workplace | 33 | 20.0 |
| Union Not Available at Workplace | 14 | 8.5 |
| Union Not Available for Position/Job | 52 | 31.4 |
| Local Union Not Strong/Does Not Represent Well | 13 | 7.7 |
| Had Previous Bad Experience with Union(s) | 8 | 4.7 |
| Supports "Right to Work" Laws/Opposes Unions | 29 | 17.3 |
| Total | 166 | 100 |

Methodology

The Wichita Labor Basin has a total population of approximately 706,709, and a Civilian Labor Force (CLF) of 382,541. The Docking Institute's analysis suggests that the basin contains an Available Labor Pool (ALP) of 153,719 individuals.

Explaining the Civilian Labor Force

Traditional methods of assessing the dynamics of the labor force have concentrated on what the Bureau of Labor Statistics (BLS) calls the Civilian Labor Force (CLF). The CLF represents "the civilian non-institutional population, 16 years of age and over classified as employed or unemployed." The BLS defines "non-institutional civilians" as those individuals who are not inmates in institutions and who are not on active duty in the Armed Forces; and "unemployed civilians" as civilians available for work and who had "made specific efforts to find employment" in the previous four weeks.

While a review of CLF statistics represents the starting point for understanding the labor force in the Wichita Labor Basin, there are some limitations associated with these statistics. These limitations occur because the CLF *excludes* individuals who may be willing and able to be gainfully employed but have not made specific efforts to find employment in the last four weeks. These individuals may include full-time students who do not work, homemakers, the unemployed who are no longer seeking employment, military personnel who may be leaving military employment in the near future, and retired individuals who may be available for work but have not been looking for work recently.

In addition, most new employers draw their workforce from those who are presently employed, not those who are unemployed. As such, Census-based and BLS data (such as the CLF) do not specifically address the possibility of workers moving from one industry to another in search of other employment opportunities.

Defining the Available Labor Pool

An alternative to the CLF is the "Available Labor Pool¹²." The Available Labor Pool is composed of workers categorized as either 1) currently not working *but* looking for employment, 2) currently employed (full- or part-time) *and* looking for other full-time employment, 3) currently not working in any manner *but* willing to consider different employment for the *right opportunity*, and 4) currently employed and not looking, *but* willing to consider different employment for the *right opportunity*.

There are two key differences between the Civilian Labor Force and the Available Labor Pool. First, the Available Labor Pool methodology expands the pool of potential workers by including workers excluded from the CLF¹³. Secondly, the number of potential workers is then

¹² The Available Labor Pool includes potential workers excluded from the CLF (such as full-time students willing to take a job, homemakers who have not yet sought employment, military personnel who may be leaving military employment in the near future, and retired individuals who may be willing and able to be gainfully employed).

¹³ The number that is added to the Civilian Labor Force is derived by taking from the survey the total number of full-time students, homemakers, military, retirees, and long-term unemployed, who state that they are seeking or available for employment and are within a reasonable commute distance to the center of the labor basin, and dividing this number by the total number of respondents. This quotient is then multiplied by the total number of people in the labor basin who are 18 to 65 years old.

restricted to those workers who indicate they are looking for work or are available for new employment. The advantage of this methodology is that it allows researchers to examine those members of the labor pool who have a propensity to consider a job opportunity given their employment expectations. Even with these restrictions, it should be noted that, in practice, not all members of the Available Labor Pool would apply for a new job opportunity. However, the Available Labor Pool figure for a labor basin reveals to current employers and potential employers better information about the quantity and quality of the labor pool than do Civilian Labor Force data and unemployment statistics. The Available Labor Pool for the Wichita Labor Basin includes 153,719 individuals. This represents a substantial number of workers and potential workers for employers to draw upon in the Wichita Labor Basin.

Survey Research Methods

Data for this study was collected from a random digit telephone survey¹⁴ of adults living in ten counties in south central Kansas: Butler, Cowley, Harper, Harvey, Kingman, Marion, McPherson, Reno, Sedgwick, and Sumner. Surveying took place from March 1, 2006 to April 28, 2006, using a Computer Assisted Telephone Interviewing (CATI) system. A total of 4,249 households were successfully contacted during the data collection period, and a randomly selected adult¹⁵ in each was asked to participate in the study. In 2,432 households the selected adult agreed to be interviewed. This represents a cooperation rate of 57% and a margin of error of +/-2.00%.

Survey respondents that were 65 years of age or older and retired or over 65 and not working and not interested in a new or different job were not asked the entire battery of survey questions and are not included in the analysis of this report. The remaining respondents (all other working and non-working respondents) total to 1,648, and are considered eligible respondents. Of the 1,648 cooperating and eligible respondents, 38% (or 628) indicated that they were available for new or different full-time employment and/or were looking for a new or different full-time job. This subgroup is considered the Available Labor Pool for the Wichita Labor Basin. Responses from 628 individuals provides a margin of error of +/- 3.9%.

The study sponsors and Institute personnel agreed upon the survey items used, with the former identifying the study objectives and the latter developing items and methodologies that were valid, reliable, and unbiased. Question wording and design of the survey instrument are the property of the Docking Institute. A detailed summary of the method of analysis used in this report can be found in Joseph A. Aistrup, Michael S. Walker, and Brett A. Zollinger, "The Kansas Labor Force Survey: The Available Labor Pool and Underemployment." *Kansas Department of Human Resources*, 2002.

Up to eight attempts were made to contact each respondent during three calling periods (10 AM to Noon, 2 PM to 4 PM, and 6 PM to 9 PM). Initial refusals were re-attempted by specially trained "refusal converters," which aided in the cooperation rate.

¹⁴ The telephone numbers were assembled by randomly generating suffixes within specific area codes and prefixes. As such, unlisted numbers were included in this sample, minimizing the potential for response bias. Known business, fax, modem, and disconnected numbers were screened from the sample in efforts to reach households only (and to minimize surveyor dialing time).

¹⁵ Surveyors requested to "speak with an adult over the age of 17 that has had the most recent birthday."

Appendix I: Current Employment Status of Available Labor Pool

| | Current Employment Status of ALP | |
|--|-------------------------------------|---------|
| | Number | Percent |
| General Labor/Construction/Cleaning | 5,692 | 3.7 |
| Farm Labor/Ranch Hand/Landscaping | 2,301 | 1.5 |
| Delivery/Driver/Courier | 2,161 | 1.4 |
| Maintenance/Wiring/Plumbing | 5,712 | 3.7 |
| Factory Worker/Grain Elevator/Meat Packer | 4,281 | 2.8 |
| Truck Driver/Heavy Equipment Operator | 2,543 | 1.7 |
| Police/Fire/Postal/Military Enlisted | 3,683 | 2.4 |
| Mechanic/Welder/Carpenter/Electrician | 5,605 | 3.6 |
| Lab or Medical Tech/Comp Tech/Programmer | 4,224 | 2.7 |
| Other Blue Collar | 0 | 0.0 |
| General Customer Service/Retail/Reception/Waitress | 20,237 | 13.2 |
| Clerical/Secretary/Book-Keeper/Bank Teller | 15,754 | 10.2 |
| Para-legal/Para-pro/CNA/Care Assistance | 7,916 | 5.1 |
| Nurse/LPN/RN/Semi-skilled Social Service | 11,113 | 7.2 |
| Office Manager/Small Business Owner | 9,196 | 6.0 |
| Teacher/Couselor/Social Worker/Researcher | 12,577 | 8.2 |
| Sales/Marketing/Accounting | 6,924 | 4.5 |
| Govt., Non-Profit, or Bus Exec/Farm Owner/Military Officer | 4,098 | 2.7 |
| Professor/Doctor/Engineer/Attorney | 9,432 | 6.1 |
| Other White Collar | 0 | 0.0 |
| Homemaker | 5,822 | 3.8 |
| Full-Time Student | 4,850 | 3.2 |
| Unemployed | 7,081 | 4.6 |
| Retired | 762 | 0.5 |
| Disabled | 1,754 | 1.1 |
| Total | 153,719 | 100 |

Appendix II: Open-Ended Responses to Technical Degree Question

| | Frequency | Valid Percent |
|--|-----------|---------------|
| Art/Graphics/Music/Photography | 4 | 9.1 |
| Beautician/Hair/Nails | 2 | 4.5 |
| Certified Nurses Aid/Dietitian | 3 | 6.8 |
| Childcare/Childhood Education | 2 | 4.5 |
| College General Education | 2 | 4.5 |
| Dental Assistant | 2 | 4.5 |
| EMT/Paramedic | 2 | 4.5 |
| Fire Science/Law Enforcement | 2 | 4.5 |
| General Science | 4 | 9.1 |
| Medical Assistant | 4 | 9.1 |
| Mortuary Science | 1 | 2.3 |
| Nursing | 7 | 15.9 |
| Physical Therapy Assistant/Message Therapy | 3 | 6.8 |
| Pre-Med/Pharmacy Tech/Psychiatric Tech | 3 | 6.8 |
| Religion/Bible Study | 2 | 4.5 |
| Truck Driving | 1 | 2.3 |
| Total | 44 | 100 |

Appendix III: Hourly Wage to Annual Salary Conversion Chart

| Hourly Wage | Annual Salary | Hourly Wage | Annual Salary |
|--------------------|----------------------|-------------|---------------|
| \$5.00 | \$10,400 | | |
| \$5.50 | \$11,440 | \$30.00 | \$62,400 |
| \$6.00 | \$12,480 | \$30.50 | \$63,440 |
| \$6.50 | \$13,520 | \$31.00 | \$64,480 |
| \$7.00 | \$14,560 | \$31.50 | \$65,520 |
| \$7.50 | \$15,600 | \$32.00 | \$66,560 |
| \$8.00 | \$16,640 | \$32.50 | \$67,600 |
| \$8.50 | \$17,680 | \$33.00 | \$68,640 |
| \$9.00 | \$18,720 | \$33.50 | \$69,680 |
| \$9.50 | \$19,760 | \$34.00 | \$70,720 |
| \$10.00 | \$20,800 | \$34.50 | \$71,760 |
| \$10.50 | \$21,840 | \$35.00 | \$72,800 |
| \$11.00 | \$22,880 | \$35.50 | \$73,840 |
| \$11.50 | \$23,920 | \$36.00 | \$74,880 |
| \$12.00 | \$24,960 | \$36.50 | \$75,920 |
| \$12.50 | \$26,000 | \$37.00 | \$76,960 |
| \$13.00 | \$27,040 | \$37.50 | \$78,000 |
| \$13.50 | \$28,080 | \$38.00 | \$79,040 |
| \$14.00 | \$29,120 | \$38.50 | \$80,080 |
| \$14.50 | \$30,160 | \$39.00 | \$81,120 |
| \$15.00 | \$31,200 | \$39.50 | \$82,160 |
| \$15.50 | \$32,240 | \$40.00 | \$83,200 |
| \$16.00 | \$33,280 | \$40.50 | \$84,240 |
| \$16.50 | \$34,320 | \$41.00 | \$85,280 |
| \$17.00 | \$35,360 | \$41.50 | \$86,320 |
| \$17.50 | \$36,400 | \$42.00 | \$87,360 |
| \$18.00 | \$37,440 | \$42.50 | \$88,400 |
| \$18.50 | \$38,480 | \$43.00 | \$89,440 |
| \$19.00 | \$39,520 | \$43.50 | \$90,480 |
| \$19.50 | \$40,560 | \$44.00 | \$91,520 |
| \$20.00 | \$41,600 | \$44.50 | \$92,560 |
| \$20.50 | \$42,640 | \$45.00 | \$93,600 |
| \$21.00 | \$43,680 | \$45.50 | \$94,640 |
| \$21.50 | \$44,720 | \$46.00 | \$95,680 |
| \$22.00 | \$45,760 | \$46.50 | \$96,720 |
| \$22.50 | \$46,800 | \$47.00 | \$97,760 |
| \$23.00 | \$47,840 | \$47.50 | \$98,800 |
| \$23.50 | \$48,880 | \$48.00 | \$99,840 |
| \$24.00 | \$49,920 | \$48.50 | \$100,880 |
| \$24.50 | \$50,960 | \$49.00 | \$101,920 |
| \$25.00 | \$52,000 | \$49.50 | \$102,960 |
| \$25.50 | \$53,040 | \$50.00 | \$104,000 |
| \$26.00 | \$54,080 | Ψ30.00 | Ψ10-1,000 |
| \$26.50 | \$55,120 | | |
| \$27.00 | \$56,160 | | |
| \$27.50 | \$57,200 | | |
| \$28.00 | \$58,240 | | |
| | , , | | |
| \$28.50 | \$59,280 \$60,330 | | |
| \$29.00 \$29.50 | \$60,320 \$61,360 | | |