

Calculating Zones of Underemployment and Other Measures Used in Alaska Employment Preference Determinations

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- R&A was asked to provide details on how zones of underemployment are calculated
- R&A's role is limited to running a set series of calculations every other fiscal year
- The commissioner uses the calculations to determine zones of underemployment and which of their occupations qualify for resident hire preference

Statutes and Regulations

- AS 36.10.150 – Determination of zone of underemployment
- 8 AAC 30.064 – Hiring preference for residents of zone of underemployment
- 8 AAC 30.068 – Determination that lack of employment opportunities has substantially contributed to serious social or economic problems
- 8 AAC 30.069 – Determination of peculiar source of unemployment

Two Main Calculations

- **Zone of underemployment** – calculated by comparing seasonally adjusted unemployment rates for Alaska and the U.S.
- **Occupations within the zone that qualify for resident hire preference** – calculated by combining several data sets and applying a series of formulas

Zone of Underemployment

- Alaska and U.S. average seasonally adjusted unemployment rates for the most recent 12-month period available
- Rates compared to see whether Alaska's rate was higher or lower than the nation's over that time
- If Alaska's rate was 10 percent higher, commissioner generally deems the entire state a zone of underemployment

Calculation Example

- For the 2019 determinations, rates were 6.8 percent for Alaska and 3.8 percent for the U.S.
- Alaska's rate was about 79 percent higher: well above the 10 percent threshold for zone of underemployment
- $6.8 - 3.8 = 3.0$
- $(3.0 / 3.8) * 100 = 78.9\%$ above U.S. rate

Occupations Evaluated for Resident Hire Preference

- | | | |
|----------------------------|---------------------------|-----------------------------|
| 1.Boilermakers | 9.Foremen and Supervisors | 17.Plumbers and Pipefitters |
| 2.Bricklayers | 10.Insulation Workers | 18.Roofters |
| 3.Carpenters | 11.Ironworkers | 19.Sheet Metal Workers |
| 4.Cement Masons | 12.Laborers | 20.Surveyors |
| 5.Culinary Workers | 13.Mechanics | 21.Truck Drivers |
| 6.Electricians | 14.Millwrights | 22.Tug Boat Workers |
| 7.Engineers and Architects | 15.Painters | 23.Welders |

For an occupation to be eligible for resident hire employment preference, ALL of these criteria must be met:

- Nonresident percentage in that occupation is over 10% (*column 3, next slide*)
- Percent of total residents in that occupation who are unemployed is over 10% (*column 5*)
- Percent of unemployed residents with experience in that occupation relative to its total workers is over 10% (*column 6*)

Calculation Example

To qualify, columns 3, 5, and 6 must all be 10% or more

Table 1 Employment Preference Determinations Zone of Underemployment Prepared June 2019, Third Quarter 2018 Labor Supply and Demand Data							
Occupation	1	2	3	4	5	6	Qualifies for Hiring Preference?
	Resident Workers	Nonresident Workers	Percent Nonresident Col2/ (Col1+Col2)	Unemployed Residents Available for Work	Percent Unemployed Residents Col4/ (Col1+Col4)	Percent of Available Unemployed Residents to Total Workers Col4/ (Col1+Col2)	
Carpenters	2,628	453	14.7	905	25.6	29.4	Yes
Engineers and Architects	3,121	555	15.1	290	8.5	7.9	No

Data Sources Used in Occupational Calculations

- **Wage records** – used to calculate workers by occupation
- **Permanent Fund Dividend applications** – used to calculate Alaska residency
- **Claims for unemployment insurance** – used to determine number of unemployed workers available for work
- **Active resumes and work history in ALEXsys** – Used to identify workers looking for work in particular occupations

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