An economist is waiting at a bus stop and notices a dejected young man sitting on a bench. She asks him what’s wrong, and he replies that summer is over, the place where he worked has closed for the winter, and he’s depressed to be out of work. The economist replies, “Don’t worry, then. Seasonally adjusted, you still have a job!”

It’s an old joke, but useful for pointing out that seasonally adjusted job numbers and unemployment rates are a little more complicated than data that haven’t been adjusted.

Last month’s Employment Scene outlined the dramatically changing employment and wage levels in Alaska due to jobs that only happen at certain times of the year. Seasonal adjustment is a statistical method that attempts to eliminate the influence those fluctuations have on the employment and unemployment rates, making the underlying trends easier to see.

Seasonal adjustment works because seasonal swings in employment and unemployment rates follow a predictable pattern. Over the course of the year, Alaska schools open and close, seasonal tourism workers arrive and leave, and fisheries follow mostly regular seasons.

Which numbers are changed

The number of people employed is much larger in the summer in Alaska, and the number unemployed is larger in the winter. Using historical and current seasonal factors, seasonal adjustment smoothes each of these components to create the seasonally adjusted rate, which is the rate reported each month for the nation as well as the state.

Similarly, Alaska’s employers have more work in the summer, so seasonally adjusted monthly employment adjusts the number of jobs up in the winter and adjusts them down in the summer. (See Exhibit 1.)

The reasons for adjusting

Seasonally adjusted rates are useful for comparing market conditions at different times of the year; for instance, January employment is always lower than July, but seasonal adjustment allows comparison of those two months despite the disparity in actual job levels.

The seasonally adjusted unemployment rates and employment levels are also the most current and most cited nationwide statistics that are released monthly, so adjustment allows comparison of Alaska’s labor market conditions to other states and the nation.
Unemployment Rates
January 2001 to September 2012

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

Statewide Employment
Nonfarm wage and salary

<table>
<thead>
<tr>
<th>Preliminary</th>
<th>Revised</th>
<th>Year-Over-Year Change</th>
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</thead>
<tbody>
<tr>
<td>Alaska</td>
<td></td>
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<tr>
<td>9/12</td>
<td>8/12</td>
<td>9/11</td>
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</tbody>
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Total Nonfarm Wage and Salary
- Goods-Producing: 342,900 (900 change)
- Service-Providing: 296,400 (2,400 change)

Mining and Logging
- Mining: 17,300 (800 change)
- Oil and Gas: 13,150 (700 change)

Construction
- 15,300 (100 change)

Manufacturing
- 13,900 (100 change)

Wholesale Trade
- 6,900 (700 change)

Retail Trade
- 35,900 (500 change)

Food and Beverage Stores
- 6,300 (0 change)

General Merchandise Stores
- 9,900 (0 change)

Transportation, Warehousing, Utilities
- Air Transportation: 6,200 (200 change)

Information
- 4,400 (200 change)

Financial Activities
- 15,200 (300 change)

Professional and Business Services
- 28,900 (100 change)

Government
- 46,000 (1,300 change)

Health Care
- 32,300 (600 change)

Leisure and Hospitality
- 36,200 (0 change)

Other Services
- 11,000 (400 change)

State Government
- 26,700 (0 change)

Local Government
- 43,100 (1,000 change)

Local Government Education
- 25,200 (1,000 change)

A dash means confidence intervals aren’t available at this level.

Unemployment Rates
Boroughs and census areas

Alaska Statewide: 9.2%
United States: 7.9%

Most processors are men

Age and gender are only available for the 23.6 percent of processors who are Alaska residents.

Seafood Processors
Continued from page 11

Seafood harvesters and other agricultural workers, and private household workers. For estimates of fish harvesting employment and other fisheries data, go to labor.alaska.gov/research/seafood/seafood.htm.

Includes public school systems. Variations in academic calendars from year to year occasionally create temporarily large over-the-year changes.

The median hourly wage for seafood processors was $9.03 per hour in 2011, but those working in Southeast made a higher median wage by nearly $3 per hour.

Economist Josh Warren contributed to this article.