# Thomas County Labor Basin Labor Availability Analysis - 2007

Cheyenne • Decatur • Gove • Logan • Rawlins Sheridan • Sherman • Thomas • Wallace



## Prepared For

## **Thomas County Economic Development Alliance**

Prepared By

The Docking Institute of Public Affairs

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# Thomas County Labor Basin Labor Availability Analysis - 2007

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# Thomas County Labor Basin Labor Availability Analysis

#### **Executive Summary**

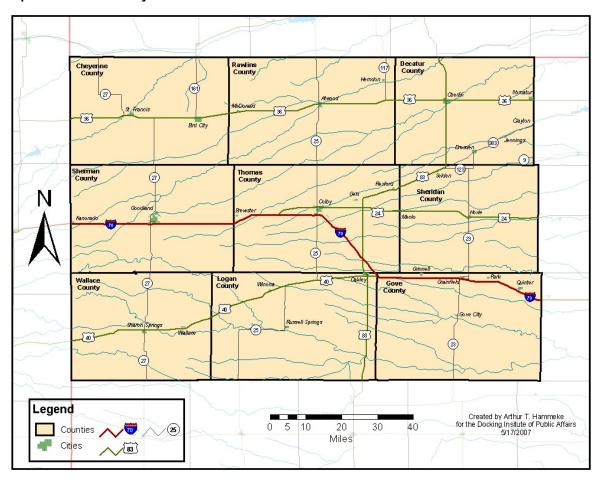
The Thomas County Labor Basin includes Cheyenne, Decatur, Gove, Logan, Rawlins, Sheridan, Sherman, Thomas and Wallace Counties in Kansas. The purpose of this report is to assess the "Available Labor Pool" in this labor basin. The "Available Labor Pool" represents those who indicate that they are looking 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 Thomas County Labor Basin is estimated to be 32,322. About 18.5% of the population (or 5,990 individuals) is considered to be part of the Available Labor Pool (ALP).
- Of the ALP, an estimated 458 (7.6%) non-working and 1,082 (18.1%) working individuals are *looking* for new employment, while 166 (2.8%) non-working and 4,285 (71.5%) working individuals would *consider* new and/or different employment for the right opportunities.
- Slightly more than 78% of the ALP has at least some college experience and almost all (99%) has at least a high school diploma. The average age for members of the entire ALP is about 45 years old, and women make up almost 58% of the ALP.
- Majorities of ALP members report needing "no additional training" for a job requiring working in groups or interpersonal skills (74%), math (53%) and writing (53%). More than half of ALP members indicate a need for at least "some training" for a job in management (63%), public speaking (67%) and computers (70%).
- About 45% of the working ALP respondents "strongly agree" with a statement suggesting that they
  have a "generally positive work environment" and 44% "mildly agree" with that statement.
- Slightly more than 81% (4,875) of the ALP indicate that they are "willing to work outside of their primary field of employment for a new or different employment opportunity."
- About 24% of the members (or 1,412 individuals) of the ALP will commute up to 45 minutes, one
  way, for an employment opportunity. Slightly more than 77% (or 4,639 individuals) will commute up
  to 30 minutes for employment.
- The most important desired benefits are good health benefits, good retirement benefits, OJT or paid training, good salary or hourly wage, and good vacation benefits.
- Among the ALP that are willing to commute the necessary distance to the labor basin center, 1,374 people (23%) are interested in a new job at \$16 an hour, 651 (11%) are available at \$12 an hour, and 199 (3%) are available at \$8 an hour.
- Of the 5,633 members in the subset of *employed members* of the ALP, 2,119 (39%) consider themselves underutilized. A substantial majority (87%) of this subset of the ALP has some college experience, and three-quarters (75%) is willing to change jobs to improve their underutilized status.

#### The Thomas County Labor Basin

The Thomas County Labor Basin includes nine counties in western 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 (Colby) for an employment opportunity. In the case of the Thomas County Labor Basin, it can be reasonably assumed that individuals may commute from one of the eight neighboring counties (and within Thomas County) because these counties contain: 1) communities that are sufficiently isolated but with adequate transportation access leading to Colby, and 2) communities that are within an hour's commute time to the center of the labor basin.



Map 1: Thomas County Labor Basin

The Thomas County Labor Basin has a total population of approximately 32,322 and a Civilian Labor Force (CLF) of 17,417. There is an average unemployment rate of 3.07% and this research effort suggests that there is a pool of approximately 5,990 individuals from which new employers and/or currently employers can draw. This "pool" of workers is referred to as the Available Labor Pool (ALP) by Docking Institute researchers.

The ALP 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*. Please see the Methodology section – page 20 – for more information about the Institute's ALP analysis methodology and the survey research methods used for this report.

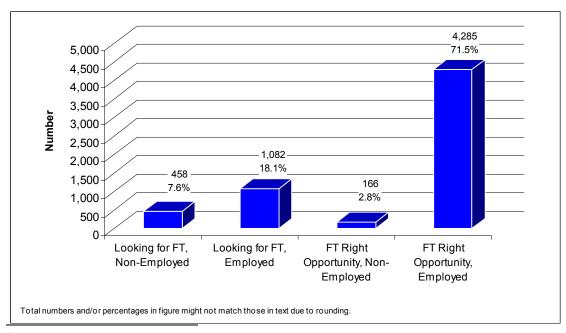
#### The Thomas County Labor Basin's Available Labor Pool

This section of the report assesses the characteristics of the ALP in the Thomas County 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 employment opportunity?
- What types of jobs have these workers and potential workers had in the past?
- What kinds of training do these they feel they need to get a new or different job?
- What is the level of job satisfaction among the workers that are available for new employment?
- 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?

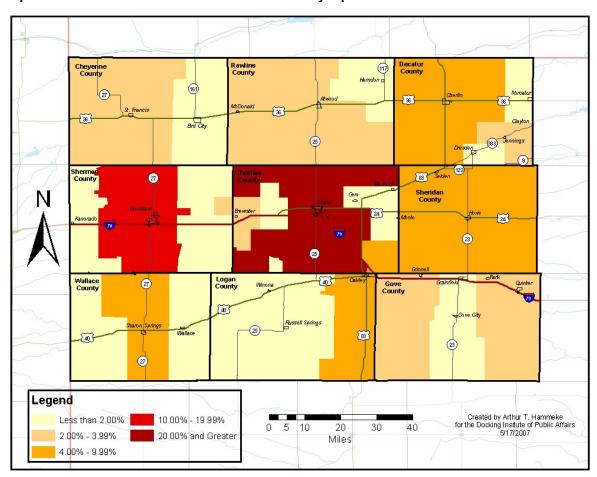
It is estimated that 458 (7.6% of the ALP) non-employed and 1,082 (18.1%) employed individuals are *currently looking* for new or different employment, and 166 (2.8%) non-employed individuals and 4,285 (71.5%) employed individuals *would consider* changing employment for the right opportunities.





<sup>&</sup>lt;sup>1</sup> 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 Thomas County 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 Thomas County Labor Basin are located in Thomas and Sherman Counties, while up to 9.99% of the available labor is also located in zip code areas within Decatur, Sheridan, Logan, and Wallace Counties. Up to 3.99% of the available labor is located in zip code areas within Cheyenne, Rawlins and Gove Counties.



Map 2: Percent of Total Available Labor in Basin by Zip Code

Table 1 shows the gender, age, and education levels of the 5,990-member ALP. Nearly 58% are women, and the average age is about 45. Nearly all (98.7%) have at least a high school diploma, more than three-quarters (78.2%) have at least some college education, and nearly two-thirds (35.3%) have at least a bachelor's degree.

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

ible 1. Age, Gender, and Education Levels	OI Available La	DOI 1 001	
Age	Age in 2006		
Range	18 to 76		
Average	45		
Median	47		
Gender	Number	Percent	
Female	3,454	57.7	
Male	2,537	42.3	
Total	5,990	100.0	
			Cumulative
Highest Level of Education Achieved	Number	Percent	Percent
Doctoral Degree	0	0.0	0.0
Masters Degree	212	3.5	3.5
Bachelors Degree	1,905	31.8	35.3
Associates Degree	1,293	21.6	56.9
Some College (including current students)	1,276	21.3	78.2
High School Diploma Only	1,228	20.5	98.7
Less HS Diploma	77	1.3	100.0
Total	5,990	100.0	
al numbers or percentages in table might not match those in tex	t due to rounding.		

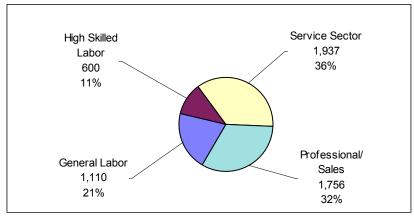
Table 2 (next page) shows the various occupational categories of the 5,990 members of the ALP. General labor occupations represent 18.5% of the entire ALP, including 727 (12.1%) general laborers/cleaners/delivery drivers. High-skilled blue-collar jobs make up 10% of the ALP, with 360 (6.0%) technicians/mechanics/welders. Traditional service-related or "pink-collar" occupations represent 32.3% of the ALP, including 505 (8.4%) customer service workers/receptionists/food service workers. Government and business professionals and sales operatives make up 597 (10%) of the ALP. Finally, educators, counselors, doctors, and attorneys make up a large percentage of the ALP (19.3%). Teachers are a majority of this group.

Table 2: Major Occupational Categories of Available Labor

			Years	at Job
	Number	Percent	Mean	Media
General Labor/Cleaning/Farm Labor/Delivery	727	12.1	10.0	7.
Maintenance/Factory Work	246	4.1	12.5	12.
Trucking/HEO/Other BC	137	2.3	9.5	6.
Total General Labor	1,110	18.5	10.7	8.
Gov't Service/Protective Service	240	4.0	7.8	2.
Technician/Mechanic/Welder	360	6.0	12.2	8.
Total Highly-Skilled Labor	600	10.0	10.0	5.3
Customer Service/Receptionist/Food Service	505	8.4	6.3	6.
Clerical/Secretarial	579	9.7	7.2	5.
Social Service/Para-Professional/Nursing	553	9.2	11.5	9.
Office Manager/Small Business Owner/Other WC	300	5.0	10.8	6.
Total Service Sector	1,937	32.3	8.9	6.8
Gov't & Business Professional/Sales	597	10.0	16.9	10.
Educator/Counselor/Doctor/Attorney	1,159	19.3	11.6	9.
Total Professional	1,756	29.3	14.2	9.8
Homemakers/Unemployed	372	6.2	n/a	n/
Students	129	2.2	n/a	n/
Retired/Disabled	88	1.5	n/a	n/
Total Non-Employed	588	9.8		
Total	5,990	100		

Figure 2 shows the occupational sectors of the *employed members* of the ALP only. 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)



#### **Current Skills, Experience, Training Needs, Job Satisfaction**

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

Table 3 and Figure 3 (next page) show the results of analysis performed on data collected 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 579 members of the ALP in the Thomas County Labor Basin are currently employed as clerical workers, secretaries, book-keepers, bank tellers, and similar positions. An additional 666 ALP members in the basin indicate previous employment experience or training in one of those jobs, for a total of 1,245 individuals.

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

	Current Employment*	Previous Work/Training*	Current plus Previous Work or Training**
	Number +	Number =	Number
General Labor/Construction/Cleaning	392	174	566
Farm Labor/Ranch Hand/Landscaping	247	301	549
Delivery/Driver/Courier	87	0	87
Maintenance/Wiring/Plumbing	165	133	298
Factory Worker/Grain Elevator Op/Meat Packer	81	40	121
Truck Driver/Heavy Equipment Operator	137	264	400
Police/Fire/Postal/Military Enlisted	240	133	373
Mechanic/Welder/Carpenter/Electrician	272	171	443
Lab or Medical Technicial/Comp Technician	88	84	172
Other Blue Collar	0	0	0
General Customer Service/Retail/Reception/Food Service	505	691	1,196
Clerical/Secretary/Book-Keeper/Bank Teller	579	666	1,245
Para-legal/Para-pro/CNA/Day Care	395	276	671
Nurse/LPN/RN/Semi-skilled Social Service	158	90	248
Office Manager/Small Business Owner	300	622	923
Teacher/Instructor/Writer/Researcher	942	162	1,104
Sales/Marketing/Accounting	315	220	535
Govt, Non-Profit, or Bus Exec/Farm Owner/Military Officer	281	84	366
Counselor/Social Worker/Physician's Assistant	127	0	127
Professor/Doctor/Engineer/Attorney	90	0	90
Other White Collar	0	0	0
Total	5,402	4,113	0

<sup>\*</sup> Retired, disabled, non-working students, homemakers are not included.

<sup>\*\*</sup> An individual member of the ALP is counted only once within a training/experience category.

Total numbers or percentages in table might not match those in text due to rounding.

Figure 3 shows the same information as that presented in Table 3, but in graphic format. Again, many ALP members report current work experience or previous work/training as clerical workers, secretaries, book-keepers, bank tellers, and similar positions that require interaction with the public and some computer skills. There are 579 working ALP members currently employed in this category and 666 previously employed/trained in this category, for a total of 1,245 individuals.

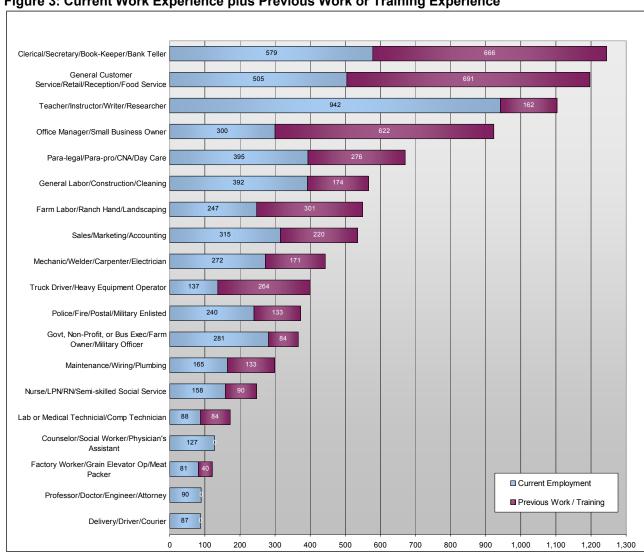


Figure 3: Current Work Experience plus Previous Work or Training Experience

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 five specific employment areas listed in Figure 4. 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 3,810 (64%) ALP members report having training and/or experience in data entry with telephone operation, while fewer (2,747 or 46%) would consider employment in that field. Between 43% and 28% of the Available Labor Pool members also have training and/or experience as office workers and administrative assistants, truckers/heavy equipment operators, and warehousing/distribution workers. Fewer have training or experience in manufacturing or processing plants (840 or 14%).

The most popular employment option of those listed is office work with 3,868 (65%) of the members of the ALP reporting that they would be interested in a job in that field. Data entry with telephone work and warehousing work are the second and third most popular employment fields. Almost a third of the ALP in the labor basin is interested in a job in manufacturing or processing.

The third column shows the number and percent of ALP members that have experience or training in a field **and** are willing to work in that field again.

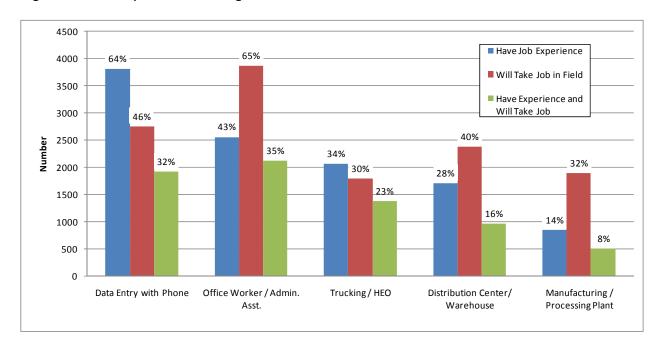


Figure 4: Work Experience / Willing to Work in Field

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:

- A. Social Sciences
  - Sociology, Psychology, Anthropology, Politics, and Social Work.
- B. Biological Sciences and Health
  - Biology, Agriculture, Nursing, Pre-med, Pre-vet, and Human Performance.
- C. Physical Sciences and Engineering
  - Physics, Geology, Chemistry, and Engineering.
- D. Business and Economics
  - Management, Accounting, Finance, Marketing, and Economics.
- E. Arts and Humanities
  - Art, Music, History, Philosophy, and Languages.
- F. Computer Science and Math
  - Computer Programming or Technology, Networking, Web design, and Math.
- G. Education
  - Elementary and Secondary Teaching.

The figure below shows that most ALP members indicate a college major in Education (730 or 32%). Biological Sciences and Health accounts for the next largest number of students/former students (447 or 20%), while Business and Economics (338 or 15%) and Social Sciences (310 or 14%) round out the top four fields.

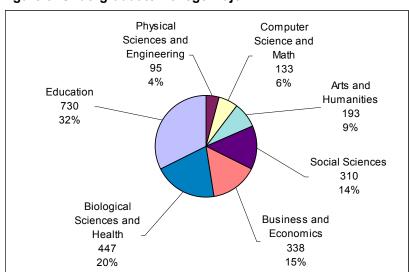


Figure 5: Undergraduate College Major

Survey respondents were also asked questions assessing their need for training in various skill areas that employers often desire. Figure 6 shows that about 74% of the members of the ALP report needing "no additional training" for a job requiring working in groups or interpersonal skills. About 25% of the ALP report needing "some additional training" about 1.3% report needing "much additional training" for a job requiring working in groups or interpersonal skills.

More than half of the ALP indicates needing "no additional training" for a job requiring math skills (53%) or writing skills (53%). On the other hand, more than 60% report needing at least some training for jobs requiring management, public speaking or computer operation skills.

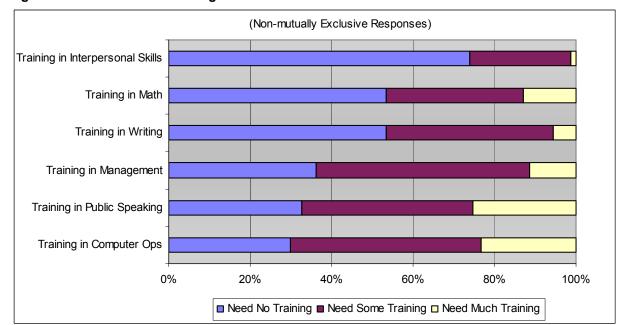


Figure 6: Self-Assessed Training Needs

Figure 7 and Table 4 (next page) show responses to questions regarding job satisfaction. The figure and table report responses from working survey respondents only. The figure shows that about 45% of the working ALP respondents "strongly agree" with a statement suggesting that they have a "generally positive work environment," while about 44% "mildly agree" with that statement<sup>2</sup>.

About 85% of the working ALP respondents indicate that they "strongly agree" or "mildly agree" with a statement regarding the enjoyment of their work, while nearly the same percentage (84%) "strongly agree" or "mildly agree" they have a reasonable work load. More than 70% of the respondents to this question suggest that they "strongly agree" or "mildly agree" with statements regarding a fair chance at pay increases and receiving fair pay for the work they perform.

<sup>&</sup>lt;sup>2</sup> The responses shown in Figure 7 are ordered by combined "strongly agree" and "mildly agree" percentages.

The statement with the largest percentages of disagreement is with regards to having a "fair chance for promotion." About a third (34%) of the respondents indicate that they "mildly disagree" with this statement and almost 40% indicate that the "strongly disagree."

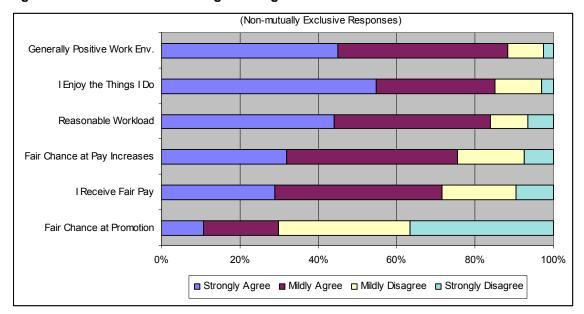


Figure 7: Job Satisfaction Among Working ALP

Table 4 shows combined "strongly agree" and "mildly agree" percentages only. The table also shows the responses of ALP members and non-ALP members. The table suggests that slightly more than 88% of the working ALP member "strongly agree" or "mildly agree" with the statement regarding a positive work environment. About 98% of the survey respondents that are non-ALP members suggest the same.

Regarding having a "fair chance for promotion," slightly less than 30% of the working ALP members indicated that they strongly or mildly agree with that statement. As for non-ALP members, 45% of the respondents indicate the same.

Table 4: Job Satisfaction Among Working ALP and Non-ALP

	Strongly and	l Mildly Agree
	ALP Only Non-ALP	
	Percent	Percent
Generally Positive Work Env.	88.4	98.3
I Enjoy the Things I Do	85.2	96.9
Reasonable Workload	83.9	94.7
Fair Chance at Pay Increases	75.6	78.0
I Receive Fair Pay	71.5	71.5
Fair Chance at Promotion	29.8	45.0

#### **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 large percentage of those unwilling to change their jobs, might limit the types of employers that can enter the labor basin. Figure 8 indicates that 4,875 (81%) members of the ALP in the Thomas County Labor Basin are willing to accept positions outside of their primary fields of employment.

Figure 8: Willing to Work Outside of Primary Field

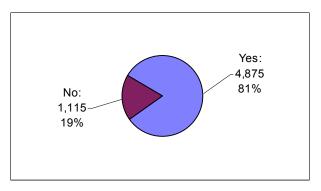


Table 5 and Figure 9 suggest that the ALP in the Thomas County Labor Basin is open to commuting. About 24% of the members (or 1,412 individuals) of the Available Labor Pool will commute up to 45 minutes, one way, for an employment opportunity. More than three-quarters (77.4% or 4,639) will commute up to 30 minutes for employment, and more than 90% (or 5,545) will travel up to 15 minutes for employment.

**Table 5: Available Labor by Commute Minutes** 

	C	Cumulative
	Number	Percent
More than 60 Minutes	86	1.4
Up to 60 Minutes	856	14.3
Up to 55 Minutes	856	14.3
Up to 50 Minutes	981	16.4
Up to 45 Minutes	1,412	23.6
Up to 40 Minutes	1,532	25.6
Up to 35 Minutes	1,648	27.5
Up to 30 Minutes	4,639	77.4
Up to 25 Minutes	4,771	79.7
Up to 20 Minutes	5,198	86.8
Up to 15 Minutes	5,454	91.0
Up to 10 Minutes	5,714	95.4
Up to 5 Minutes	5,990	100.0
Total numbers or percentages in tak	ala miaht nat mat	sh thans in tout

Total numbers or percentages in table might not match those in text due to rounding.

Figure 9: Available Labor by Commute Minutes

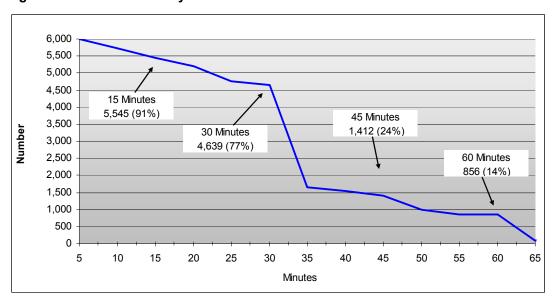


Figure 10 shows various benefits affecting the decisions of current workers to take a different job and potential workers to take a new job. The five most important benefits are good health benefits, good retirement benefits, on-the-job (OJT) or paid training, good salary or hourly pay, and good vacation benefits. Each of these five received 79% or more support from survey respondents.

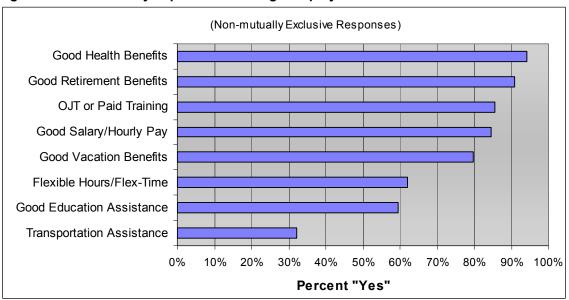


Figure 10: Benefits Very Important to Change Employment

It is not surprising that many respondents (85%) indicate that a good salary is an important benefit. It is interesting to note, however, that good health, retirement benefits and OJT received more support than salary. These figures suggest that employers might consider offering these benefits (or offering improved existing benefits) to attract new employees.

Table 6 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 6.	Desired	Ranafite	and Current	Ranafite	Offered
I able 0.	DESILEU	Dellellio	anu Guneni	Dellellio	Ollelea

Table 0. Desired Denents and Current Denents Officied					
Benefit I	Important	Benefit Currently			
to Cha	nge Jobs	Offered*			
	Percent	Percent			
Good Health Benefits	94.2	73.4			
Good Retirement Benefits	91.0	67.9			
OJT or Paid Training	85.5	79.3			
Good Vacation Benefits	79.8	72.7			
Flexible Hours/Flex-Time	61.9	52.1			
Good Education Assistance	59.6	44.6			
Transportation Assistance	32.2	23.3			
* This column respresents response	es from worki	ng ALP members only.			

#### **Wage Demands for the Willing to Commute**

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 of the report 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 estimate 15 minutes from Colby is considered "willing to commute the necessary travel time" for a new job. Data from such a respondent are included in this section of the report.

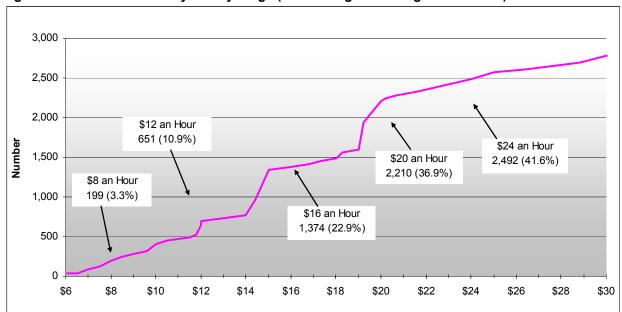


Figure 11: Available Labor by Hourly Wage (Controlling for Willing to Commute)

Figure 11 shows the wage demands for the ALP members that are "willing to commute." It is estimated that 2,492 people (or about 42%) are interested in a new job at \$24 an hour<sup>3</sup>. Approximately 2,210 (or about 37%) members of the labor pool are interested in new employment opportunity at \$20 an hour, while 1,374 (about 23%) are interested at \$16 an hour. Additionally, about 651 people (about 11%) are interested in a new job at \$12 an hour and 199 (3.3%) at \$8 an hour.

Figure 11 suggests the obvious: that the higher the wage, the larger the pool of available labor. For example, 480 members of the ALP are available for a new or different job at \$11.50 an hour. At \$12.00 an hour, however, the size of the available labor increases to 651 members. This represents an increase of 171 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 only a small increase in available labor. For example, about 285 members of available labor are interested in a job at \$9.00 an hour. At \$9.50 an hour there are

<sup>&</sup>lt;sup>3</sup> See Appendix II for an hourly wage/annual salary conversion chart.

approximately 300 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is estimated to be only 15 individuals. Similarly, there are 1,340 individuals available at \$15.00 an hour but only about 34 more available at \$16.00 an hour.

#### Wage Demands by Occupational Sector (Controlling for Willing to Commute)

Another way to examine the wage demands of a labor basin's ALP is by occupational sector. 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 below *includes* data from respondents that:

- are willing to commute the necessary travel time 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 by Occupational Sector (Controlling for Willing to Commute)** 

ı	Mobile G	eneral Labor	Mobile S	Service Sector
	(N= 37.8) (	(+/- 15.9% MoE)	( N= 39.6 )	(+/- 15.6% MoE)
	Number	Cumulative	Number	Cumulative
\$30 or More	1,573	100%	1,646	100%
Up to \$30	1,530	97%	1,531	93%
Up to \$27	1,530	97%	1,531	93%
Up to \$24	1,497	95%	1,498	91%
Up to \$21	1,457	93%	1,458	89%
Up to \$18	1,049	67%	1,010	61%
Up to \$15	721	46%	764	46%
Up to \$12	442	28%	486	30%
UP to \$9	202	13%	202	12%
Up to \$6	0	0%	0	0%

Table 7 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. 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.

#### **Underutilization Among Available Labor Pool Workers**

Underutilization — individuals possessing skills and/or training that exceeds the responsibilities of their current job — is a significant issue in many communities. To assess underutilization in the Thomas County Labor Basin, *employed members of the ALP* were presented with a scenario describing underutilization. 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 5,366 *employed members* of the ALP (shown in Figure 12), more than a third answered "yes" to one or more of the questions presented above and are considered underutilized. Figure 13 shows that the underutilized workers represent 39% (or 2,105 individuals) of the employed members of the ALP.

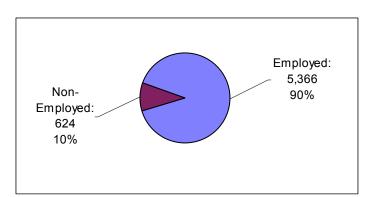


Figure 12: Employed Members of the Available Labor Pool

Figure 13: Underutilized Workers

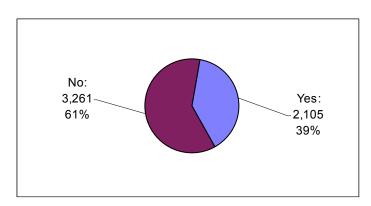


Figure 14 shows the percentages of the positive responses (i.e., "yes" answers) to the various measures of underutilization. Slightly more than 30% of this subset of the ALP consider themselves as possessing education levels exceeding those needed for their current jobs, while 28% consider themselves underutilized because they have skills that are not being used on the job. Nineteen percent had a previous job that provided more income, while about 7% suggest they are not able to work enough hours.

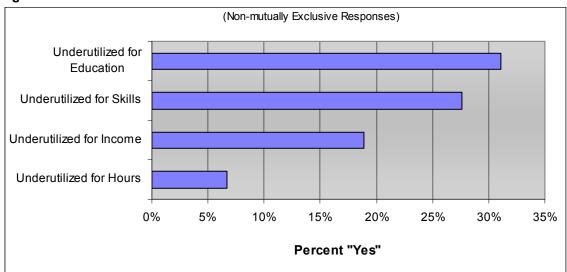


Figure 14: Reasons for Underutilization

Table 8 and Figure 15 (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 is higher than the overall ALP, with 87% having at least some college education and 65% having completed associate's degrees. (Table 1 shows that 78% of the entire ALP have some college experience and 56% having completed an associate's degree).

Table 8: Highest Level of Education Achieved Among Underutilized

			Cumulative
	Number	Percent	Percent
Doctoral Degree	0	0.0	0.0
Masters Degree	80	3.8	3.8
Bachelors Degree	768	36.5	40.3
Associates Degree	529	25.1	65.4
Some College	455	21.6	87.0
High School Diploma Only	273	13.0	100.0
Less HS Diploma	0	0.0	
Total	2,105	100	
Total numbers or percentages in table might not match those in	text due to rounding.		

Figure 15 shows that 25% (529 individuals) of the underutilized workers are employed as general laborers and 11% (242) are employed as skilled blue-collar workers. Most underutilized workers are employed as service sector and support workers (39% or 799 individuals), although a high percentage (25% or 536 individuals) hold professional positions.

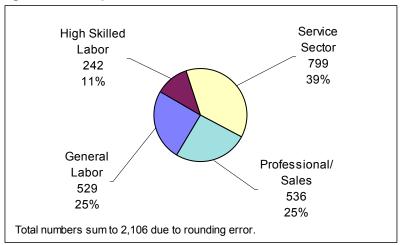


Figure 15: Occupational Sectors of Underutilized Workers

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 16 suggests that a substantial portion -75% (or 1,582 individuals) - of the underutilized workers are willing to change jobs to address underutilization.

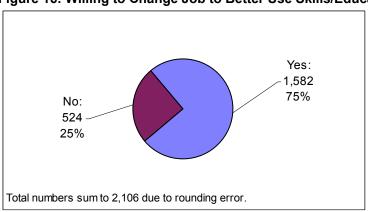


Figure 16: Willing to Change Job to Better Use Skills/Education

#### Methodology

The Thomas County Labor Basin has a total population of approximately 32,322, and a Civilian Labor Force (CLF) of 17,417. The Docking Institute's analysis suggests that the basin contains an Available Labor Pool (ALP) of 5,990 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 Thomas County 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 actively 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 Pool<sup>4</sup>." 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 CLF<sup>5</sup>. Secondly, the number of potential workers is then

<sup>&</sup>lt;sup>4</sup> 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).

<sup>&</sup>lt;sup>5</sup> 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 Thomas County Labor Basin includes 5,990 individuals; this represents a sizeable number of workers and potential workers for employers to draw upon in the Thomas County Labor Basin.

#### Survey Research Methods

Data for this study was collected from a random digit telephone survey<sup>6</sup> of adults living in nine counties in western Kansas. Surveying took place from January 22, 2007 to February 22, 2007, using a Computer Assisted Telephone Interviewing (CATI) system. A total of 939 households were successfully contacted during the data collection period, and a randomly selected adult<sup>7</sup> in each was asked to participate in the study. In 722 households the selected adult agreed to be interviewed. This represents a cooperation rate of 76.9% and a margin of error of +/-3.6%.

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 433, and are considered eligible respondents. Of the 433 cooperating and eligible respondents, 33.3% (or 144) indicated that they were available for new or different employment and/or were looking for a new or different job. This subgroup is considered the Available Labor Pool for the Thomas County Labor Basin. Responses from 144 individuals provides a margin of error of +/- 8.2%.

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.

<sup>&</sup>lt;sup>6</sup> 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).

<sup>&</sup>lt;sup>7</sup> 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	392	6.5
Farm Labor/Ranch Hand/Landscaping	247	4.1
Delivery/Driver/Courier	87	1.5
Maintenance/Wiring/Plumbing	165	2.8
Factory Worker/Grain Elevator Op/Meat Packer	81	1.4
Truck Driver/Heavy Equipment Operator	137	2.3
Police/Fire/Postal/Military Enlisted	240	4.0
Mechanic/Welder/Carpenter/Electrician	272	4.5
Lab or Medical Technicial/Comp Technician	88	1.5
Other Blue Collar	0	0.0
General Customer Service/Retail/Reception/Food Service	505	8.4
Clerical/Secretary/Book-Keeper/Bank Teller	579	9.7
Para-legal/Para-pro/CNA/Day Care	395	6.6
Nurse/LPN/RN/Semi-skilled Social Service	158	2.6
Office Manager/Small Business Owner	300	5.0
Teacher/Instructor/Writer/Researcher	942	15.7
Sales/Marketing/Accounting	315	5.3
Govt, Non-Profit, or Bus Exec/Farm Owner/Military Officer	281	4.7
Counselor/Social Worker/Physician's Assistant	127	2.1
Professor/Doctor/Engineer/Attorney	90	1.5
Other White Collar	0	0.0
Homemaker	253	4.2
Full-Time Student	129	2.2
Unemployed	118	2.0
Retired	44	0.7
Disabled	44	0.7
Total	5,990	100

Appendix II: 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	*******	, , , , , , ,
\$26.50	\$55,120		
\$27.00	\$56,160		
\$27.50	\$57,200		
\$28.00	\$58,240		
\$28.50	\$59,280		
\$29.00	\$60,320		
\$29.50	\$61,360		