

WHAT'S INSIDE

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Nearly 86,000 people can't be all wrong...
Employment Scene
Consistent job growth in February



ALASKA DEPARTMENT OF LABOR

& WORKFORCE DEVELOPMENT

Sarah Palin, Governor Commissioner Click Bishop

ALASKA ECONOMIC TRENDS



April 2007 Volume 27 Number 4

ISSN 0160-3345

To contact us for more information, a free subscription, mailing list changes or back copies, email us at trends@labor.state.ak.us or call (907) 465-4500.

Alaska Economic Trends is a monthly publication dealing with a wide variety of economic-related issues in the state. Its purpose is to inform the public about those issues.

Alaska Economic
Trends is funded by the
Employment Security Division
and published by the Alaska
Department of Labor and
Workforce Development.

Printed and distributed by Assets, Inc., a vocational training and employment program, at a cost of \$1.08 per copy.

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Cover: A pipefitter apprentice operates a Magnatech orbital welding machine, also called an automatic welder, during an intensive two-week pipeline construction training program in Fairbanks in October 2005. State-of-the-art automatic welders will likely be used for the gas line itself, while traditional stick welding by hand will be used for the gas line supports and elsewhere, said Randy Cheap of the nonprofit training group, Alaska Works Partnership Inc. The two-week training program, held annually since 2002, produced 97 graduates in each of the last two years; the next session is set for fall. It's largely funded by the Alaska Department of Labor, with in-kind support from unions, contractors and oil companies. Photo by Andy Mills, Governor's Office Web site: almis.labor.state.ak.us

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The Alaska Gasline Inducement Act and Alaska Hire

By Governor Sarah Palin

I have long recognized that AGIA must not only induce a gasline, but also must provide Alaskans real opportunities for gasline-related employment. This means offering vocational programs to train Alaskans for pipeline jobs, as well as assuring that Alaskans will fill those jobs. AGIA fulfills these goals in six ways.

First, AGIA requires that applicants commit to hire Alaskans for management, engineering, construction, operations, maintenance, and other gasline-related

positions, and to contract with Alaska businesses to the extent permitted by law. Note that jobs to be filled are not short-term construction positions; we want Alaskans trained and experienced in all facets of this project, including its maintenance and management for the 40 or 50 years it is producing. Remember that the requirement is not limited to simply hiring Alaskans, but to contracting with Alaska businesses to do pipeline work, which will expand the scope of the pipeline's impact on careers in Alaska.

Second, the AGIA requires that applicants commit to establishing a local headquarters in Alaska. This is an important requirement since project management will be coordinated in Alaska, enhancing the likelihood that management positions will be staffed by Alaskans.

Third, applicants must commit to negotiate a project labor agreement. A project labor agreement is basically a preconstruction bargaining agreement between management and labor, specific to the project. Under a PLA, costs are established for labor, including wages, benefits, and working conditions. PLAs provide a host of assurances for both management and workers. Stability in labor cost estimates lessens cost overrun risks. No-strike/lock-out agreements assure there are no management-labor disputes for the duration of the project, which promotes ontime delivery of project milestones. Local hiring halls can be established. Apprenticeship requirements would offer Alaskans the opportunity to learn on the job, with pay and benefits. PLA language would allow bidding for any pipeline-related work to be open to any qualified firm, union or non-union.

Fourth, AGIA requires the Commissioner of Labor and Workforce Development to develop a job training program for pipeline-related positions. It is so important to train a skilled Alaskan workforce and we are committed to doing this right. As an added benefit, it serves as an inducement to the licensee, which would prefer that the state handle this responsibility. We are pleased to do so.

Fifth, if explorers get financial terms that enable them to economically explore for, discover, and transport new gas to and through the line, it opens the North Slope basin to not just marketing the known 35 trillion cubic feet of gas there, but to the additional hundreds of trillion cubic feet of gas waiting to be discovered. A gasline that will transmit hundreds of trillions of cubic feet of gas for 40 or 50 years is a critical means to provide long-term vocational stability to Alaska workers.

Last, AGIA requires that the applicant commit to provide for a minimum of five delivery points of gas in Alaska. Offtake points from the main line provide opportunities for spur lines to fuel Alaska homes and businesses with Alaska gas. In-state delivery also requires additional infrastructure, which in turn requires additional personnel to build and maintain the infrastructure.

I believe strongly in offering Alaskans the best and most meaningful opportunities to capitalize on work generated by AGIA and the gasline it will facilitate. AGIA does that – it offers Alaskans not just jobs, but careers.

The above paragraphs are excerpts from Governor Palin's weekly Alaska Gasline Inducement Act briefing on Alaska hire. For further information on AGIA, please visit our website at http://www.gov.state.ak.us/agia/.

A Supply of Alaska Workers for the Gas Line

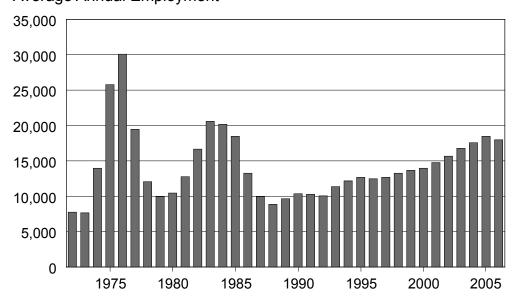
How ready is Alaska's work force?

hirty years ago two welders finished the final weld on the trans-Alaska oil pipeline, a 20th century engineering marvel that has pumped billions of barrels of oil to market and billions of dollars into Alaska's economy. Next month's anniversary comes in the midst of negotiations and planning for another pipeline – the gas line to ship natural gas from the North Slope, at least partly along the same route as the oil pipeline.

The oil pipeline has been a technical and economic success, but as a young state with a relatively small population, Alaska had nowhere near the number of skilled or unskilled workers to take full advantage of the high wages that

Construction Employment in Alaska 1972 to 2006

Average Annual Employment



Note: The 2006 average annual employment is preliminary and subject to revision.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Quarterly Census of Employment and Wages and Current Employment Statistics)

came with such a big project operating on a compressed timeline.

The numbers were overwhelming: Total construction jobs in the state nearly quadrupled from less than 8,000 in 1973 to more than 30,000 in 1976 (see Exhibit 1) and some 70,000 people worked on the pipeline project during its two-year construction phase. Not surprisingly, a significant number of those workers came from outside Alaska and, although some stayed and made Alaska their home, many left when the project was completed.

With more lead time, a larger population, and a more mature resource-based economy that has generated a lot of workers with relevant experience, there's an opportunity for things to be different with the gas line. But to maximize resident hire on the gas line it's necessary to first assess the state's current supply of experienced workers and then evaluate the ability of existing

training programs to supplement that supply.

Analysis focuses on supply

This article is not an attempt to answer how many workers will be needed for the gas line, as it is too early to pin down that number. The demand for workers, whatever it turns out to be, will of course have a major impact on the state's ability to provide a large share of any gas line work force. High wages will naturally attract more

¹ The number of workers needed will depend on a number of factors, including route, design, size, technology and segmentation.

experienced Alaskans to the project and the prospect of high wages will encourage Alaskans to seek relevant training in the months and years leading up to the project.

Rather than demand, however, this article focuses on the other side of the equation, the supply side. It looks first at the existing resident work force employed in occupations most likely to be called on to build the gas line.

Next, it looks at a group that is easy to forget about: workers who have experience in gas line occupations but who aren't currently working in those occupations. After more than 30 years of operating major oil fields and transportation systems, and all the public and private construction projects related to a young, growing economy, there is now a significant number of Alaskans with relevant experience.

The final group consists of the Alaska residents who can be trained between now and the beginning of any gas line project. Again, the number that will be required is unknown; what is known is the state's current capacity to train workers in specific occupations, which will allow the state to quickly assess shortfalls when more specifics about work force demands become available.

What occupations will be required to build a gas line?

Nine occupational groups² made up of 27 occupations were selected as being especially relevant to the construction of a gas line. (See Exhibit 2.) Using employee wage records that nearly all employers are required to file under

Gas Line Occupations Occupations involved in building the gas line

2

Occupational Group	Occupation Title
Management	Construction managers Civil engineers First-line supervisors of laborers First-line supervisors of transportation workers First-line supervisors of construction and extraction workers
Inspectors	Inspectors, testers, sorters, samplers and weighers Occupational health and safety specialists and technicians
Operating engineers	Operating engineers and other construction equipment operators Excavating, loading machine and dragline operators
Pipefitters and welders	Plumbers, pipefitters and steamfitters Welders, cutters, solders and brazers Welding, cutting, soldering and brazing machine operators
Survey workers	Surveyors Surveying and mapping technicians
Haulers	Truck drivers, heavy and tractor-trailer Truck drivers, light or delivery services
Laborers	Laborers and freight, stock and material movers Construction laborers Helpers for production workers Helpers for extraction workers
Maintenance and mechanics	Bus and truck mechanics and diesel engine specialists Mobile heavy equipment mechanics General maintenance and repair workers Machinery maintenance workers Industrial machinery mechanics
Carpenters and electricians	Carpenters Electricians

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

state unemployment insurance laws,³ we were then able to determine the size of the existing work force in those occupations and also to count the workers who had previously worked in those occupations and then moved on. The most recent complete year for which data were available was 2005, although the numbers are unlikely to have changed dramatically since then.

While many of the gas line occupations are most commonly found in the construction industry,

² For simplicity, we'll refer to the nine occupational groups as the gas line occupations in the rest of the article. More occupations may be needed to actually build the gas line, depending on the construction processes planners decide to employ.

³ Wage and salary workers who aren't covered by state unemployment insurance include agricultural workers, self-employed workers, some employed students, most fishermen, full-commissioned sales workers, private railroad workers, and elected and appointed officials. Federal workers are covered by federal unemployment insurance; therefore, they aren't included in Alaska's wage records and aren't part of this article's analysis.

workers can easily have the same occupation while working for a company that operates in a different industry. Mining companies, for example, employ many operating engineers, and transportation companies also employ many workers in gas line occupations.

More than 47,000 resident workers in gas line occupations

In 2005, nearly 57,000⁴ workers were employed in gas line occupations. (See Exhibit 3.) About 83 percent of those workers, 47,290, were Alaska residents. Laborers made up a large part of the total with 23,268 workers; the other occupations combined to employ 33,556.

The average laborer made \$6,171 per quarter in 2005, while all the other gas line occupations had average wages of \$12,440 per quarter. All told, workers in the gas line occupations made \$1.55 billion in 2005, or 14 percent⁵ of Alaska's total wages.

Escalated nonresident hire rates often indicate a shortage of resident labor for that occupation. Inspectors, plus pipefitters and welders had the highest rates of nonresidents, at 24 percent and 21 percent, respectively, in 2005. Haulers had the lowest percentage of nonresidents with 12 percent.

Median age of 39 is likely to creep higher

The median age for workers in the gas line occupations in 2005 was 39, or about three years older than the state average. (See Exhibit 4.) Laborers were the only occupation that had a lower median age than the state average. A large percentage of workers in every other gas line occupation were in their 50s and will be nearing retirement age in the next 10 years. Those workers are unlikely to be available in large numbers to help with a gas line project.

Overall, Alaska's population is also expected to grow older over the next 20 years. The state's median age is expected to increase from 33.4 years to 35.8 years between 2005 and 2029, according to recent Department of Labor projections.⁶

The same pattern is visible when comparing the age of the gas line occupation work force in 2001 to the same occupational work force in 2005. Looking at the differences in age distributions for the gas line occupations in 2001

Percentage

Percentage

The Labor Supply for Gas Line Occupations Alaska 2005

Alaska, 2005	Resident Workers	Total Number of Workers	Total Wages	Percentage of Nonresident Workers	Who Worked All Four Quarters	Who Worked Two Quarters or Less	Average Quarterly Wage
Management	3,664	4,422	\$232,760,083	17.1%	48.2%	37.0%	\$18,182
Inspectors	446	590	\$24,558,791	24.4%	48.8%	34.9%	\$14,139
Operating engineers	4,740	5,692	\$208,373,743	16.7%	35.4%	43.6%	\$13,586
Pipefitters and welders	2,854	3,530	\$123,412,359	20.5%	41.4%	43.2%	\$12,560
Survey workers	846	1,005	\$33,628,614	15.8%	40.0%	41.0%	\$12,058
Haulers	5,594	6,355	\$164,254,146	12.0%	37.5%	44.8%	\$9,633
Laborers	19,586	23,268	\$294,984,065	15.8%	15.6%	69.1%	\$6,171
Maintenance and mechanics	6,476	7,534	\$186,536,861	14.0%	38.8%	48.2%	\$9,471
Carpenters and electricians	8,653	10,526	\$283,085,561	17.8%	30.2%	52.5%	\$10,797
Total	47,290 ¹	56,824 ¹	\$1,551,594,223	16.8%	35.0%	47.5%	\$10,426

¹ These totals represent a count of workers who were employed in any gas line occupation for any length of time in 2005. Some workers are counted in more than one occupation, but are only counted once in the total.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database and Alaska Permanent Fund Dividend records)

⁴ This figure represents an unduplicated count of workers who were employed in any gas line occupation for any length of time in 2005. ⁵ Based on total wage figures listed in *Nonresidents Working in Alaska 2005*, published in January 2007. For a copy, go to Research and Analysis' Web site at almis.labor.state.ak.us or call (907) 465-4500.

⁶ See *Alaska Economic Trends*, February 2005. For a copy, see Page 2.

versus 2005,⁷ it's easy to see the challenge it presents. (See Exhibit 5.) In 2005, there were more gas line workers over 50 and fewer workers in the 35- to 45-year-old range compared to 2001.

Work in gas line occupations is quite seasonal

The work force for gas line occupations, as well as the construction industry in general, tends to spike in the summer months, as it did in 2005. (See Exhibit 6.)

Sixty-five percent of the workers in gas line occupations in 2005 weren't employed in all four quarters. (See Exhibit 7.) Not including laborers – the most seasonal of the gas line occupations – almost a third of the workers in gas line occupations were employed for two quarters or less. Maintenance and mechanics, management, and pipefitters and welders were the least seasonal occupations.

If gas line construction during the harsh Alaska winter is possible, many workers who normally work only in the spring, summer and fall might be available to work on the gas line project during the winter months without quitting their pre-gas line jobs.

Slower construction growth may free some workers

Looking at current trends, there is some indication that a portion of the existing work force may become available for other projects. Growth in construction employment – which includes all nine gas line occupations – was strong from 2001 to 2005, but 2006 estimates show a decline and several factors suggest weaker growth or slight declines in the near future.

High turnover leads to a larger potential work force

Turnover, the churning of workers entering and exiting an occupation, creates a pool of

Age Patterns Differ by Occupation Alaska, 2005

_	Age Groups for Resident Gas Line Workers ¹						
_	0-20	20-29	30-39	40-49	50-59	60+	Age ¹
Management	1.2%	10.8%	18.7%	33.3%	27.7%	8.4%	46
Inspectors	1.8%	18.6%	18.2%	28.3%	25.6%	7.6%	44
Operating engineers	1.5%	15.3%	19.8%	33.4%	24.3%	5.7%	44
Pipefitters and welders	2.5%	24.6%	26.1%	27.3%	16.3%	3.2%	38
Survey workers	3.2%	27.0%	18.6%	24.2%	22.0%	5.1%	40
Haulers	2.3%	21.5%	23.7%	27.2%	19.2%	6.2%	41
Laborers	9.5%	34.6%	20.4%	21.7%	11.2%	2.7%	32
Maintenance	4.1%	18.2%	18.2%	30.7%	22.6%	6.2%	43
Carpenters and electricians	2.9%	26.5%	23.9%	27.0%	16.1%	3.7%	38
Total	5.4%	25.5%	20.9%	26.3%	17.3%	4.6%	39

¹ Based on workers' ages as of Dec. 31, 2005.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database and Alaska Permanent Fund Dividend records)

The Work Force is Aging Workers in gas line occupations, 2001 and 2005



Number of Alaska Resident Workers



Note: This exhibit compares the data from the second quarter in both years.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database and Alaska Permanent Fund Dividend records)

experienced workers who could return to their former occupation.

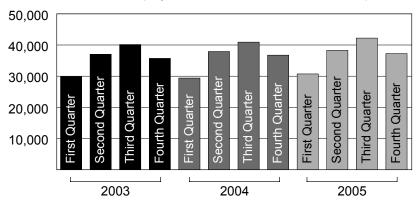
Overall, 19,600 entered gas line occupations between 2004 and 2005 and roughly 18,700 left during that period. (See Exhibit 8.) Turnover rates were similar in earlier years.

Some of those who left were never residents, some were residents who left the state and some were short-term hires working simple jobs. There's a substantial number, though, who stayed in the state and took work in other occupations.

⁷ For simplicity, we looked at the second quarter for both years. The second quarter is usually the second-busiest season for gas line occupations.

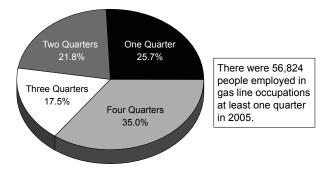
Employment Booms in Summer Alaska, 2005

Number of Workers Employed Each Quarter in Gas Line Occupations



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

Nearly Half Work Less than Six Months Alaska, 2005



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

Turnover in Gas Line Occupations Alaska, 2003 to 2005

For the right opportunity – say the construction of a gas line – they could return, bringing their experience and training with them.

An invisible supply of trained workers

Assessing the potential number of current Alaska residents who might be available to benefit from a major gas line project is a complicated matter. In addition to all the people currently working in gas line occupations, there are thousands who have recently worked in those occupations but are currently working in other fields. Perhaps, for the right incentives, these workers could be enticed back into gas line occupations.

To estimate the size of this potentially available work force we used wage records from 2002 to 2005 to identify workers who had some previous experience in gas line occupations and who were still in Alaska during 2005.

We defined "workers with some experience" as those who had at least four quarters of experience in any of the gas line occupations during the previous three years, but for whatever reason were not employed in any of the gas line occupations during a particular quarter in 2005.

To estimate the number who might be willing to work on the gas line, we narrowed the selection criteria to only include those workers with some experience who were under 50 years of age in 2005, because by the time construction begins many of these workers will be either retired or very near retirement.

	2005				2004			2003		
	Total Workers	New Workers	Workers Who Didn't Return from 2004	Total Workers	New Workers	Workers Who Didn't Return from 2003	Total Workers	New Workers	Workers Who Didn't Return from 2002	
Management	4,422	1,543	1,283	4,162	1,256	1,303	4,209	1,315	1,436	
Inspectors	590	195	218	613	199	299	713	292	345	
Operating engineers	5,692	1,929	1,809	5,572	1,930	1,815	5,457	1,879	2,086	
Pipefitters and welders	3,590	1,348	993	3,235	1,092	1,244	3,387	1,274	1,265	
Survey workers	1,005	377	305	933	348	315	900	335	341	
Haulers	6,355	2,450	2,398	6,303	2,582	2,250	5,971	2,206	2,824	
Laborers	23,268	11,874	12,045	23,439	12,194	11,465	22,710	11,613	13,181	
Maintenance and mechanics	7,534	2,964	3,000	7,570	3,072	3,126	7,624	3,290	3,456	
Carpenters and electricians	10,526	4,115	3,936	10,347	4,042	4,268	10,573	4,567	4,407	
All Gas Line Occupations ¹	56 824	19 600	18 727	55 951	19 368	18 637	55 220	18 968	20 978	

¹ The totals represent a count of workers who were employed in any gas line occupation for any length of time in 2005. Some workers are counted in more than one occupation, but are only counted once in the total.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

Potentially available workers fall into four categories: (1) workers who were underemployed because they were making less than they could have made if they were employed in the gas line occupation where they have experience; (2) workers who were unemployed and collected unemployment benefits; (3) workers who were not employed in wage and salary jobs⁸ and didn't receive unemployment benefits; and (4) workers who moved on to other wage and salary jobs paying a higher or roughly equivalent wage.

Exhibits 10, 11 and 12 show the number of potentially available workers by quarter. Fewer workers were available in the summer months (quarters 2 and 3) due to seasonality.

Overall, there were roughly 14,700 workers who could have been available for gas line employment in at least one quarter during 2005. Even during the third quarter – the busy season – there were 7,822 potentially available workers.

In looking at operating engineers specifically, most were available in the first quarter during the winter. (See Exhibit 11.)⁹ Their availability dropped off, though, in the second, third and fourth quarters (43 percent, 48 percent and 38 percent, respectively).

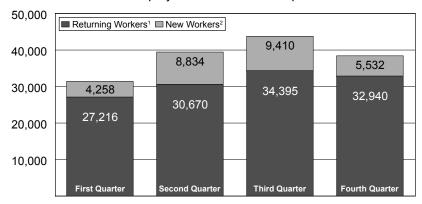
Of the potentially available operating engineers, carpenters and electricians, and laborers, ¹⁰ 38 percent, 25 percent and 22 percent, respectively, were unemployed and received unemployment benefit checks during the first and fourth quarters.

Labor supplies were tightest for pipefitters, operating engineers, and survey workers. They had the fewest number of potentially available workers compared to the number of employed workers in those occupations. (See Exhibit 13.)

Turnover in Gas Line Occupations Alaska, 2005

9

Number of Workers Employed in Gas Line Occupations



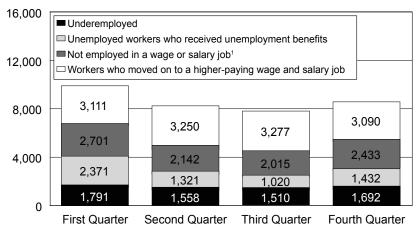
¹ Returning workers are those who were employed in the same gas line occupation in at least one of the previous four quarters.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

Potentially Available Workers Alaska, 2005



Number of Potentially Available Workers for the Gas Line



There were roughly 14,700 workers who were potentially available for gas line employment during at least one quarter in 2005.

Note: Potentially available workers are defined as Alaska residents who were under the age of 50 in 2005 and who worked at least four quarters in any of the gas line occupations during the previous three years but who were not employed in any of the gas line occupations during the referenced quarter. A person might be counted in more than one quarter but is not counted more than once in the same quarter.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

⁸ It's unknown how many of these workers may be self-employed, employed by the federal government or out of the labor force, either voluntarily or otherwise. See footnote No. 3 for further details on who is covered.

⁹ Similar charts for each of the gas line occupations are available online at www.labor.state.ak.us/research/trends/apr07indgraph. pdf.

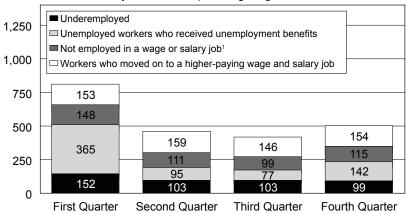
¹⁰ See the online charts referenced in the last footnote.

² New workers are those who were not employed in the same gas line occupation during the previous four quarters.

¹ It's unknown how many of these workers may be self-employed, employed by the federal government or out of the labor force, either voluntarily or otherwise. See footnote No. 3 in the article text for further details on who is covered.

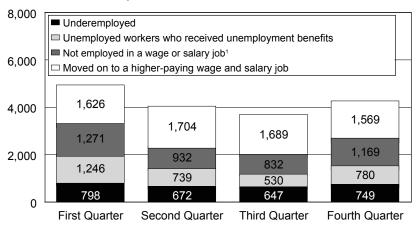
Operating Engineers Alaska, 2005

Number of Potentially Available Operating Engineers



Laborers Alaska, 2005

Number of Potentially Available Laborers



Notes and footnote for Exhibits 11 and 12

Note: Potentially available workers are defined as Alaska residents who were under the age of 50 in 2005 and who worked at least four quarters in any of the gas line occupations during the previous three years but who were not employed in any of the gas line occupations during the referenced quarter. A person might be counted in more than one quarter but is not counted more than once in the same quarter.

¹ It's unknown how many of these workers may be self-employed, employed by the federal government or out of the labor force, either voluntarily or otherwise. See footnote No. 3 in the article text for further details on who is covered.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

There were relatively more workers potentially available for jobs as laborers, carpenters and electricians and inspectors.

The Anchorage/Matanuska-Susitna Borough area had the most potentially available workers of any region in 2005, but people living in that area made up less than half the potentially available labor pool. (See Exhibit 14.) In other words, there were more potentially available workers per capita outside the Anchorage and Mat-Su area in 2005.

People in training programs

People who have completed a training program for a gas line occupation or have at least received some training also represent a potential source of labor. We identified more than 300 training programs offered by Alaska schools and training providers that teach skills needed for gas line occupations.¹¹ We received detailed data for 110 of those.

The training ranges from short-term on-the-job training (for some laborer and hauler jobs) to a bachelor's degree (for some management and inspector jobs). (See Exhibit 16.)

About 1,300 people completed the 110 training programs during 2005 and federal fiscal year 2005, 12 according to information Alaska training providers submit to the state and federal Departments of Labor. (See Exhibit 16.) The 1,300 represents 57 percent of the 2,300 people who exited training programs during that period; the remainder didn't complete their programs.

Nearly 200 Alaska workers completed their apprenticeship training in a construction trade during the 2005 federal fiscal year, according to the U.S. Department of Labor's Office of Apprenticeship, the agency that oversees

¹¹ A list of the programs used in this analysis is available online at www.labor.state.ak.us/research/trends/apr07indtrain.pdf. For other apprenticeship programs for gas line and other occupations, go to the U.S. Department of Labor's Office of Apprenticeship's Web site at oa.doleta.gov/bat.cfm. For more information, call John Hakala, the Office of Apprenticeship's state director, at (907) 271-5035 or email him at hakala.john@dol.gov. (The Office of Apprenticeship was formerly the Bureau of Apprenticeship and Training.)

¹² The 2005 federal fiscal year runs from Oct. 1, 2004, to Sept. 30, 2005.

	Quarter 1		Quarter 2		Qua	arter 3	Quarter 4	
	Number of Current Workers	Number of Potentially Available Workers						
Management	2,905	526	3,190	518	3,360	502	3,347	517
Inspectors	383	110	441	84	464	90	449	85
Operating engineers	2,867	818	4,182	468	4,433	425	3,855	510
Pipefitters and welders	2,176	389	2,457	366	2,616	342	2,577	333
Survey workers	555	121	718	97	778	107	738	99
Haulers	3,787	933	4,557	763	4,504	806	4,203	835
Laborers	8,693	4,941	12,390	4,047	15,019	3,698	11,696	4,267
Maintenance	4,590	1,000	5,060	892	5,200	891	4,845	936
Carpenters and electricians	5,518	1,591	6,509	1,354	7,431	1,225	6,762	1,357
Total ¹	30,843	9,974	38,364	8,271	42,275	7,822	37,333	8,647

Note: Potentially available includes Alaska residents under the age of 50 who worked at least four quarters in any of the gas line occupations during the previous three years but who were not employed in any of the gas line occupations in 2005.

apprenticeships. The number of workers entering those apprenticeship programs has been rising significantly in recent years, from 510 entrants in federal fiscal year 2003 to 849 in federal fiscal year 2006. The most recent data show 1,936 active construction apprentices in federal fiscal year 2006.

In the last three years, 232 people have completed a two-week Alaska Pipeline Joint Crafts Training Program course in Fairbanks, which prepares entry-level workers and pipelitter apprentices for pipeline work in the arctic.

It's important to note that some workers with experience or training in occupations related to gas line construction will still require additional training. Not all the workers or trainees in these occupations could perform all the tasks required if construction on the gas line started tomorrow.

People who could be trained

Broadening the scope to include all Alaska residents, wage records show that more than half the state's residents ages 18 to 49 were either unemployed or were "low-wage earners" in 2005 – more than 158,000 in all. For this study, we defined the low-wage earners as those who worked less than six months (two quarters) in 2005 or who had an average quarterly wage below \$3,000.

Potentially Available by Area Alaska, 2005

Number of Potentially
Available Resident Workers for
Gas Line Occupations

Borough or Census Area	Gas Line Occupations
Aleutians East Borough	58
Aleutians West Census Area	121
Anchorage, Municipality of	4,428
Bethel Census Area	730
Bristol Bay Borough	40
Denali Borough	60
Dillingham Census Area	136
Fairbanks North Star Borough	1,918
Haines Borough	44
Juneau Borough	501
Kenai Peninsula Borough	1,216
Ketchikan Gateway Borough	257
Kodiak Island Borough	252
Lake and Peninsula Borough	98
Matanuska-Susitna Borough	1,949
Nome Census Area	378
North Slope Borough	272
Northwest Arctic Borough	294
Prince of Wales-Outer Ketchikan Census Ar	
Sitka Borough	150
Skagway-Hoonah-Angoon Census Area	117
Southeast Fairbanks Census Area	203
Valdez-Cordova Census Area	256
Wade Hampton Census Area	409
Wrangell-Petersburg Census Area	121
Yakutat Borough	32
Yukon-Koyukuk Census Area	388
Unknown	100
Total	14 697

Note: Potentially available includes Alaska residents under the age of 50 who worked at least four quarters in any of the gas line occupations during the previous three years but who were not employed in any of the gas line occupations in 2005.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database and Alaska Permanent Fund Dividend records)

¹ These totals represent a count of workers who were employed in any gas line occupation for any length of time in 2005. Some workers are counted in more than one occupation, but are only counted once in the total.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

The 158,000 represents a broad sweep – it includes everyone ranging from people who couldn't work due to a disability or other reason to those who opted to be a stayat-home parent and those who were self-employed or worked in another occupation not covered by unemployment insurance. But the 158,000 also includes people who were looking for work or a better job.

Roughly 86,000 of the 158,000 residents weren't employed in wage and salary jobs at all in 2005.

Areas with the highest percentage of unemployed workers and low-wage earners in 2005 include the Wade Hampton Census Area (69 percent), Yukon-Koyukuk Census Area (65 percent) and Lake and Peninsula Borough (65 percent). (See Exhibit 17.) The areas with the lowest

percentage of unemployed workers and low-wage earners in 2005 include the Aleutians West Census Area (33 percent), Juneau (44 percent) and Anchorage (47 percent).

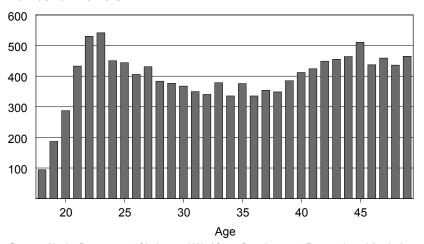
It's impossible to know the exact depth of skills and experience without surveying the 158,000 about their construction background, but, given the sheer numbers, there should be no shortage of people who could be trained.

Summary

Governor Palin's proposed Alaska Gasline Inducement Act, along with past proposals, requires gas line contractors to

Potentially Available Workers are All Ages Alaska, 2005

Number of Workers



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database)

Training Programs for Gas Line Occupations People in Alaska who exited programs, 2005

	Exited in 20	005	
D	idn't Complete Program	Completed Program	Training Requirements
Management	289	219	Moderate-term on-the-job training to bachelor's degree
Inspectors	137	183	Moderate-term on-the-job training to bachelor's degree
Operating Engineers	0	24	Moderate-term on-the-job training to bachelor's degree
Pipefitters and Welders	26	62	Long-term on-the-job training
Survey Workers	64	34	Moderate-term on-the-job training to bachelor's degree
Haulers	5	25	Short-term to moderate-term on-the-job training
Laborers	1	0	Short-term to moderate-term on-the-job training
Maintenance and Mechanics	40	54	Moderate-term to long-term on-the-job training
Carpenters and Electricians	58	452	Long-term on-the-job training
All Construction Apprenticeships 1,2	360	181	Long-term on-the-job training with related instruction
Alaska Pipeline Joint Crafts Training Program	course N/A	97	- · · · · · · · · · · · · · · · · · · ·
Total	980	1,331	

¹ The "all construction apprenticeships" category is based on the federal fiscal year.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Department of Labor, Office of Apprenticeship

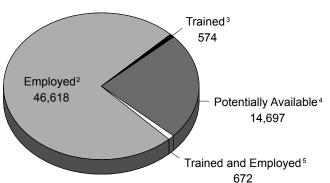
² Occupational classifications of federal data weren't available for this article; as a result it's possible that some of these apprenticeship programs aren't related to jobs needed for the gas line.

Borough or Census Area of Residence	Residents Ages 18 to 49	Employed ¹	Low-Wage Earners²	Not Employed in Wage or Salary Job	Percentage of Residents Who Were Low-Wage Earn- ers or Not Employed
Wade Hampton Census Area	3,186	2,564	1,589	622	69.4%
Yukon-Koyukuk Census Area	2,940	2,302	1,266	638	64.8%
Lake and Peninsula Borough	777	603	329	174	64.7%
Skagway-Angoon-Hoonah	1,431	1,037	495	394	62.1%
Wrangell-Petersburg Census Area	2,731	1,822	726	909	59.9%
Dillingham Census Area	2,115	1,565	714	550	59.8%
Haines Borough	1,023	737	325	286	59.7%
Prince of Wales-Outer Ketchikan Census Area	2,413	1,750	771	663	59.4%
Bethel Census Area	7,390	6,032	2,995	1,358	58.9%
Denali Borough	944	632	235	312	57.9%
Southeast Fairbanks Census Area	2,883	2,003	773	880	57.3%
Northwest Arctic Borough	3,247	2,438	1,043	809	57.0%
Aleutians East Borough	715	497	188	218	56.8%
Nome Census Area	4,172	3,413	1,580	759	56.1%
Kenai Peninsula Borough	23,464	16,485	5,979	6,979	55.2%
Yakutat Borough	289	233	103	56	55.0%
Kodiak Island Borough	6,068	4,139	1,402	1,929	54.9%
Valdez-Cordova Census Area	4,668	3,439	1,308	1,229	54.3%
Matanuska-Susitna Borough	36,903	25,264	8,109	11,639	53.5%
Fairbanks North Star Borough	42,562	29,456	9,461	13,106	53.0%
North Slope Borough	3,219	2,504	944	715	51.5%
Sitka Borough	4,114	2,985	925	1,129	49.9%
Ketchikan Gateway Borough	6,292	4,676	1,493	1,616	49.4%
Bristol Bay Borough	577	441	136	136	47.1%
Anchorage, Municipality of	129,906	94,518	25,817	35,388	47.1%
Juneau Borough	15,108	11,771	3,340	3,337	44.2%
Aleutians West Census Area	1,688	1,444	309	244	32.8%
Total	310,825	224,750	72,355	86,075	51.0%

¹ Employed represents resident workers ages 18 to 49 who were employed in unemployment insurance-covered wage-and-salary jobs at any time during 2005. (Therefore, federal workers or self-employed workers, such as fishermen, aren't included.)

Resident Labor Pool for Gas Line Occupations Alaska, 2005





The total resident workers who were employed, potentially available or trained in gas line occupations in 2005: 62,561.

² Low-wage earners represents workers who earned an average of less than \$3,000 per quarter in 2005, or were employed two quarters or less that year. Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section (Occupational Database and Alaska Permanent Fund Dividend records)

¹The gas line occupations are defined in Exhibit 2.

² Employed includes Alaska residents who were employed in any of the gas line occupations at any time in 2005 and didn't receive training in 2005 or federal fiscal year 2005.

³ Trained represents the number of Alaska residents who completed training programs related to gas line occupations and weren't employed in or considered potentially available for any gas line occupation during 2005. This category includes the 97 trainees from the Alaska Pipeline Joint Crafts Training Program course. We didn't have individual data for those trainees, so, for the purpose of this exhibit, we assumed they weren't previously or currently employed in a gas line occupation.

⁴Potentially available includes Alaska residents under the age of 50 in 2005 who worked at least four quarters in any of the gas line occupations during the previous three years but either (1) weren't employed in a wage and salary job for at least one full quarter in 2005, or (2) were employed in a non-gas line occupation for at least one full quarter in 2005.

⁵ Trained and employed represents Alaska residents who received gas line related training during 2005 and federal fiscal year 2005 and were employed in or considered potentially available for a gas line occupation during 2005.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Department of Labor

make Alaska resident hire a priority. More than \$14 million in federal and state money has been authorized to date for gas line related job training, including funding for a pipeline training center in Fairbanks, and additional funding is likely.

Those dollars can only be spent to maximum effect if there is first a realistic assessment of our existing work force in gas line occupations. That work force includes workers who have relevant experience but have since moved on to other occupations or are not currently employed. The number of these experienced workers who choose to return to gas line occupations will depend largely on the wages and conditions of the jobs being offered, but it's helpful to know they're out there when

making decisions about where to spend training dollars.

All told, the data discussed in this article suggest that in 2005, Alaska had roughly 62,600¹³ resident workers who had some sort of current employment, previous experience or training in gas line occupations. (See Exhibit 18.)

It's clear that after looking at the number of current and potentially available workers in the gas line occupations, due to seasonality, turnover, training and unemployment, Alaska has the population size and maturity in the construction and petroleum industries to play a more central role in building this generation's pipeline.

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¹³ The 62,600 represents the number of currently employed Alaska residents plus the number of potentially available workers and the number who completed training programs.

Nearly 86,000 people can't be all wrong...

early every product the Alaska Department of Labor and Workforce Development's Research and Analysis Section produces finds it way onto the Workforce Info Web site, which averaged 86,000 users a month in 2006.

The site, almis.labor.state.ak.us, allows Research and Analysis to distribute timely and relevant data quickly to the public. Since March 1, for instance, users have had access to completely new seafood industry data. They can view and download fish harvesting and seafood processing related tables, charts and maps – all with regional, species and gear type data. The seafood industry is an important piece of the Alaska economy, and its data is now an important piece of Workforce Info.

Many Alaska Economic Trends' articles use data published on the Workforce Info Web site. For example, this month's article, "A Supply of Alaska Workers for the Gas Line: How Ready is Alaska's Work Force?," used population projection information, drew on the Quarterly Census of Employment and Wages (QCEW) and the Current Employment and Statistics (CES) data sets, and included Alaska resident hire data – all available on Workforce Info.

Workforce Info users can mine Research and Analysis data from several directions. For example, to explore population data, search the site one of three different ways:

- Click on the "Population & Census" button on the vertical navigation bar on the left to tap into various population data sets.
- Click on "Economic Information" on the top menu bar to go to the "Local Area Profile" section for population informa-

- tion about a specific area.
- Use the "Download Data" tab on the top menu bar and select "Population" to choose the area, time period and type of data to view, print or download to a computer.

What's the difference between the links on the left hand vertical bar and the links across the top menu bar?

The links on the left vertical bar allow users to drill down through the entire Web site's more than 1,600 documents. Users can get the data as a Web document, pdf or Excel file.

The links across the top menu bar allow users to choose their parameters from a different perspective. The three choices on the top menu bar for data include:

Career Center

The "Career Center" tab leads to useful data for career searches based on up-to-date information for more than 800 occupations. It allows users to match their skills to careers, to investigate career training requirements and to gather information about where training is offered.

Economic Information

The "Economic Information" tab puts economic, occupation and population information at users' fingertips. The section's interactive search capabilities allow people to explore industries, occupations, training programs, geographic areas and information about employers.

For example, if people are interested in a broad spectrum of economic and demographic data on

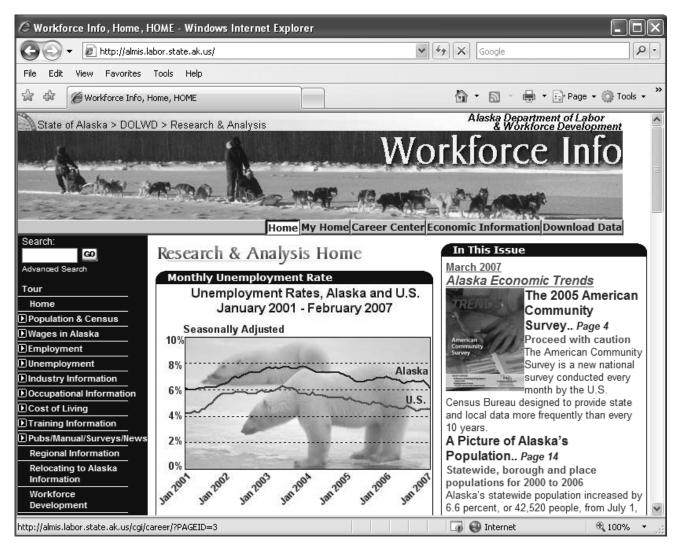
a particular borough or census area in the state, they can get that from the Local Area Profile section. Not all data are provided for every area, though. When that's the case, the site displays the statewide data. The data displayed through the Local Area Profile section contain:

- A general description about the area with the most current annual average monthly employment and earnings
- Employment and wage information including unemployment rates, the number of businesses by company size, current employment statistics, fastestgrowing occupations and industries, plus high-wage occupations
- Population and income data
- Economic indicators including the Consumer Price Index, number of building permits, property values and taxes
- Training providers

Download Data

The "Download Data" tab allows users to choose a data set. Users can further tailor their request by choosing geographic areas, time periods, years, occupations or industries. The data sets available for users to query are:

- Current Employment Statistics
- Income
- Industry and occupation projections
- Unemployment rates and labor force statistics
- Wages
- Consumer Price Index
- Population
- Names and addresses of businesses in Alaska
- Unemployment insurance claimants numbers
- Short-term industry employment forecast



Consistent job growth and lower unemployment in February

onfarm wage and salary employment rose by 6,000 in February, with the biggest increases coming in state government education (2,100) and seafood processing (1,200). (See Exhibit 2.) February usually marks the first step in a steady climb toward the state's peak employment months of July and August.

February's estimated job count of 302,600 was an increase of about 4,500 from February 2006. Over-the-year growth was widespread, led by an increase of 1,500 in the oil and gas industry. Construction employment, which has fallen below year-ago levels for several months now, was down 400 over the year.

Northern region and Anchorage/Mat-Su lead growth

The dominant share of the state's job growth continued to come from the Northern region, where North Slope oil and gas activity has been strong, and from the Anchorage/Mat-Su region.

(See Exhibit 4.) Other areas of the state showed slow growth, with the exception of the Southwest region, which was down 100 jobs from February 2006.

Unemployment rate inches lower

Alaska's seasonally adjusted unemployment rate fell threetenths of a percentage point in February to 6.1 percent, the lowest since June 2001, and the second consecutive month the rate has dropped three-tenths of a percentage point. (See Exhibits 1 and 3.)

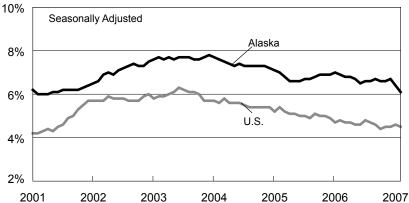
Although a plus or minus 1 percent margin of error dictates restraint in interpreting the declines, rates have shown a gradual downward trend since 2004. Employment growth has been relatively stable over that period, so the declines may have more to do with declining migration to the state and other demographic factors than to a structural change to the state's economy.

Aleutians West Census Area has state's lowest rate

The lowest unemployment rate for February was in the Aleutians West Census Area at 3.4 percent and the highest was in the Wade Hampton Census Area at 21.2 percent.¹ Twenty-five out of the state's 27 boroughs and census areas recorded lower rates than in February 2006.

Unemployment Rates, Alaska and U.S. January 2001 to February 2007





Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Department of Labor, Bureau of Labor Statistics

¹ Unemployment rates for boroughs and census areas are not seasonally adjusted and should not be compared with the seasonally adjusted state rate.

Nonfarm Wage and Salary Employment

Employment	reliminary	Revised	Revised	Chang	es from:
Alaska	1/07	12/06	1/06	12/06	1/06
Total Nonfarm Wage and Salary 1	302,600	296,600	298,100	6,000	4,500
Goods-Producing ²	39,300	37,700	38,200	1,600	1,100
Service-Providing ³	263,300	258,900	259,900	4,400	3,400
Natural Resources and Mining	13,100	12,900	11,400	200	1,700
Logging	300	100	300	200	0
Mining	12,900	12,900	11,100	0	1,800
Oil and Gas	10,900	11,000	9,400	-100	1,500
Construction	14,300	14,000	14,700	300	-400
Manufacturing	11,900	10,800	12,100	1,100	-200
Wood Product Manufacturing	300	300	300	0	0
Seafood Processing	8,500	7,300	8,600	1,200	-100
Trade, Transportation, Utilities	60,000	60,100	59,000	-100	1,000
Wholesale Trade	6,400	6,400	6,200	0	200
Retail Trade	34,200	34,300	33,600	-100	600
Food and Beverage Stores	6,200	6,200	6,000	0	200
General Merchandise Stores	8,800	9,000	8,600	-200	200
Transportation, Warehousing, Utilities	19,400	19,400	19,200	0	200
Air Transportation	5,900	6,000	5,800	-100	100
Truck Transportation	3,000	3,000	2,900	0	100
Information	6,900	6,900	7,000	0	-100
Telecommunications	3,900	3,900	4,100	0	-200
Financial Activities	14,400	14,500	14,500	-100	-100
Professional and Business Services	23,500	22,900	22,900	600	600
Educational ⁴ and Health Services	37,700	37,000	36,900	700	800
Health Care	26,900	26,600	26,200	300	700
Leisure and Hospitality	27,000	26,700	26,500	300	500
Accommodations	6,100	6,000	5,900	100	200
Food Services and Drinking Places	17,100	16,900	17,000	200	100
Other Services	11,300	11,400	11,000	-100	300
Government	82,500	79,400	82,100	3,100	400
Federal Government⁵	16,100	16,100	16,300	0	-200
State Government	25,100	22,700	24,700	2,400	400
State Government Education 6	7,900	5,800	7,900	2,100	0
Local Government	41,300	40,600	41,100	700	200
Local Government Education 7	23,900	23,300	24,200	600	-300
Tribal Government	3,200	3,200	3,300	0	-100

Notes for all exhibits on this page:

Sources for all exhibits on this page: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S Bureau of Labor Statistics

Nonfarm Wage and Salary Employment By Region

	Preliminary	Revised	Revised	Changes from:		rom: Percent C	
	2/07	1/07	2/06	2/07	2/06	1/07	2/06
Anch/Mat-Su	163,500	160,900	160,700	2,600	2,800	1.6%	1.7%
Anchorage	146,100	143,400	143,700	2,700	2,400	1.9%	1.7%
Gulf Coast	26,000	25,650	25,900	350	100	1.4%	0.4%
Interior	42,100	41,300	41,900	800	200	1.9%	0.5%
Fairbanks ⁸	36,300	35,500	36,100	800	200	2.3%	0.6%
Northern	18,000	17,700	16,250	300	1,750	1.7%	10.8%
Southeast	33,000	32,450	32,950	550	50	1.7%	0.2%
Southwest	20,100	18,850	20,200	1,250	-100	6.6%	-0.5%

Unemployment Rates By borough and census area

2/07 4.5	1/07 4.6	Revised 2/06
4.5		2/00
		4.8
	6.4	6.9
4.0	F 0	5.1
		5.1 8.2
		J
		6.9 6.2
	~	
		9.8
		11.0
		11.5
		13.2
		8.1
		15.9
	16.6	16.0
	8.8	11.3
10.7	10.7	13.7
5.5	5.5	8.2
11.6	11.4	12.2
8.2	8.6	9.2
13.6	13.4	16.1
5.3	5.5	6.2
8.0	8.0	8.8
18.3	17.7	19.1
5.9	6.2	7.5
20.6	23.2	22.5
14.1	16.4	14.1
13.1	13.3	21.1
10.9	11.7	12.0
5.7	7.4	7.5
3.4	6.2	3.8
13.0	12.8	14.4
13.3	14.1	17.1
10.1	10.8	11.3
10.0	9.9	11.1
21.2	20.5	22.2
	11.6 8.2 13.6 5.3 8.0 18.3 5.9 20.6 14.1 13.1 10.9 5.7 3.4 13.0 13.3 10.1 10.0	7.3 7.4 6.2 6.1 5.5 5.4 8.9 8.9 10.0 10.1 10.4 10.3 6.5 7.3 12.4 12.5 7.4 7.4 14.8 16.3 6.3 6.3 12.0 11.2 17.3 16.6 8.8 8.8 10.7 10.7 5.5 5.5 11.6 11.4 8.2 8.6 13.6 13.4 5.3 5.5 8.0 8.0 18.3 17.7 5.9 6.2 20.6 23.2 14.1 16.4 13.1 13.3 10.9 11.7 5.7 7.4 3.4 6.2 13.0 12.8 13.3 14.1 10.1 10.8 10.0 9.9

For more current state and regional employment and unemployment data, visit our Web site.

almis.labor.state.ak.us

¹ Excludes self-employed workers, fishermen, domestic workers, unpaid family workers and nonprofit volunteers

² Goods-producing sectors include natural resources and mining, construction and manufacturing.

³ Service-providing sectors include all others not listed as goods-producing sectors.

⁴ Private education only

⁵ Excludes uniformed military

⁶ Includes the University of Alaska

⁷ Includes public school systems

⁸ Fairbanks North Star Borough

Employer Resources

Labor relations for public employees

The Alaska Labor Relations Agency is an impartial and independent agency within the Alaska Department of Labor and Workforce Development. The agency serves as the labor relations agency for most public employers and employees within Alaska, including the State of Alaska, municipalities, boroughs, school districts and the University of Alaska.

The agency also administers the Public Employment Relations Act and railroad labor laws under the Alaska Railroad Corporation Act. The Alaska Legislature, under those acts, authorized the Alaska Labor Relations Agency to conduct secret ballot elections so public employees can choose whether a union or employee organization should begin or continue representing them for bargaining purposes. The agency, based in Anchorage, consists of six board members and four staff members – two hearing officers, a human resource specialist and an administrative clerk.

The agency also reviews unfair labor practice complaints from individuals, employers or unions covered by the Public Employment Relations Act; hears disputes about strike classifications and bargaining impasse matters; determines appropriate bargaining units; and enforces collective bargaining agreements. For more information, go to the Alaska Labor Relations Agency Web site at labor.state. ak.us/laborr.

