



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Transportation and Public Facilities

Civil Rights Office
P.O. Box 196900
Anchorage, AK 99519-6900
Main Phone: 907-269-0851
Fax number: 907-269-0847
www.dotcivilrights.alaska.gov

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Elizabeth Hoffman
Civil Rights/Realty Program Specialist
FHWA Alaska Division
P.O. Box 21648
Juneau, AK 99801

RE: Alaska Department of Transportation & Public Facilities (ADOT&PF) FFY 2017 On-The-Job Training (OJT) Program Goals/Projections, and Methodology

Dear Ms. Hoffman,

The ADOT&PF Civil Rights Office (CRO) has finalized its OJT Program apprenticeship/trainee goals for FFY2017. The CRO has established goals in accordance with 23 CFR 230.111, and the process is outlined in the attached methodology.

- **42 OJT Positions**
- **21,613 OJT Hours**

The preceding projections were derived utilizing the approved FHWA OJT formula which is detailed in the attached methodology.

These projections are subject to change as a direct result of projects actually bidding. The CRO will closely monitor these projections over the year.

Respectfully,

A handwritten signature in black ink, appearing to read "Norma M Lucero".

Norma M Lucero
Civil Rights Office Acting Manager

Alaska Department of Transportation & Public Facilities Civil Rights Office

On-the-Job Training Goals

Federal Fiscal Year 2017

To project the number of On-The-Job Trainee (OJT) positions and hours to be approved during FFY 2017, the Alaska Department of Transportation & Public Facilities (ADOT&PF) Civil Rights Office (CRO) compiled data from multiple sources, analyzed the data, and based on the findings calculated the projected number of OJT positions and hours to be approved during FFY 2017.

Methodology

The first step in projecting the number of OJT positions and hours to be approved during FFY 2017 is to determine the number of positions and hours that have been approved federal fiscal year-to-date. A review of current OJT files revealed that as of the date of this writing, there have been 11 positions and 5,500 hours advertised during FFY 2017.

The next step in the process is to establish an estimate for the total remaining dollars to be advertised during the federal fiscal year. To determine this figure the CRO reviewed data from the ADOT&PF All Region Tentative Advertising Schedule; a report that includes information on projects that ADOT&PF anticipates advertising for up to 12 months into the future. Because the OJT Program provisions do not apply to all projects listed on the Tentative Advertising Schedule, the CRO took steps to refine the data to reflect only projects for which OJT Program provisions are applicable. These refinements included the exclusion of FAA-, FTA-, and State-funded projects, as well as projects not expected to be advertised during FFY 2017. Additionally, projects for which the engineer's estimated range was below 1.5 million dollars were excluded on the basis that while these projects are reviewed for OJT opportunities, they are not typically assigned OJT goals due to the dollar value and duration of the contract. Further, the Tentative Advertising Schedule does not provide an estimate of exact dollar cost by project, and instead lists an engineer's estimated range for projects. The CRO utilized the lower-bounds of the engineer's estimated ranges to arrive at a conservative estimate for the total dollars to be advertised during the remainder of FFY 2017. This process yielded an estimate of \$217,500,000 to be advertised on FHWA-assisted contracts during the remainder of FFY 2017.

To arrive at a projection of OJT positions based on estimated total dollars to be advertised, the CRO established an estimate for non-labor costs to use in its calculations. The CRO pulled a sample of projects from each ADOT&PF operating region that were advertised during FFY 2016, and used this data to establish the average dollar-weighted non-labor costs as a percentage of the engineer's estimates. This procedure was based on the premise that recently advertised projects would likely reflect a similar cost structure to projects that will be advertised in the near future. Through this process the CRO estimated that non-labor costs will comprise 67% of the total project costs on projects advertised in FFY 2017.

Based on the previous information, the CRO calculated the projected number of OJT positions to be approved during the remainder of FFY 2017 using the following formula, which is based off of the approved ADOT&PF OJT Project Goal Methodology.

Where the labor factor of costs excluding non-labor costs is 30%, the average cost per employee is \$100,000.00, the recommended ratio of trainees/apprentices to journey workers is 1:5, and:

- X = Lower bound of Engineer’s Estimated Range for a project expected to be advertised in FFY 2017
- Y = Labor Cost Value for projects advertised in FFY 2016

$$\frac{\{(\sum X_i) \times Y \times 30\%\}}{\$100,000} = \text{Estimated Total Workforce}$$

$$\text{Projected OJT Positions} = \frac{\text{Estimated Total Workforce}}{6}$$

Then the projected number of OJT Positions to be approved on projects that will advertise during the remainder of FFY 2017 is:

$$\frac{\{(\$217,500,000 \times 33\%) \times 30\%\}}{\$100,000} = 215$$

$$\text{Projected OJT Positions} = \frac{215}{6} = 36$$

The CRO then added the projection of OJT positions to be approved during the remainder of FFY 2017 with the number of OJT positions that have already been approved during FFY 2017 to arrive at the following preliminary projection for total OJT positions to be approved in FFY 2017:

$$**11 positions approved + 36 projected positions = 47 Total OJT Positions**$$

ADOT&PF also performed calculations to arrive at a projection for FFY 2017 OJT hours based on the approved ADOT&PF OJT Project Methodology. Where the labor factor of costs excluding non-labor costs is 30%, the average cost per worker hour is \$75.00, the recommended ratio of trainees/apprentices to journey workers is 1:5, and:

- X = Lower bound of Engineer’s Estimated Range for a project expected to advertise in FFY 2017
- Y = Labor Cost Value for projects advertised in FFY 2016

$$\frac{\{(\sum X_i) \times Y \times 30\% \}}{\$75.00} = \text{Estimated Total Worker Hours} = H$$

$$\frac{H}{5} = \text{Total Trainee and Apprentice Hours} = T$$

$$\text{Projected OJT Hours} = T * 30\%$$

Following this method, the CRO arrived at the following projection for OJT hours to advertise during the remainder of FFY 2017:

$$\frac{\{(\$217,500,000 \times 33\%) \times 30\% \}}{\$75.00} = 287,100$$

$$\frac{287,100}{5} = 57,420$$

$$\text{Projected OJT Hours} = 57,420 \times 30\% = 17,226$$

As previously mentioned, there have been 5,500 OJT hours approved year-to-date. The CRO combined this figure with its estimation of OJT hours to be approved during the remainder of FFY 2017 to arrive at a preliminary projection for total OJT hours for FFY 2017 as shown below:

$$\mathbf{5,500 \text{ hours awarded} + 17,226 \text{ projected hours} = 22,726 \text{ Total OJT Hours}}$$

The CRO took additional steps to account for other factors that are not addressed in the ADOT&PF OJT Project Methodology. Variables such as project duration and scope of work can impact the number of OJT positions on a project without regard to the basic bid amount. To account for these factors, the CRO reviewed FFY 2016 year-end data to determine the number of OJT positions and hours that were awarded in that year. Based on the premise that ADOT&PF will advertise contracts with similar scopes of work during FFY 2017, the CRO averaged the preliminary projections for OJT positions and hours with the FFY 2016 positions and hours approved to project the number of OJT positions and hours to be approved during FFY 2017. The following calculations demonstrate this process:

$$\frac{47 \text{ Projected OJT Positions} + 37 \text{ Positions Approved in FFY 2016}}{2} = 42 \text{ OJT Postions}$$

$$\frac{22,726 \text{ Projected OJT Hours} + 20,500 \text{ Hours Approved in FFY 2016}}{2} = 21,613 \text{ OJT Hours}$$

Based on the data reviewed, the CRO projects approving 42 OJT positions and 21,613 OJT hours during FFY 2017.