

Growing Up with Young Workers in Alaska

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A look at twentysomething workers in 1994, then again 10 years later

The early years of a person’s “working life” can be equal parts confusion and frustration. How does a young person gain meaningful work experience if he or she can never get hired for a skilled position, even an entry-level one?

At the same time, that person’s young friends will be making a broad spectrum of incomes. Data show that yearly wages for young people tend to vary by a wide margin. Any work-related concerns amongst young people should be tempered with the knowledge that for the vast majority of young workers – even those earning low wages – things can improve relatively quickly as they age and acquire advanced skills.

This study presents a before-and-after picture of young workers from 1994 to 2004 rather than a simple snapshot taken along the way. The focus is not on today’s youth, but rather how far the “thirtysomething” workers of today have come since 1994. Though less conventional, longitudinal studies like this one offer valuable insight about how an individual’s employment and earnings will change over time.

In this study we identify a group, or cohort, of 31,761 workers who were 19 to 29 years old in 1994 and were employed in wage and salary occupations at some time during 1994 and 2004. The group – called “young workers”

and the “young workers group” in this article – breaks down as follows:

- “Young workers” – workers who were 19 to 29 years old in 1994
 - “College-age” – workers who were 19 to 23 in 1994
 - “Twentysomething” – workers who were 24 to 29 years old in 1994

For this study, “urban” refers to people who were working in Anchorage, the Matanuska-Susitna region, Fairbanks or Juneau in 1994. The term “rural” refers to people working anywhere else in Alaska during that time. “Origin” refers to where the individual was working in 1994. Unless otherwise noted, this study will use median quarterly wages as the basic tool for wage comparisons. Wage data from 1994 are presented as nominal figures and therefore have not been adjusted for inflation.

The income mobility of young workers

Income mobility refers to a worker’s ability to change his or her earnings over time relative to other workers. Basically, it’s a study that tries to answer the question, “Can the poor become rich, and the rich become poor?” To find out, young workers were placed into five earnings categories (called quintiles). Each quintile consisted of an equal number of workers arrayed

Income Mobility for Young Workers

By earnings quintile, 1994 and 2004



1994 Earnings Quintiles	Total Workers	Number of Workers in the 2004 Earnings Quintiles					1994 Median Quarterly Wage
		First	Second	Third	Fourth	Fifth	
First Quintile - Highest Earnings Quintile	6,352	3,122	1,628	788	456	358	\$8,969
Second Quintile	6,352	1,255	1,768	1,608	1,031	690	\$5,434
Third Quintile - Middle Earnings Quintile	6,352	850	1,268	1,549	1,621	1,064	\$3,573
Fourth Quintile	6,352	677	992	1,382	1,645	1,656	\$2,070
Fifth Quintile - Lowest Earnings Quintile	6,353	448	696	1,025	1,599	2,585	\$727
2004 Median Quarterly Wage	31,761	\$16,757	\$11,247	\$8,297	\$5,427	\$1,853	

Notes:

Gray area denotes “low-income” workers – those with incomes in the two lowest quintiles.

The young workers group refers to the group of 31,761 wage and salary workers in Alaska who were 19 to 29 years old in 1994 and worked both in 1994 and 2004.

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

according to their median quarterly earnings in both 1994 and 2004. (See Exhibit 1.) These five quintiles were examined to identify the number of workers who moved to higher and lower wage groups between 1994 and 2004.

Since this income mobility study follows the same group of people over time, the upward movement of one worker must be offset by the downward movement of another.

Of special interest are the workers who populated the lowest two earnings quintiles – called the low-wage workers – in 1994. How many of these low-wage workers moved up to a higher quintile in 2004? How many “high-achievers” from the bottom two quintiles earned their way into the top two quintiles? A wide range of factors influenced the results of income mobility for young workers.

Factors affecting income mobility

Many of the young, low-wage workers from 1994 were neither young nor making low wages by 2004. All kidding about gray hair and wrinkles aside, over half of them moved to a higher earnings quintile. (See Exhibit 2.) About 9 percent of these low-wage workers elevated

themselves all the way to the highest earnings quintile. Mobility differed depending on the following factors:

- Age
- Gender
- Origin¹
- Industry experience

Age was the biggest factor related to income mobility. (See Exhibit 3.) The youngest workers typically made the least amount of money in 1994. During this period, many worked in low-wage occupations² – possibly part time – while they acquired the education and experience needed to earn higher wages later in life.

Wages earned by 19- to 21-year-olds in 1994 were less predictive as to how much they would

¹ “Origin,” as mentioned previously, refers to where the individual was working in 1994. That person may or may not have been born in that borough or census area. Generally, the origin of the workers are grouped as “urban” or “rural” for the purposes of this study.

² In general, young workers are more likely to work part time, which would often result in lower quarterly or annual wages. The comparative effect is minimized in this study because as the young workers age, their peers (within the young workers group) also move into full-time positions. Therefore, a part-time young person could see a big increase in his or her earnings due to working more hours, but, in order to move into a higher earnings quintile, that person would still have to out-earn other young workers who had also transitioned into full-time jobs by 2004.

2 Mobility for Young Worker Group of 1994 What happened in 2004

What Happened in 2004

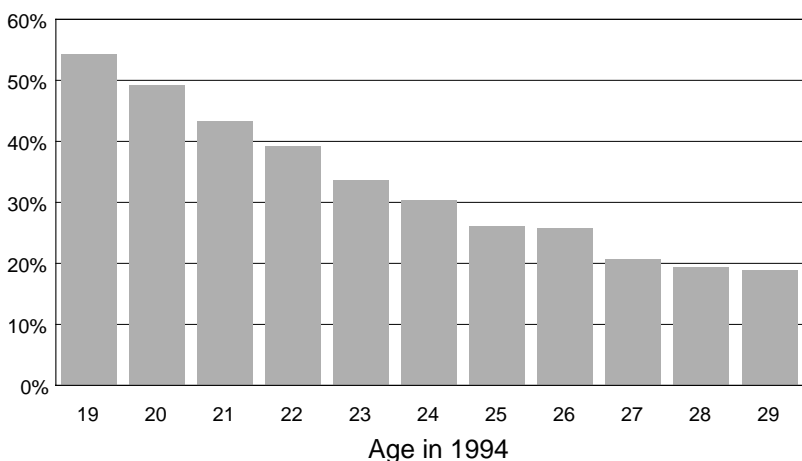
Earnings Position in 1994	Same Quintile	Moved Up	Moved Down ¹	Moved Up to Highest Two Quintiles	Moved Up to Highest Quintile
First Quintile - Highest Earning Quintile	49.1%	-	50.9%	-	-
Second Quintile	27.8%	19.8%	52.4%	-	19.8%
Third Quintile - Middle Earning Quintile	24.4%	33.3%	42.3%	33.3%	13.4%
Fourth Quintile	25.9%	48.0%	26.1%	26.3%	10.7%
Fifth Quintile - Lowest Earning Quintile	40.7%	59.3%	-	18.0%	7.1%

¹ This doesn't mean their wages actually dropped; in most cases they simply grew slower than the rest of the group.

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

3 Upward Income Mobility By 2004 Young workers group

Percentage who moved to a higher income quintile by 2004



Note: This graph shows that 55 percent of the workers who were age 19 in 1994 moved up to a higher income quintile by 2004.

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

be earning by 2004. Although the college-age workers posted the highest upward mobility rates, it was very possible for twentysomething workers to also become high-achievers by going from the lowest two quintiles to the highest two quintiles. (See Exhibit 4.)

Men and women exhibited varying degrees of income mobility. Men were somewhat more likely to move up to a higher earnings quintile than women, but low-wage men were much more likely to see large wage increases.

Workers employed in rural areas in 1994 were slightly less likely to climb to a higher earnings quintile in 2004 than those employed in urban

areas during that time. Low-wage, urban workers from 1994 were much more likely to see large wage gains over the subsequent 10 years. (See Exhibit 5.)

By 2004, about 70 percent of the young workers group was employed in a different industry and those workers who switched industries generally displayed higher rates of income mobility. (See Exhibit 6.) To be fair, however, the workers who remained within their original industry were marginally older and were making better wages when they began and ended the 1994-2004 study period. (See Exhibit 7.) Not surprisingly, high-wage industries, such as construction, natural resources and state government, had more remaining workers. Educational and health services, a sector with fewer unskilled positions, also had a high percentage of remaining workers.

Wages by industry

More than half of the natural resources workers in 1994 belonged to the highest earnings quintile, while over a third of the workers in construction and state government fell into that group. (See Exhibit 8.) Leisure and hospitality, tribal government, manufacturing (mostly seafood processing) and local government all saw many of their workers fall into the lower two earnings categories. Typically, industries that paid well in 1994 continued to provide very good wages for remaining workers in 2004.

The other side of the coin: downward mobility

Not all workers could have exhibited increasing

wages relative to their peers. Just as workers who earned very little in 1994 had a decent chance of moving up, workers who earned a relatively high wage were nearly as likely to move to a lower earnings quintile in 2004. (See Exhibit 2.) This doesn't necessarily mean their wages actually dropped; in most cases, they simply grew slower than the rest of the group.

About 66 percent of educational and health services³ workers were in the top three earnings quintiles in 1994. (See Exhibit 8). Ten years later, 42 percent of those workers had slipped to a lower earnings class. Despite being passed by in terms of earnings, educational and health services saw the highest retention rates⁴ of any private sector industry in this study. (See Exhibit 7.) Young workers who began the period as state government employees were also more likely to see their earnings increase less rapidly compared to the overall group.

Prominent trend for young workers

Income mobility studies can be very useful for determining how a worker's earnings can change relative to his or her peers, but they say little about actual dollar values. For instance, natural resource workers had the lowest percentage of "upward-movers" but natural resources was the highest paid industry in both 1994 and 2004.

Nearly all these young workers saw big wage increases, to different extents, over the 1994-2004 period. Using available data, we can answer general questions such as, "Did urban Alaskans fare better than rural Alaskans?" Or, "Did women's wages keep pace with men's wages?" For more information regarding data sources, groupings, terminology or other cohort specifics, please see the methodology section at the end of this article.

³ Educational and health services includes only those workers employed in the private sector. People employed in a public school would be listed under the local government sector; those 1994 public school workers made up about half of the young local government work force. Therefore, the majority of the educational and health services category consists of private health care providers.

⁴ Retention rate refers to the percentage of workers who were employed in the same basic industry during 1994 and 2004.

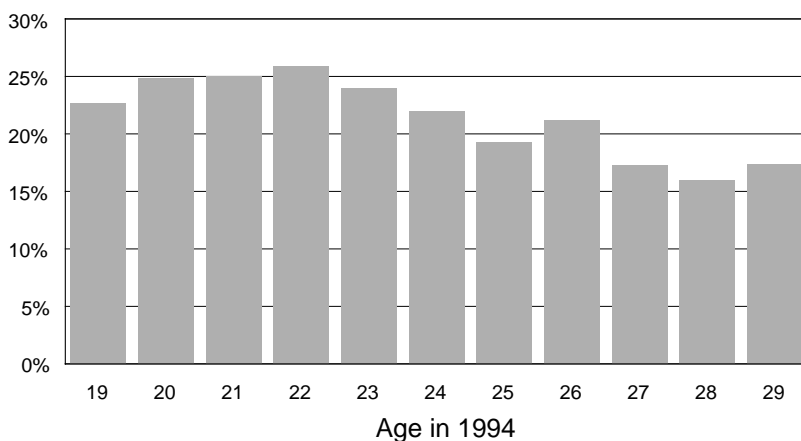
Sharp earnings increase for young workers

Young workers typically see their earnings increase rapidly during their 20s and into their 30s. This group of Alaskans is no different. College-age workers saw the greatest increase in earnings; their wages grew by an average of 12.4 percent per year. (See Exhibit 9.)

A Drastic Income Climb 4

Low-income workers who moved up

Percentage of high-achievers by age



Note: This graph represents the percentage of young low-income workers who moved from the bottom two earnings quintiles in 1994 to the highest two quintiles by 2004. These workers are identified as "high achievers" in this article.

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

Income Mobility by Gender and Origin 5

Young workers who moved up by 2004

	Percentage of the Group who Moved Up	Percentage of High Achievers ¹
Men	34.6%	28.9%
Women	29.2%	15.9%
Urban ²	34.0%	27.5%
Rural ³	28.6%	14.7%

¹ High Achievers refers to those who moved from the bottom two earnings quintiles in 1994 to the top two quintiles in 2004.

² "Urban" refers to young workers who were employed in Anchorage, the Mat-Su region, Fairbanks or Juneau in 1994.

³ "Rural" refers to young workers who were working elsewhere in the state in 1994.

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

6 Income Mobility by Industry Experience

Staying in an industry versus leaving

Industry Where They Started in 1994	Percentage Who Stayed in the Industry	Moved Up		High-Achievers ¹	
		Stayed	Left	Stayed	Left
Construction	42.2%	29.6%	42.2%	34.8%	32.7%
Educational and Health Services	44.6%	24.5%	23.1%	30.1%	20.8%
Financial Activities	27.7%	23.6%	33.3%	32.3%	18.2%
Information	37.7%	21.5%	33.3%	35.1%	26.3%
Leisure and Hospitality	21.6%	18.2%	5.4%	46.0%	23.6%
Manufacturing	25.2%	15.3%	9.4%	36.6%	16.0%
Natural Resources and Mining	39.2%	11.2%	50.0%	29.3%	36.7%
Other Services	17.3%	26.5%	20.6%	39.9%	22.7%
Professional and Business Services	13.0%	22.8%	26.7%	32.2%	25.5%
Trade, Transportation and Utilities	24.6%	22.2%	20.7%	36.9%	24.8%
State Government	51.3%	19.7%	34.8%	37.1%	32.2%
Local Government	57.6%	21.8%	15.6%	35.3%	16.3%
Total	30.1%	22.3%	19.1%	36.3%	22.9%

¹ Represents the percentage of workers in the lowest two earnings quintiles who moved up to the top two quintiles in 2004.

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

7 Income Differences of Staying in an Industry Versus Switching

Young workers group, 1994 compared to 2004

Industry	Median Quarterly Wage in 1994		Median Quarterly Wage in 2004		Percent Change in the 1994-2004 Period	
	Stayed in Industry	Left Industry	Stayed in Industry	Left Industry	Stayed in Industry	Left Industry
Construction	\$6,567	\$4,651	\$13,292	\$10,519	102.4%	126.1%
Educational and Health Services	\$4,891	\$3,324	\$8,650	\$7,021	76.9%	111.2%
Financial Activities	\$5,134	\$3,174	\$10,044	\$6,830	95.6%	115.2%
Information	\$5,925	\$3,375	\$11,638	\$7,513	96.4%	122.6%
Leisure and Hospitality	\$2,799	\$2,094	\$5,029	\$7,066	79.6%	237.4%
Manufacturing	\$4,230	\$2,606	\$8,334	\$6,849	97.0%	162.9%
Natural Resources and Mining	\$11,841	\$5,645	\$19,034	\$10,194	60.8%	80.6%
Other Services	\$4,086	\$2,749	\$8,941	\$7,498	118.8%	172.7%
Professional and Business Services	\$5,675	\$4,005	\$11,345	\$8,878	99.9%	121.7%
Trade, Transportation and Utilities	\$5,063	\$3,102	\$9,785	\$7,976	93.2%	157.2%
State Government	\$6,295	\$3,704	\$10,565	\$9,125	67.8%	146.3%
Local Government	\$4,122	\$2,024	\$8,596	\$6,489	108.5%	220.6%
Total	\$5,009	\$3,027	\$9,596	\$7,761	91.6%	156.4%

Note: Wage and salary data do not include tips or commissions. Tips are common, for instance, in the leisure and hospitality sector and realtor commissions are common in real estate, which falls in the financial services sector.

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

Where They Started Out

Young workers in 1994 versus 2004, by industry



Industry	Median Quarterly Wage in 1994	Median Quarterly Wage in 2004	Percentage of Workers in 1994 Earnings Quintiles				
			First Quintile (Highest Earning Quintile)	Second Quintile	Third Quintile (Middle Earning Quintile)	Fourth Quintile	Fifth Quintile (Lowest Earning Quintile)
Construction	\$5,403	\$11,747	37.4%	22.6%	14.8%	13.3%	11.9%
Educational and Health Services	\$3,973	\$7,917	18.1%	26.3%	21.6%	16.8%	17.2%
Financial Activities	\$3,844	\$7,887	12.6%	27.5%	24.7%	16.6%	18.6%
Information	\$4,581	\$9,342	24.8%	27.5%	16.2%	15.2%	16.4%
Leisure and Hospitality	\$2,213	\$6,553	4.6%	12.2%	22.2%	29.6%	31.3%
Manufacturing	\$2,869	\$7,201	15.4%	15.7%	20.3%	27.1%	21.4%
Natural Resources and Mining	\$7,881	\$13,256	56.9%	13.9%	13.5%	8.4%	7.4%
Other Services	\$3,014	\$7,792	11.9%	18.4%	23.2%	26.0%	20.6%
Professional and Business Services	\$4,240	\$9,069	26.4%	21.2%	19.8%	16.8%	15.9%
Trade, Transportation and Utilities	\$3,590	\$8,471	16.5%	22.2%	23.3%	21.9%	16.1%
State Government	\$5,329	\$10,085	33.3%	25.9%	14.1%	14.8%	12.1%
Local Government	\$3,067	\$7,332	27.2%	12.5%	13.0%	16.2%	31.1%

Notes:

This table shows the wages and income placings by industry. For example, in 1994, the majority of natural resources and mining workers (56.9 percent) were in the highest earnings quintile.

Wage and salary data do not include tips or commissions. Tips are common, for instance, in the leisure and hospitality sector and realtor commissions are common in real estate, which falls in the financial services sector.

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

Twentysomething workers saw less growth, but still registered wage growth of 6.6 percent per year. By comparison, those who were 30 to 40 years old in 1994 saw nominal gains of only 3.8 percent per year, only slightly out-pacing inflation, which ran at 2.1 percent per year⁵ during the study period.

Men's earnings increase faster

In 1994, the women-to-men earnings ratio, or gender gap,⁶ in the study was 76 percent. Over the next 10 years, earnings for the men increased faster than for the women. (See Exhibit 10.)

By 2004, the women made only 70 percent of their male counterparts' earnings. Although 25 percent of the women in the young worker group held a job in 2004 requiring a bachelor's

degree or higher, they consistently earned less than the men in the group. Only 15 percent of the men had a job requiring a bachelor's degree or higher in 2004.

Despite this long-term trend in the young workers group, wages for Alaska women of all ages have been increasing faster than Alaska men's wages in recent years. From 2000 to 2004, overall earnings for Alaska women of all ages grew by 21 percent while Alaska men of all ages saw their total earnings increase by 15 percent.

For all Alaska residents in 2004, women earned 67.6 percent of what men earned.

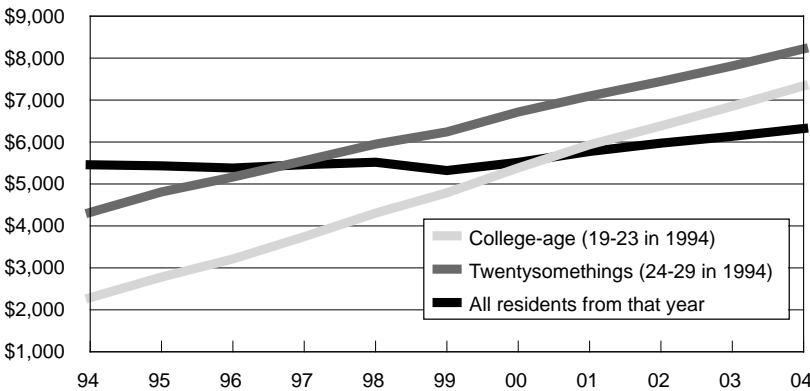
Identifying and measuring specific causes for income disparity based on gender is a large topic in itself and is beyond the scope of this study. But in general, many studying the causes for gender-based income disparity point to a whole spectrum of causes ranging from gender discrimination to a premise that many women

⁵ Inflation was calculated using the Anchorage Consumer Price Index from the years 1994 to 2004.

⁶ The term "gender gap" is used to describe the disproportionate earnings between men and women. Men tend to earn significantly more than women.

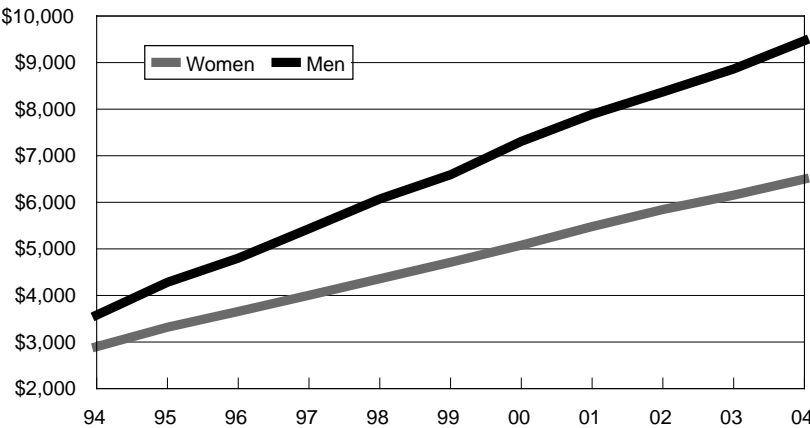
9 Wages for Young Workers Group Alaska, 1994 to 2004

Median Quarterly Wages



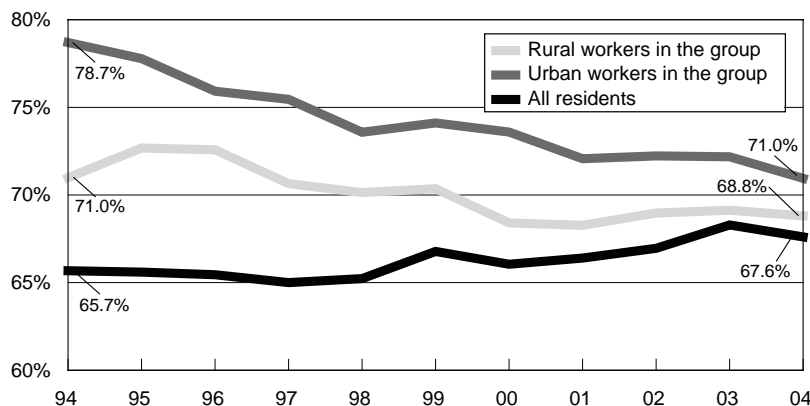
10 Wages for Young Workers Group By gender, 1994 to 2004

Median Quarterly Wages



11 Urban Versus Rural Gender differences, 1994 to 2004

Women's Percentage of Men's Earnings



Note: The gender gap was computed based on the average annual earnings of men and women for each year.

Source for Exhibits 9, 10, and 11: Alaska Department of Labor & Workforce Development, Research and Analysis Section

are the primary caregivers in their families at home and therefore might work less hours in a year. The latter is a factor that could cause women to acquire experience and tenure at slower rates than men. For one gender gap discussion, see *Trends'* June 2005 issue.

Gender gap behaves differently in rural and urban areas

In rural areas the gender gap was significantly wider than it was in urban areas for the young workers group. The rural gender gap amongst the young workers was 7.7 percent higher than the urban gender gap in 1994. Yet, as the group aged, the difference between the two declined to 2.2 percent in 2004. (See Exhibit 11.) These data suggest that a sizeable gender gap exists earlier in the careers of rural workers.

The earnings penalty

"Earnings penalty" refers to the adverse affects on future wages when workers forego post-secondary education or other occupational training opportunities. Whether urban or rural, man or woman, the average incomes for the young workers with less education, experience or training⁷ was considerably lower. (See Exhibit 12.)

For both men and women in 2004, the average worker of one gender employed in an occupation requiring little training earned an annual income that was roughly half of what an average worker of the same gender earned in an occupation requiring a bachelor's degree or higher.

Although the gender gap extended to both blue-collar and white-collar occupations, education still played a key role in determining the upward income mobility of men and women. Well-educated men were the most able to pull themselves up by the bootstraps and move from low-income occupations to become high-achievers by 2004, but men who had related experience in an industry or other significant training often did the same. (See Exhibit 12.)

⁷ All educational or training groupings were based on the degree or training requirements of the workers' occupations in 2004, not on the education the workers actually obtained. Educational data for these individuals were unavailable.

Wages for Young Workers by Gender and Origin By 2004 occupational requirements¹

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	Workers	Percentage of Workers in this Category in 2004	Median Quarterly Wage in 1994	Median Quarterly Wage in 2004	Average Annual Wage in 2004	Percentage of the Group Who Moved Up	Percentage of High Achievers ²
Males							
Bachelor's degree or above	2,618	15.3%	\$4,825	\$12,870	\$55,814	44.6%	59.6%
Long-term training (12+ months)	2,965	17.4%	\$4,370	\$10,961	\$43,354	36.4%	34.1%
Mid-term training (one to 12 months)	3,702	21.7%	\$4,088	\$9,959	\$38,854	35.0%	30.0%
Related experience, vocational training or associate degree	2,571	15.1%	\$4,993	\$11,923	\$49,323	38.2%	43.7%
Short-term training (less than a month)	5,043	29.5%	\$3,082	\$6,459	\$26,926	26.4%	11.7%
Unknown educational requirements	176	1.0%	\$3,581	\$5,992	\$27,195	25.6%	12.3%
Females							
Bachelor's degree or above	3,640	24.8%	\$3,836	\$9,827	\$38,284	37.8%	37.5%
Long-term training (12+ months)	379	2.6%	\$3,375	\$6,863	\$30,239	30.9%	12.7%
Mid-term training (one to 12 months)	2,708	18.4%	\$3,484	\$7,520	\$29,262	28.7%	13.9%
Related experience, vocational training or associate degree	1,865	12.7%	\$3,737	\$8,561	\$33,039	33.1%	25.6%
Short-term training (less than a month)	5,900	40.2%	\$2,544	\$5,021	\$20,312	23.1%	5.6%
Unknown educational requirements	194	1.3%	\$2,385	\$3,327	\$17,103	20.6%	9.1%
Urban							
Bachelor's degree or above	4,552	22.0%	\$4,402	\$11,203	\$48,249	42.1%	52.6%
Long-term training (12+ months)	2,073	10.0%	\$4,445	\$11,339	\$44,528	38.8%	39.5%
Mid-term training (one to 12 months)	4,048	19.5%	\$4,168	\$8,936	\$36,877	33.0%	26.9%
Related experience, vocational training or associate degree	3,098	14.9%	\$4,525	\$10,611	\$44,361	38.0%	41.8%
Short-term training (less than a month)	6,709	32.4%	\$3,066	\$6,322	\$25,664	26.0%	10.0%
Unknown educational requirements	252	1.2%	\$2,940	\$4,218	\$22,007	24.6%	7.4%
Rural							
Bachelor's degree or above	1,706	15.5%	\$3,771	\$9,762	\$38,597	36.6%	30.9%
Long-term training (12+ months)	1,271	11.5%	\$3,768	\$8,721	\$37,528	30.9%	20.9%
Mid-term training (one to 12 months)	2,362	21.4%	\$3,143	\$7,577	\$31,244	31.2%	17.6%
Related experience, vocational training or associate degree	1,338	12.1%	\$3,849	\$8,971	\$38,114	31.5%	22.5%
Short-term training (less than a month)	4,234	38.4%	\$2,295	\$4,497	\$19,709	22.4%	5.9%
Unknown educational requirements	118	1.1%	\$2,587	\$5,280	\$21,683	19.5%	16.1%

¹ All educational or training groupings were based on the degree or training requirements of the workers' occupations in 2004, not on the education the workers actually obtained. Educational data for these individuals were unavailable.

² High Achievers refers to those who moved from the bottom two quintiles in 1994 to the top two quintiles in 2004.

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

Women working in low-income occupations in 1994 had very little chance of becoming high-achievers by 2004 unless they acquired a college degree and an occupation that would put it to use.

Go to work or go to school

In 1994, the majority of college-age workers did not work in all four quarters of the year. (See Exhibit 13.) Between the ages of 22 and 26, many seasonal⁸ workers usually begin to

transition into stable, year-round positions. Younger workers generally have shorter tenures and end up switching jobs more often. This "job-hopping" trend did not completely evaporate as the young workers aged, however, providing further evidence that workers today will change employers, and even careers, more often.

A follow up study of college-age workers who were employed in all four quarters in 1994 revealed some distinct differences. Typical 2004 wages for the year-round workers were significantly higher than for seasonal workers

⁸ Workers who did not work all four quarters are referred to as "seasonal" in this study.

employed in 1994. The earnings gap was even larger for older, college-age workers. (See Exhibit 14.) These data suggest that workers with longer terms of employment experience, even as soon as age 19, benefit in later years.

The lone group who did not benefit from working year-round was college-age workers who went on to jobs requiring at least a

bachelor's degree in 2004. It's likely they were unable to work four quarters during 1994 because they were enrolled as full-time college students. Data from this study clearly support the common advice given to high school seniors: begin working year-round to gain viable experience in an industry or earn a college degree.

Wage differences for urban and rural Alaskans

Earnings growth for the urban section of the young workers group steadily outpaced their rural counterparts. (See Exhibit 15.) As of 2004, wages for young "urbanites" were 39 percent higher than rural wages. Urban workers were more likely to be employed in an occupation requiring a bachelor's degree or higher. They also exhibited higher wages up and down the education and experience ladder. (See Exhibit 12.)

If wages are higher in Alaska's bigger cities, why doesn't everyone move there? City life isn't for everyone, but by 2004 about 21 percent of the young, rural workers had moved to an urban area. They fared slightly better than the rural peers they left behind, but not as well as their new urban counterparts. (See Exhibit 16.)

By 2004, the median quarterly wage for young, rural women was 27 percent below urban women. (See Exhibit 17). Despite this imbalance, wages for rural women actually grew faster, as a percentage, than those of urban women.

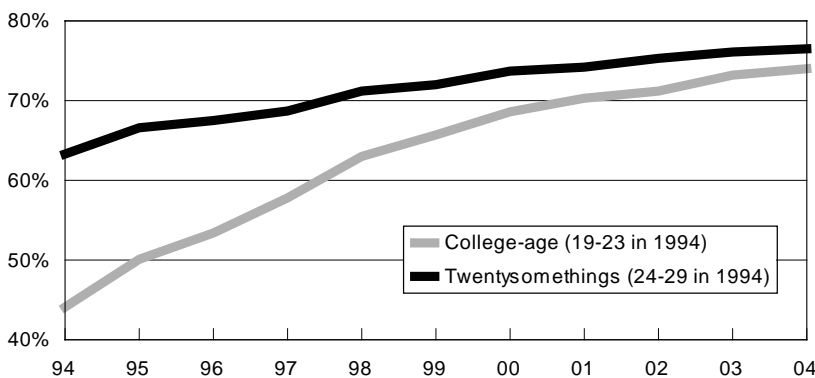
Starting out in different places

Not every rural area was devoid of high-paying job opportunities for young workers. Young workers from the Denali Borough and the Aleutians West Census Area fared very well. Many workers who made above-average wages in the North Slope Borough in 1994 didn't see their wages grow much faster than inflation over the next 10 years. (See Exhibit 18.)

13 Those Who Worked Year-Round

Young workers group, 1994 to 2004

Percentage who worked year-round



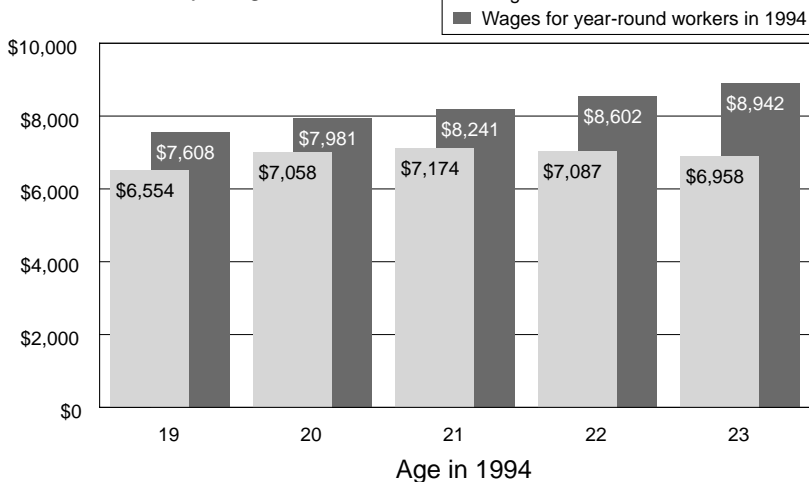
Note: Year-round workers were identified as those employed in a wage and salary position during all four quarters of the year.

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

14 Higher Future Wages

Year-round versus seasonal, 2004

Median Quarterly Wages in 2004



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

Industry migration for the young workers group

The young workers didn't just move to new places from 1994 to 2004; many moved into different industries as well. Workers beat a well-trodden career path between the professional and business services sector and the trade, transportation and utilities sector. It may have been expected that state and local government workers would trade places on a somewhat regular basis, but that didn't really happen in this study. (See Exhibit 20.)

Young workers group and others on the move

Studying migration allows us to broaden the scope of this article to include all individuals who were 19 to 29 years old in 1994, not just those in the young workers group who were employed in 1994 and 2004. This section and the next section will look at the bigger group of individuals,⁹ which includes everyone in that age group who lived in Alaska, moved into the state, left the state or moved within the state during the 1994-2004 period, regardless of whether they worked.

More than half of the young individuals from 1994 moved out of state or to another area within the state by 2004. (See Exhibit 19.) The college-age group saw the most migration into and out of Alaska. The majority of migrants of all ages moved out of state. Despite losing those individuals, even more people of the same age group migrated to Alaska over the 1994-2004 period. New residents did not migrate to Alaska's main population centers of Anchorage,

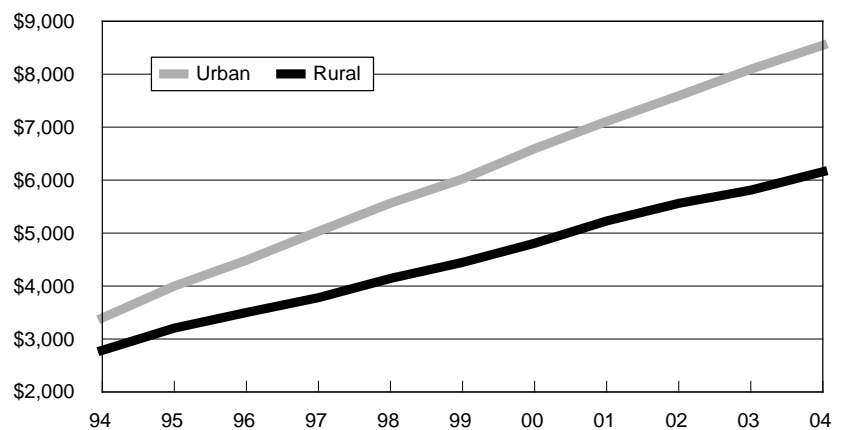
Mat-Su, Fairbanks and Juneau any more than previous population levels would suggest. These new residents likely filled labor needs throughout the state. For more information on Alaska migration, see *Trends'* July 2004 issue.

Young, rural Alaskans migrated away from their original rural area at a slightly higher rate¹⁰ (52 percent) compared to those living in urban areas (51 percent). The young, rural Alaskans who did move within the state since 1994 were more likely to migrate to one of the urban areas listed above than new residents. Factors such as secondary schools and other post-high school training

¹⁰ Permanent Dividend Fund data regarding the migration of rural youth, particularly college students, may be understated for two reasons. Alaska college students often use their parents' rural home address for PFD applications and would therefore not be counted as being urban. Rural students moving on to college often do so when they are 18, a year before our study would have captured them as rural youth migrating to an urban area or out-of-state.

Wages for Young Workers Group **15** By origin, 1994 to 2004

Median Quarterly Wages



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

⁹ The bigger group described here is identified in all references in this article as "individuals," which is not to be confused with the young workers group. Both the young workers group and "new residents" are subsets of the bigger group of individuals.

Moving to an Urban Area **16** Wages of the young workers group

	Total	Median Quarterly Wage in 1994	Median Quarterly Wage in 2004	Average Annual Wage in 1994	Average Annual Wage in 2004
Urban workers	20,732	\$3,874	\$8,995	\$16,603	\$37,448
Rural workers who stayed in rural areas	8,755	\$2,906	\$6,271	\$14,176	\$28,357
Rural workers who moved to urban areas	2,274	\$2,935	\$7,768	\$14,206	\$33,456

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

17 Gender and Origin Differences

Wages for young workers group

centers make those cities more attractive to young individuals looking to gain education or training.

Who earns more: new residents or long-term residents?

From 1994 to 2004, Alaska became home to 42,950 new individuals, or residents, who were 19 to 29 years old in 1994. Did these new individuals bring advanced skills that allowed them to out-earn residents who were here at the beginning of our study in 1994?

One assumption is that the work experience and networking available to the long-term

Gender	Median Quarterly Wage in 1994	Median Quarterly Wage in 2004	Average Annual Earnings in 2004
<u>Men</u>			
Urban Men	\$4,252	\$10,415	\$43,260
Rural Men	\$3,444	\$8,047	\$34,362
All Men	\$4,011	\$9,753	\$40,169
<u>Women</u>			
Urban Women	\$3,480	\$7,684	\$30,693
Rural Women	\$2,482	\$5,572	\$23,644
All Women	\$3,139	\$7,007	\$28,247

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

18 Where They Worked in 1994 and What They Made

Young workers group, 1994 versus 2004

Place of Work in 1994	Number of Workers	Median Quarterly Wages in 1994	Median Quarterly Wages in 2004	Percentage in Lower Two Quintiles in 1994
Aleutians East Borough	78	\$2,847	\$8,058	48.7%
Aleutians West Census Area	201	\$4,790	\$9,351	32.3%
Anchorage, Municipality of	13,255	\$3,997	\$9,058	33.9%
Bethel Census Area	1,393	\$1,495	\$4,237	69.1%
Bristol Bay Borough	76	\$3,915	\$8,799	30.3%
Denali Borough	67	\$4,657	\$12,396	41.8%
Dillingham Census Area	329	\$2,222	\$5,625	55.3%
Fairbanks North Star Borough	3,742	\$3,439	\$9,139	39.6%
Haines Borough	85	\$2,586	\$7,200	52.9%
Juneau, City and Borough of	1,579	\$4,470	\$8,486	30.1%
Kenai Peninsula Borough	2,204	\$3,242	\$8,409	44.0%
Ketchikan Gateway Borough	774	\$4,414	\$8,149	31.7%
Kodiak Island Borough	716	\$2,657	\$6,804	51.8%
Lake and Peninsula Borough	94	\$1,520	\$5,303	69.1%
Matanuska-Susitna Borough	2,151	\$3,362	\$8,853	43.0%
Nome Census Area	758	\$2,731	\$5,432	50.4%
North Slope Borough	542	\$5,441	\$7,760	24.0%
Northwest Arctic Borough	573	\$3,615	\$6,093	40.7%
Prince of Wales-Outer Ketchikan Census Area	313	\$3,251	\$6,043	44.1%
Sitka, City and Borough of	455	\$3,567	\$8,241	40.2%
Skagway-Hoonah-Angoon Census Area	147	\$2,576	\$5,776	54.4%
Southeast Fairbanks Census Area	238	\$2,787	\$8,189	49.6%
Valdez-Cordova Census Area	516	\$4,128	\$8,296	33.7%
Wade Hampton Census Area	662	\$1,117	\$3,809	76.3%
Wrangell-Petersburg Census Area	319	\$3,519	\$6,693	41.4%
Yakutat, City and Borough of	47	\$4,319	\$6,999	21.3%
Yukon-Koyukuk Census Area	442	\$2,323	\$6,192	57.2%

Note: This exhibit does not include a small number of workers with unknown area classifications in 1994.

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

residents¹¹ would allow them to earn far more than imported labor of a similar age. That turned out to be correct. A comparison of 2004 wages reveals that long-term, twentysomething residents earned about 9 percent more than transplanted residents of the same age. The difference between college-age workers in the two groups was only 2 percent. Wages were more unevenly distributed amongst new residents. Long-term, male residents out-earned new male residents by a significantly higher margin. (See Exhibit 21.)

Summary

Earnings for the young workers group have increased dramatically over the past 10 years.

¹¹ In this article, the term "long-term residents" identifies those who worked and resided in Alaska in 1994 and 2004.

Education, vocational training and work experience all have had significant impacts on future earnings. Earnings for men and women in the young workers group were relatively close in 1994. Over the next 10 years, women saw less wage growth than men, bringing the gender gap closer to the state average.

Urban workers tended to earn more than rural workers between 1994 and 2004. They were also more likely to be employed in jobs requiring a bachelor's degree. But young workers from the Denali Borough, Aleutians West Census Area and Bristol Bay Borough earned very high wages in 2004.

Migration amongst young Alaskans is extremely common; more than half moved away from their home borough or area. Those who did move tended to relocate out of state. Luckily,

Migration of the Young Workers Group and Others 1994 versus 2004 **19**

1994	Total Residents	Employed				
College-age (19-23)	33,071	25,408				
Twentysomethings (24-29)	46,685	34,234				
Young Individuals (Total)	79,756	59,642				
2004	New Total	Still in Alaska	New Residents	Moved Out of State	Still Employed	Moved within State
1994 College-age (19-23)	39,937	20,262	19,675	12,809	13,141	4,983
1994 Twentysomethings (24-29)	53,026	29,751	23,275	16,934	18,620	6,480
1994 Young Individuals (Total)	92,963	50,013	42,950	29,743	31,761	11,463

Young Individuals: 122,706
Young Workers: 31,761

Notes:

This exhibit and Exhibit 21 are the only exhibits in this article that, along with the young workers group (the group of 31,761 workers who were 19 to 29 years old in 1994 and worked both in 1994 and 2004), also includes all individuals who were ages 19 to 29 in 1994. These individuals lived in Alaska or migrated to, out of or within Alaska during the 1994-2004 period, regardless of whether they worked. This latter group is listed in the "New Residents" column.

It is important to note that the 29,743 individuals who moved out of Alaska during the 1994-2004 period were likely more than replaced by the 42,950 individuals of the same age who moved into Alaska during the same period.

The "Still Employed" total represents the young worker group that has been the basis for most of this article's analysis.

Due to differing methodologies, the data may not be consistent with official U.S. Census Bureau figures.

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

20 Movement Across Industries

Young workers group, 1994 versus 2004

Number of Workers in Each Industry in 2004

Industry	1994 Worker Total	Construction	Educational and Health Services	Financial Activities	Information	Leisure and Hospitality	Manufacturing	Natural Resources and Mining
Construction	2,194	925	72	84	46	53	64	206
Educational and Health Services	2,293	72	1,051	92	29	96	12	26
Financial Activities	2,072	108	184	638	62	67	29	41
Information	581	24	42	19	219	22	5	9
Leisure and Hospitality	3,779	240	433	175	84	919	47	93
Manufacturing	1,088	86	72	39	24	79	284	50
Natural Resources and Mining	635	77	31	19	17	14	13	262
Other Services	1,442	95	150	62	29	75	25	40
Professional and Business Svcs.	3,843	316	302	193	124	188	101	257
Trade, Transportation and Utilities	8,211	608	741	398	199	400	143	282
Unknown Industry	411	34	51	25	8	48	6	27
State Government	1,295	36	97	44	20	35	9	22
Local Government*	3,917	171	375	147	69	117	32	55
2004 Worker Total	31,761	2,792	3,601	1,935	930	2,113	770	1,370
Percent change: 1994-2004	-	27.3%	57.0%	-6.6%	60.1%	-44.1%	-29.2%	115.7%

* Includes some tribal government employment

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

21 New Versus Long-Term Residents

Earnings, 2004

	Number of Workers in 2004	Median Quarterly Wage in 2004	Average Total Wages in 2004
Long-Term Residents*	38,060	\$7,817	\$32,925
New Resident Workers**	28,003	\$7,391	\$31,986
By Gender			
Long-Term Males	19,546	\$9,470	\$39,107
New Males**	14,393	\$8,712	\$37,247
Long-Term Females	18,514	\$6,499	\$26,400
New Females**	13,610	\$6,206	\$26,430

* "Long-term" refers to those workers who lived in Alaska in 1994 and worked in 2004. This group is not solely made up of the young workers group featured in this article, because some residents may have lived in Alaska in 1994 but did not work that year.

** "New resident workers," "new males" and "new females" refers to those workers who permanently moved to Alaska after 1994. They are not part of the younger workers group.

Note: This exhibit and Exhibit 19 are the only exhibits in this article that, along with the young workers group (the group of 31,761 workers who were 19 to 29 years old in 1994 and worked both in 1994 and 2004), also includes all individuals who were ages 19 to 29 in 1994. These individuals lived in Alaska or migrated to, out of or within Alaska during the 1994-2004 period, regardless of whether they worked. This latter group is listed in the "New Residents" column.

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

Alaska is also a destination for many young people and during the 10-year period the number of people in this age group actually increased.

Income mobility for young workers was impacted by several factors. The youngest workers, particularly males, were the most likely to see large relative increases to their income. Workers who switched industries did manage to improve their relative earnings; however, workers who remained in their original industry generally earned higher wages in 2004.

New Alaska residents saw slightly lower wages than their long-term counterparts, especially amongst the twentysomething group. The disparity increased with age, indicating that many long-term workers benefited from in-state work experience gained during their early 20s.

Other Services	Professional and Business Services	Trade, Transportation and Utilities	Unknown Industry	State Government	Local Government*
41	151	276	1	104	171
74	120	205	2	157	357
60	121	268	1	134	359
15	37	98	0	30	61
127	319	761	3	206	372
24	70	208	1	38	113
5	42	73	1	24	57
249	90	295	1	112	219
81	685	925	1	259	411
254	526	3,251	1	507	901
18	40	89	1	27	37
30	76	87	0	664	175
118	110	338	2	144	2,239
1,096	2,387	6,874	15	2,406	5,472
-24.0%	-37.9%	-16.3%	-96.4%	85.8%	39.7%

Methodology and Data Sources

Employment and earnings data for wage and salary workers in this study are derived from the Alaska Department of Labor & Workforce Development's Occupational Database. The ODB consists of quarterly unemployment insurance, or UI, wage records. In addition to earnings data, the ODB also contains information regarding occupation, place of work, employer and industry.

The self-employed, fishermen, military or other federal government workers are not included in the UI wage records and are not included in this study. The age and gender of workers were identified by matching the UI wage records with historical Alaska Permanent Fund Dividend applicant files. No age or gender data are available for workers unless they have previously filed a PFD application. Non-salary income, including tips and commissions, is not reported by employers on UI reports and therefore is not included in the data.

The "young workers" group consists of individuals between the ages of 19 and 29 (in 1994) who were employed at some time in both 1994 and 2004. Any inclusion of "new residents" was only allowed if those people were between the ages of 19 and 29 in 1994.