Earnings by Age

An age analysis of Alaska workers’ wages, occupations and industries in 1998

As individuals move through the various stages and phases of their lifetimes, their employment needs and job qualifications change. While age cannot be a determining factor in hiring decisions made by employers, age does play a role in the choices workers make in seeking jobs. A 17-year-old has different motivations and expectations regarding employment than a 48-year-old. From an analysis of the workforce by age groups, job seekers and employment specialists gain insight into Alaska’s job market and employment opportunities.

The Alaska Department of Labor and Workforce Development’s quarterly wage files include data for all workers covered by Alaska’s unemployment insurance program. By matching unemployment wage records for 1998 with Alaska Permanent Fund Dividend (PFD) applicant files from 1991 to 1999, the ages of 299,694 workers (84 percent of wage and salary employees) were determined. This study includes only those workers with wages reported for one or more quarters in 1998 and who applied for a PFD in any year during the 1990s.

This article examines the wages, industries, and occupations of workers in the following five age groups:

- Youth (14 to 18)
- Young adults (19 to 29)
- Adults (30 to 49)
- Older adults (50 to 64)
- Seniors (65 and over).

The ages reported range from 14 to over 90 years of age. The median age overall is 37 years. Adults make up the largest segment with over 50 percent of the workforce. Only one in a hundred workers in 1998 was 65 or older. (See Exhibit 1.)

Age strongly influences wages and salaries

While youth make up nearly seven percent of workers in 1998, their wages account for less than one percent of total earnings. (See Exhibit
2.) Median wages increase with age, peaking at $33,327 for 51-year-olds. Youth have the lowest median annual wage ($1,908) while older adults have the highest ($28,570). (See Exhibit 3.)

The growth in median wages as age increases reflects a shift from part-time, seasonal jobs for youth to full-time, year-round careers for older age groups. Youth and young adult workers are likely to be in school and work fewer hours, which is reflected by their low median wages. Typically, the jobs taken by these younger workers are entry level positions requiring little experience and paying lower wages.

Seniors also have relatively low median wages ($8,097), but not due to lack of job experience. Several factors influence this group’s job choices. Part-time or temporary work may be appealing as workers transition from full-time careers into retirement. Some need to supplement their retirement incomes. Others are motivated to work more by choice than for income. Another factor tending to lower median wages for seniors is the limit on income for individuals receiving Social Security benefits. Under age 65, for every two dollars earned above $9,600, one dollar in benefits is withheld. For those age 65 to 69, the limit rises to $15,500 and the penalty decreases to one dollar in benefits for every three dollars earned. There is no limit for workers age 70 or older. The result of this policy is that seniors must carefully weigh the consequences of working full time or for higher wages.

Experience and training determine occupations

Many occupations with low median ages are entry level jobs requiring little formal education, skills, or experience. These jobs also tend to require physical labor. Occupations with the highest median age, on the other hand, tend to be administrative or supervisory and require experience, training, and education.

Mature workers have the advantage of time

Adults and older adults have had ample time to complete the education and training usually required for high paying jobs. Time in their chosen career gives them additional practice to hone valuable skills, accumulate knowledge for improved judgment, and translate experience into higher productivity. These attributes give the employer a competitive edge and make the older worker more valuable. This is one reason older adults earn 21 percent of total wages although they comprise only 15 percent of workers.

Among occupations, athletes and related occupations, such as coaches and trainers, have the lowest median age, 27. Next are retail salespersons, 29, and helpers, handlers and laborers, 30. Public administration officials and
administrators, postsecondary teachers, and librarians had the highest median age in 1998 at 47. Other occupations with high median ages are social scientists and urban planners, 46, vocational and educational counselors, 45, construction supervisors, 45, and transportation supervisors, 45. (See Exhibit 4.)

Of the 10 industries with the lowest median age, half are in retail trade. The motion picture industry, which includes video stores and movie theaters, has the lowest median age at 20. Other occupations with low median ages include agricultural production—crops, 26, and agricultural services, automotive repair, and amusement and recreation services, each with a median age of 30.

Three major industries registered median ages higher than the statewide average of 37 years. Public administration workers were the oldest at 43 years. State employees, at 44, are two years older than their local government counterparts. Also above the statewide mark are mining, median age 41, and transportation, communication, and utilities industries, 38. The industries with the highest median ages are also associated with the highest median wages. Although employment in these sectors has slowed recently, opportunities in these high-paying jobs still exist. As older workers retire, openings develop for skilled workers to replace them.

Restaurants and grocery stores are the top employers for young workers

Young workers under 19 years of age represent almost seven percent of the 1998 wage and salary workers whose ages were known. Child labor laws governing minors under 18 are designed to prevent part-time work from interfering with schooling and to protect minors from potentially dangerous job assignments. These guidelines apply whether or not the worker is actually a student. Only 14 percent of young workers were 14 or 15 years of age; few occupations are permitted to this age group. Because of these restrictions, few industries are able or willing to employ them. In 1998, half of all the 14 to 15-year-old workers worked in just five industries: eating places (17.2%), grocery stores (11.9%), public administration (7.8%), civic and social associations (7.8%), and elementary and secondary schools (5.4%).

The age group 16 to 18 has more choices in occupations open to them. Cannery work is not allowed for 14 to 15-year-olds, but among 16 to 18-year-olds, cannery worker is the third most popular occupation. Less restrictive work hours also permit more in this age group to work as waiters and waitresses, the choice for 3.6%. The most popular occupations, however, are the same for both groups. One out of five youth aged 16 to 18 works in a fast food restaurant as a food preparation worker. Grocery stores employ another 10 percent as stock clerks and baggers.
Ninety percent of all youth employed in the public administration sector worked for local government.

**Young adults begin to move into careers**

The young adult category includes workers between the ages of 19 and 29. In 1998, 24.3% of wage and salary workers were in this age group. While the top industry for this age group, eating places, is the same as for youth, the proportion of young adults working in restaurants steadily drops from 15.6% at age 19 to 5.6% by age 29. Grocery stores also employ fewer young adults, only 3.5%.

As young adults complete their formal education and begin their careers, employment in occupations requiring training or special skills increases. The construction trades, primarily carpenters, account for 3.7% of young adult workers. Mechanics and repairers represent an additional three percent. Other popular jobs include management-related occupations (2.5%), motor vehicle transportation (2.2%), and protective service occupations (1.9%).

**Adults 30 to 64 favor public administration and education jobs**

For both adults and older adults, the eating places category, while still among the top ranks, drops to third place behind public administration and elementary and secondary schools. The percent of workers in public administration jobs grows from seven percent for workers 30 to 34 years old to nearly 16 percent for those age 50 to 54 years. Other popular industries include hospitals (4.0%), colleges and universities (2.8%), and oil and gas extraction (4.0%). Workers aged 30 to 64 participate in a broader range of industries than youth and young adults, a fact reflected by low percentages of employment in any single industry.

Adult and older adult workers both share the same top four occupations, with the same proportions of employment: general office occupations (four percent), elementary school teachers, janitors and cleaners, and sales clerks, each two percent. Other top jobs for adults include manual occupations (1.9%), carpenters (1.8%), bookkeepers (1.8%), teacher aides (1.6%), secretaries (1.6%), and construction laborers (1.6%). After age 49, the proportion of workers in executive and management related

### Occupations by Median Age

#### 50 or more workers

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Median Age</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers; Postsecondary</td>
<td>47</td>
<td>2,676</td>
</tr>
<tr>
<td>Officials and Administrators, Public Administration</td>
<td>47</td>
<td>1,078</td>
</tr>
<tr>
<td>Librarians, Archivists, and Curators</td>
<td>47</td>
<td>521</td>
</tr>
<tr>
<td>Social Scientists and Urban Planners</td>
<td>46</td>
<td>450</td>
</tr>
<tr>
<td>Supervisors; Construction and Extractive Occupations</td>
<td>45</td>
<td>854</td>
</tr>
<tr>
<td>Vocational and Educational Counselors</td>
<td>45</td>
<td>600</td>
</tr>
<tr>
<td>Supervisors; Transportation and Material Moving</td>
<td>45</td>
<td>374</td>
</tr>
<tr>
<td>Officials and Administrators, Other</td>
<td>44</td>
<td>12,643</td>
</tr>
<tr>
<td>Supervisors; Mechanics and Repairers</td>
<td>44</td>
<td>836</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>43</td>
<td>3,416</td>
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</tbody>
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<tr>
<th>Occupation</th>
<th>Median Age</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes and Related Occupations</td>
<td>27</td>
<td>248</td>
</tr>
<tr>
<td>Salespersons; Retail</td>
<td>29</td>
<td>23,533</td>
</tr>
<tr>
<td>Handlers and Laborers</td>
<td>30</td>
<td>21,437</td>
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<tr>
<td>Helpers</td>
<td>30</td>
<td>2,488</td>
</tr>
<tr>
<td>Other Service Occupations</td>
<td>31</td>
<td>45,923</td>
</tr>
<tr>
<td>Fishers, Hunters, and Trappers</td>
<td>33</td>
<td>293</td>
</tr>
<tr>
<td>Fabricators, Assemblers, &amp; Hand Work Occupations</td>
<td>34</td>
<td>6,965</td>
</tr>
<tr>
<td>Other Agricultural Occupations</td>
<td>34</td>
<td>2,331</td>
</tr>
<tr>
<td>Writers, Artists, and Performers</td>
<td>34</td>
<td>1,074</td>
</tr>
<tr>
<td>Farm Operators and Managers</td>
<td>34</td>
<td>192</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section
occupations grows from 2.5% to 3.6%. Older adults also find job opportunities as secretaries (1.8%), bookkeepers (1.7%), registered nurses (1.6%), and college and post-secondary teachers (1.5%).

Seniors, age 65 and older, made up slightly more than one percent of the workforce in 1998. Only one in 500 workers was 75 years or older. As with adults and older adults, public administration is the top industry for seniors (11.3%), with elementary and secondary schools a close second at 9.2%. Record clerks (3.2%), adult education teachers (3.0%), college and post-secondary teachers (1.9%), and teacher aides (1.8%) are the most popular jobs. Individual and family services together with religious organizations employ five percent of workers age 65 and up. One surprisingly popular occupation is cannery worker. Two percent of seniors chose this physically demanding job. Nearly half of these are employed in the Kodiak Island Borough.

Young adults are the group most likely to have multiple employers

Two-thirds of all wage and salary workers had only one employer during 1998. Except for young adults, aged 19 to 29 years old, the proportion of workers with more than one employer decreases with age. While almost half of the young adults have two or more employers, only 20 percent of seniors do. (See Exhibit 5.) This could indicate a high rate of job turnover for young adults. It could also result from holding more than one job at the same time.

Youth are four times more likely to be new hires

Younger workers are more likely to be newly hired6 by their employers than their older counterparts. Seven out of 10 youth were new hires at some point during 1998 compared to only two out of 10 older adults. (See Exhibit 6.) Forty-four percent of young adults were new hires. This is not surprising since many youth and young adults are entering the workforce for the first time. Although adults have a relatively low new-hire rate of 23.9%, the sheer number of workers in this age group accounts for four out of every 10 hires. In contrast, older adults have the lowest new hire rate. They may be looking ahead to their retirement years and are reluctant to change employers and surrender the benefits they have accrued over their careers.

Once workers pass the age of 65, the new hire rate increases to nearly 25 percent. This may be due to seniors re-entering the workforce after retiring from their former careers. Manpower, a nationwide temporary employment agency, reports that 25 to 30 percent of the individuals they place are at least 50 years old.7
Methodology

Alaska Department of Labor and Workforce Development unemployment insurance wage records for 1998, containing occupations, industries, and wages, were matched with the Alaska Permanent Fund Dividend (PFD) applicant files from 1991 through 1999 to obtain the worker's age. Ages were successfully identified for 84 percent of the 356,258 records in the wage file. Self-employed individuals, federal government workers, non-residents, and workers who were residents but did not apply for a PFD or did not report their age, are excluded from this analysis.

Sources of income other than amounts reported by the employer on the quarterly unemployment insurance tax contribution report, such as the PFD and wages earned outside of Alaska, are not included in this report. Wages for workers with more than one employer in 1998 are the total earned from all employers. Workers employed by more than one employer in 1998 were assigned to the industry and occupation in which they earned the most wages.

Notes:
1 The median is the midpoint of a distribution. Half of the cases are above and half are below the median value.
3 Occupations are based on codes from the Standard Occupational Classification Manual, 1980.
5 This study deals only with residents. Since seafood processing has a high rate of non-resident workers, these numbers do not necessarily reflect the industry as a whole.
6 A worker who did not work for their employer in any of the four previous quarters is considered a new hire. For this article, a worker is counted as a new hire only once during 1998, regardless of the number of times he/she was hired throughout the year.
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