

State of Alaska PY 2011 Workforce Information

Performance Report



July 1, 2011 to June 30, 2012

Statewide Workforce Information System

PY 2011 accomplishments

During Program Year (PY) 2011, the Alaska Department of Labor and Workforce Development's Research and Analysis Section (R&A) supported the Workforce Information Grant core products that are outlined in TEGP No. 4-11. The following are summaries of how R&A met the five core grant objectives.

Populate the Workforce Information Database with state and local data

Alaska updated the Workforce Information Database (WID) core tables with required data sets as established by the Analyst Resource Center and also added a number of data fields for internal use. The WID used software version 2.4 in PY 2011 and ran the database on an MS-SQL server.

One example of how Alaska uses WID is the Alaska Career Information System (AKCIS). The system uses WID data to provide Alaska occupational wages, industry employment, industry and occupational projections, and occupational licensing information. AKCIS links this state-specific information into one program, creating an interactive, Web-based education and planning tool for students and career explorers.

<http://akcis.org/>.

Produce and disseminate industry and occupational employment projections

Alaska's 2010-2020 industry and occupational employment projections are scheduled to be published in the October 2012 issue of *Alaska Economic Trends*, the Department of Labor and Workforce Development's monthly economic news magazine.

This year's production cycle was delayed because of unforeseen events. In June 2012, the Projections Managing Partnership notified R&A that the deadline for the long-term projection deliverable was extended to August 31, 2012 due to a two month delay in the release of national projections by the Bureau of Labor Statistics (BLS). Also affecting the schedule was turnover in program staff last spring.

The short-term 2011-2013 occupational projections are nearing completion at the time of this report. Those projections should be produced and delivered to the projections partnership by mid-September.

When completed, both the industry and occupational short- and long-term projections will also be published on R&A's Web site and will be incorporated into several R&A products including the Alaska Occupations Webpage, the Alaska Career Lattice, the Alaska Local and Regional Information Web site, and the Alaska Career Information System.

Once again, R&A will create and publish an Alaska top jobs list. To rank as a top job, the occupation must rank in one of the top two wage quartiles of the Occupational Employment Statistics (OES) wage survey and have either projected growth of at least 75 jobs and above average projected growth or be among the top 50 occupations for projected job openings over the 2010-2020 period.

In addition to the occupational projections work, R&A produced and published a short-term 2012 industry forecast for statewide and for the Anchorage/Mat-Su, Fairbanks, and Southeast regions of the state. The forecast was featured in the January 2012 issue of *Alaska Economic Trends*.

Change in methods

Alaska will continue to use an alternate approach to produce occupational projections. It differs from the BLS methodology of using OES staffing patterns to determine private sector employment projections and relies instead on actual reported occupational data that employers are required to provide under state unemployment insurance laws. This creates a nearly ideal data set to develop occupational staffing patterns by industry. R&A uses its Occupational Database (ODB), which provides a much more reliable and consistent staffing pattern than what can be obtained from OES. Below are some key points in Alaska's decision to use its ODB instead of OES when developing staffing patterns—a key component in producing occupational projections.

1. BLS's OES-based staffing patterns are based on relatively small sample sizes.
2. The OES uses imputed data (i.e., it replaces a non-responding firm's data with another firm's wage data). Occasionally, imputation comes from out of state donors who are in industries that differ from those in Alaska. This introduces biases of unknown magnitude and direction, which can result in occupational staffing patterns not reflective of those in the state.
3. OES staffing patterns are uncharacteristically erratic from year to year with data having high standard rates of error from non-response, atypical reporting, and biases from imputation as mentioned above.
4. If a firm over reports on the OES survey, it is difficult for OES to use the data beyond what was requested even though doing so would provide more complete information.

With problems 1 through 3, there is no effective way to significantly improve the staffing pattern estimates using only data provided by the OES surveys. Imputed data can be removed and/or replaced using alternate means of matching employer records; however, the end product is still derived from a sample.

Alaska's unique ODB makes problem 4 irrelevant, and in the process alleviates problems 1 and 2, and greatly minimizes problem 3. Using the ODB provides a near-census of all Alaska's nonfederal

unemployment insurance-eligible wage and salary employers and the occupations they employ. Using this dataset provides more accurate and reliable staffing patterns that can be applied to the projections.

Because ODB does not include federal employment, R&A still uses the BLS staffing pattern data for federal employment in Alaska.

Conduct and publish relevant economic analyses, special workforce information, and/or economic studies determined to be of benefit to the governor and the AWIB

One example of relevant economic analysis is R&A's annual report on the number and percentage of nonresidents working in Alaska. The most recent version, *Nonresidents Working in Alaska 2010* was published in January 2012. The report outlines resident hire in Alaska by industry, occupation, and geographic area. Maximizing resident hire remains a high priority among policymakers and Alaska's Workforce Investment Board.

R&A provided printed copies of this publication to the governor, state legislators, and other interested parties. The report is available on R&A's Web site at: <http://labor.alaska.gov/research/reshire/nonres.pdf>

To publish three or four articles a month in its monthly economic news magazine, *Alaska Economic Trends*, R&A is constantly working on special projects and economic analyses from industry and geographic profiles to housing and population studies, among others.

In the last two months alone, R&A has published articles: 1) comparing foreclosures in Alaska to the U.S. as a whole, 2) analyzing Alaska's mix of employers by firm size, 3) identifying the degree to which initial unemployment rates are subsequently revised, 4) analyzing how baby boomers and the large resource-development projects that brought many of them to Alaska are affecting the state, 5) profiling the decline of industrial-sized timber operations on Prince of Wales Island, 6) comparing household and personal income data across the state, and 7) identifying the slightly higher degree of racial diversity in the state's labor force compared to the nation as a whole.

Post products, information, and reports on the Internet

R&A's Web site: <http://laborstats.alaska.gov/> is the section's primary dissemination tool for its products, reports, and data.

Products

1. *Alaska Economic Trends* is R&A's monthly economic news magazine. It has the largest distribution of any printed R&A publication with 36,125 copies produced in PY 2011. There

were 1,400 additional monthly subscribers who received the publication electronically. During this program year, historical issues of *Trends* were added to R&A's web site going back to 1978. Also, a new search feature was developed and added to the website so that users can search on issues by title of article, author, and publication date or by using a text search feature. The following links are to the general *Trends* website and to the new search feature:

<http://labor.alaska.gov/trends/>

<http://labor.alaska.gov/trends/http://live.laborstats.alaska.gov/trends/>

2. **The Alaska Training Clearinghouse** provides information for Alaska training providers and identifies training programs specific to occupations. Each program on Alaska's eligible training provider list has an instructional program code that links the program to one or more occupations based on the National Crosswalk Service Center's occupations-to-instructional-programs crosswalk file.
<http://labor.alaska.gov/research/training/atc/>
3. **The Alaska Occupations Webpage** provides a wide range of labor market information on more than 500 occupations, including WID and non-WID data sets. Users can get a report presenting an occupation's employment and projected rate of growth and the future number of job openings expected; national, state, and sub-state wage information; labor force indicators such as the percentage of nonresident workers and percent of older workers as well as licensing, training characteristics, and training provider and program information. Specific areas of occupational information are also available for special types of occupation groups such as gas line, green jobs, and health care occupations.
<http://labor.alaska.gov/research/occs/alaskaoccs/home.htm>
4. **The Alaska Local and Regional Information** webpage gives users a snapshot of an area's resident workforce. ALARI data are by place of residence. Information is available for Alaska statewide and by region, borough/census area, and community. Residency is established by matching wage record file data with Alaska's unique Permanent Fund Dividend (PFD) information. R&A recently added WID tax and property values to ALARI.
<http://labor.alaska.gov/research/alari/>
5. **The Alaska Career Lattice** was added this year. The lattice work expanded on the work done to create the career ladder. The lattice is designed to assist job seekers, career counselors, education administrators, and training providers identify occupations that are the most likely to lead to advancement to or from a particular occupation. The career lattice work is based on "real world" data analysis of occupation-to-occupation transitions by Alaska workers as well as extensive analysis of job characteristics data. Nine years of occupational data from approximately 18,000 firms were analyzed to identify the most common paths of advancement or transfer from occupation to occupation. Analyzing worker movements using the Alaska's ODB program data was a very effective tool for identifying likely career lattice links. Additionally, job characteristics data obtained from

O*NET (Occupation Information Network) were also extensively analyzed and used to assess the similarity and relative levels of occupations. Analysis of O*NET data on knowledge, skills, abilities, detailed work activities, tools and technologies, education, training and work experience all contributed to determinations of what occupations are most related to each other and their relative levels. Wage data from the Bureau of Labor Statistics were also used to assess relationships. Similarity and level scores were determined and analysts reviewed occupation-to-occupation combinations that met minimum thresholds before placing occupations on the lattice. After the lattice was developed, the economist who created the career lattice was invited to present his work at the U.S. Department of Labor, Employment and Training Administration's Region 6 Technical Assistance Forum which was held in San Francisco, CA, November 2-3, 2011. <http://live.laborstats.alaska.gov/cl/cloccs.cfm>

Information

R&A provides the following information and data sets on its Web site:

Workforce -

- Size of the labor force (total number of people employed plus those seeking employment)
- Number and percent of workers unemployed
- Number and percent of the workforce that were not Alaska residents
- Number and percent of new hires
- Number of layoffs
- Fish harvesting employment
- Number and details of work-related injuries, illnesses, and fatalities

Industry -

- Monthly estimates of payroll jobs by industry
- Quarterly employment and earnings by industry
- Short-term employment forecasts by industry
- Ten-year employment forecasts by industry
- Number of new hires by industry
- Number of people affected by mass layoffs

Occupation -

- Alaska Occupations Information
- Employment and wages by occupation
- Career and occupational information
- Ten-year occupational forecast
- Number of new hires by occupation
- Job-to-job links in a typical career path
- Alaska green jobs information and data

Housing -

- Costs related to buying, building, and renting housing in the state

Training -

- Alaska Training Clearinghouse (contains Alaska training providers and programs information and identifies training programs specific to occupations)
- Employment and earnings of training program participants

Population and census -

- Current and projected population
- Maps
- ACS and decennial census related information
- Migration data and information

Reports

In PY 2011, R&A completed several reports and posted them on its Web site:

1. ***Alaska Population Projections 2010–2035***
Published April 2012 - <http://labor.alaska.gov/research/pop/projected/pub/popproj.pdf>
2. ***Unemployment Insurance Actuarial Study and Financial Handbook, 2010***
Published November 2011 - http://labor.alaska.gov/research/uiprog/UI_Actuarial_Study.pdf
3. ***Residency Analysis of Alaska Workers–2010***
Published January 2012 - <http://labor.alaska.gov/research/reshire/nonres.pdf>
4. ***Training Program Performance, 2010***
Published February 2012 - <http://labor.alaska.gov/research/training/training.pdf/>

R&A's Web site

Nearly every R&A product is available on its Web site, <http://laborstats.alaska.gov/>. The site was visited by nearly 35,000 users on average each month in PY 2011, and downloads of R&A publications and products reached 1.4 million. *Alaska Economic Trends* accounted for about 40 percent of all downloads, at about 578,000.

The R&A web site is a combination of static html pages residing on the department's web servers and interactive database driven pages using ColdFusion programming applications. The ColdFusion pages reside on a separate off-site server contracted with a 3rd party company. The data base driven web pages derive data from the WID database and present it through custom built tables. In PY2011, R&A converted the following products to ColdFusion from static web pages:

- Alaska Training Clearinghouse - <http://live.laborstats.alaska.gov/atc/>
- Alaska Occupations Information - <http://live.laborstats.alaska.gov/occ/alloccs.cfm/>
- ALARI (Alaska Local and Regional Information) - <http://live.laborstats.alaska.gov/alari/>
- Alaska Career Ladder/Lattice - <http://live.laborstats.alaska.gov/cl/cloccs.cfm/>
- Unemployment Data - <http://live.laborstats.alaska.gov/labforce/>
- Wages in Alaska - <http://live.laborstats.alaska.gov/wage/>
- American Community Survey - <http://live.laborstats.alaska.gov/cen/acsarea.cfm/>
- Census Demographic Profiles - <http://live.laborstats.alaska.gov/cen/dparea.cfm/>
- Census Redistricting Data (PL 94-171)-
<http://live.laborstats.alaska.gov/cen/redistrarea.cfm/>
- Alaska Economic Trends Search - <http://live.laborstats.alaska.gov/trends/>
- Employer Search (Infogroup) - <http://live.laborstats.alaska.gov/employers/index.cfm/>
- The migration circle is ColdFusion - <http://live.laborstats.alaska.gov/pop/migrcircle.cfm/>
- Occupational Forecast - <http://live.laborstats.alaska.gov/occfst/>

Partner and consult on a continuing basis with the AWIB and other key workforce and economic development partners and stakeholders

During PY 2011, R&A worked with the Alaska Workforce Investment Board staff and committee members to provide products and services that support AWIB's strategic workforce development and training plan. Alaska's workforce board has been consistently supportive of R&A's workforce products and services.

R&A staff participated and made a number of presentations at AWIB meetings and executive committee conference calls. R&A participates or supports several AWIB sub-committees and is developing an economic briefing document for AWIB use.

Customer satisfaction assessment

Alaska used several methods to collect and interpret customer needs and satisfaction:

- **Customer satisfaction survey** - R&A maintained a Web-based user survey on its site. Customers who completed the survey were mostly satisfied with the products and services that R&A offers. Of those who were familiar with the data they were seeking or using, all expressed satisfaction with the Web site.
- **Informal discussions and collaboration** - R&A worked closely with its primary user groups — including the AWIB, employers, and the Alaska Department of Labor and Workforce Development's Employment Security and Business Partnerships divisions — to meet data needs. Alaska's principal customers expressed strong support for R&A and its services and products.

- **Information requests** - R&A tracked information requests for data. Staff who responded maintained an electronic log of the customer types, what they requested, and what R&A provided. Staff also met directly with several customers during the year and provided tailored reports to meet their needs.

Though Alaska's primary customers didn't request any specific improvements, R&A will continue to work with them to align its products and services with their needs. At least as importantly, R&A will regularly assess its own products and services and constantly be looking for ways to improve, expand, and simplify them.

###