

Wyoming's PY 2015 Workforce Information Grant Performance Report

Over the past two decades, Research & Planning (R&P) has built an infrastructure of administrative databases, relationships with data providers, associated establishment survey work, and analytical strategies under the WIG grant, state funds, and other types of funds. Because of the extensive databases, State funds were awarded to R&P for the evaluation of the Hathaway Scholarship Program, Wyoming's merit-based scholarship. To accompany the State funds for the scholarship evaluation, R&P was awarded a three-year, \$722,000 Workforce Data Quality Initiative (WDQI) grant. The WDQI grant further expanded R&P's databases to include student data from the Wyoming Department of Education (WDE), University of Wyoming (UW), and Wyoming Community College Commission (WCCC). The databases now contain records from wage records in Wyoming and 11 other states, postsecondary financial aid, postsecondary degree awarded, National Student Clearinghouse, Quarterly Census of Employment and Wages (QCEW), Wyoming Workforce Development Training Fund for incumbent workers, and Vital Statistics. Because the funds from the State Legislature for the Hathaway Scholarship and, before a one-year extension, the WDQI grant expired June 30, 2016, \$85,158 of the initial \$282,549 award remains after the first year.

The infrastructure developments built under the WIG and WDQI grants positioned R&P to provide the best analysis for Wyoming's WIOA Unified Plan. In late 2015, R&P staff spent many hours working on the industry sector and supply and demand analysis. As a result, approximately one-third of Wyoming's Unified Plan was provided by R&P. According to the Unified Plan, R&P's future roles in the Plan include evaluating WIOA programs for effectiveness using longitudinal tracking, providing information about the workforce system, and assessing program participants' success upon program completion.

Throughout PY 2015, R&P focused mainly on education and earnings outcomes of Wyoming students. R&P worked closely with the WDE, WCCC, and UW to create and publish products that would be useful for a variety of customers. Through customer consultation and activities to meet customer needs, R&P built partnerships

with the educational entities that resulted in the publication, *Wyoming's Hathaway Scholarship Program: A Workforce Outcomes Evaluation of a State Merit-Based Scholarship Initiative Using Administrative Records*, the presentation titled *Wyoming's Hathaway Scholarship Program and Workforce Outcomes* to the Wyoming Joint Education Committee, as well as other forthcoming publications. As WIOA is implemented, R&P will carry out the working relationship with the community colleges. R&P has also built a partnership with the Wyoming Workforce Development Council (WWDC) and presents at meetings to satisfy customer needs. Because of the abundance of work R&P put into projects for these four entities, overlap occurs in the following sections of this report where the projects for these entities are applicable.

I. Grantee Activities and Core Deliverables

i. Workforce Information Database (WIDb)

The Workforce Information Database (WID) resides on Research & Planning's (R&P) SQL Server. R&P's SQL Server contains our databases for all of the following: Workforce Data Quality Initiative (WDQI), Quarterly Census of Employment and Wages (QCEW), Occupational Employment Statistics (OES), Wage Records (WR), Unemployment Insurance Claims (UI), Education Enrollment (WDE k-12), Community College Enrollment and Graduation (WCCC), University of Wyoming Enrollment and Graduation (UW), Vital Records (Births, Deaths, Marriages, and Divorces WDH), Driver's License (WYDOT), Health Care Licensing Data, Surveys, etc. The server houses all of the data that is uploaded to the WID and makes the WID obsolete.

R&P's Workforce Information Database is current as of June 30th, 2016. While many of the files produced by the Bureau of Labor Statistics (BLS) programs are revised monthly our update schedule occurs quarterly. This is due to analyst resource availability and our normal quarterly data capture

schedule. The BLS data are collected as created, archived, and imported on the quarterly schedule corresponding to the second week following the beginning of a calendar quarter.

Extent to which the activities conform to schedule: The WID portion of the WIG conforms to specified guidelines and was completed on schedule.

ii. Industry and occupational employment projections

Research & Planning completed the statewide short-term (2015-2017) industry and occupational projections before the February 29, 2016 deadline. The short-term industry and occupational projections were featured in the February 2016 issue of *Wyoming Labor Force Trends*.

Long-term (2014-2024) industry and occupational projections were completed before the June 30, 2016 deadline. Wyoming's analyst developed both long-and short-term projections using the Projections Suite (PS) software system. The PS system is well supported via the Projections Central Support website. Both long- and short-term projections were published on our website and uploaded to the Projections Central website. With the continued low energy prices and associated layoffs in the coal mining and oil & gas sectors, our customers have sought out our short-term occupational projections data for guidance in possible re-employment opportunities for laid off workers.

R&P's projections analyst attended the Projections Managing Partnership (PMP) Summit in Minneapolis, Minnesota on June 6-7, 2016. The PMP Summit was helpful, especially with preparing for the new occupational separations methodology that states will use for the 2016-2026 long-term projections.

iii. Annual economic analysis and other reports

The Workforce Information Grant funds used in conjunction with infrastructure made possible by R&P's third round WDQI award placed R&P in the position to provide the economic data for Wyoming's WIOA Unified Plan. The Workforce Planning Report 2016, based on the WIOA plan, conforms to the guidelines and was completed on schedule. The Economic Analysis Report can be found at

<http://doe.state.wy.us/LMI/trends/0416/toc.htm>.

The Workforce Planning Report 2016 discusses major components in six chapters:

- Chapter 1: Economic Analysis
- Chapter 2: Global Demand for Oil, Gas, and Coal
- Chapter 3: What Does Wyoming's Unemployment Rate Really Mean?
- Chapter 4: Initial Unemployment Insurance Claims Increase 22.9% in 2015
- Chapter 5: Wyoming Employment Growth Lags Behind Surrounding States
- Chapter 6: Wyoming Employment and Sector Analyses

PY15 Publications:

WE Connect: Employment, Earnings, and Postsecondary Enrollment of Wyoming High School Students, November 2015

- Part 1: Wyoming High School Students' Earnings and Postsecondary Enrollment
http://doe.state.wy.us/LMI/education_we_connect/WE_Connect_Part_1.pdf
- Part 2: Opportunity Cost of Pursuing a Postsecondary Education in Wyoming
http://doe.state.wy.us/LMI/education_we_connect/WE_Connect_Part_2.pdf
- Part 3: Graduation and Work Experience for Students with Special Needs
http://doe.state.wy.us/LMI/education_we_connect/WE_Connect_Part_3.pdf
- Part 4: Turnover Rate and Labor Market Outcomes for Wyoming High School Students
http://doe.state.wy.us/LMI/education_we_connect/WE_Connect_Part_4.pdf

- Part 5: Wyoming High School Students' Postsecondary Enrollment and Awards

http://doe.state.wy.us/LMI/education_we_connect/WE_Connect_Part_5.pdf

Occasional Paper No. 8: The Education and Work Experience of Youth in Wyoming's Counties

<http://doe.state.wy.us/LMI/occasional/occ8.pdf>

Postsecondary Outcomes in Wyoming and 11 Other States: University of Wyoming

http://doe.state.wy.us/LMI/education_we_connect/UW_Table.htm

Postsecondary Outcomes in Wyoming and 11 Other States: Community Colleges

http://doe.state.wy.us/LMI/education_we_connect/WCCC_Table.htm

Wyoming's Hathaway Scholarship Program: A Workforce Outcomes Evaluation of a State Merit-Based Scholarship Initiative Using Administrative Records

http://doe.state.wy.us/LMI/education_we_connect/hathaway2016/toc_hathaway.htm

R&P also releases the monthly publication *Wyoming Labor Force Trends* containing special studies and reports. Every issue of *Trends* contains:

- State Unemployment Rates – Seasonally Adjusted
- State Unemployment Rates – Not Seasonally Adjusted
- Current Employment Statistics (CES) Estimates and Research & Planning's Short-Term Projections
- Wyoming Nonagricultural Wage and Salary Employment
- Economic Indicators
- Wyoming County Unemployment Rates
- Wyoming Normalized Unemployment Insurance Statistics: Initial Claims
- Wyoming Normalized Unemployment Insurance Statistics: Continued Claims

Featured articles and other data published in *Trends* in PY 2015 include:

July - <http://doe.state.wy.us/lmi/trends/0715/toc.htm>

- Local Jobs and Payroll in Wyoming in Fourth Quarter 2014: Slight Slowdown in Payroll and Job Growth
- Total Wages, Average Monthly Employment and Average Monthly Wage Changes for Wyoming by Year/Quarter: 2006Q1 to 2015Q1
- Research & Planning Publishes New Hires Estimates for 2014
- Continued Unemployment Insurance Claims Increase in 2015
- Persons Working in Jobs Covered by Wyoming State Unemployment Insurance, First Quarter 2015
- Research & Planning Offers County-Level Data

August - <http://doe.state.wy.us/lmi/trends/0815/toc.htm>

- Understanding Wyoming's Growing Education and Employment Database

September - <http://doe.state.wy.us/lmi/trends/0915/toc.htm>

- Unemployment Insurance Benefits: What Proportion of Wyoming Workers Would be Eligible if They Lost Their Jobs?
 - Distributed nationally by The Council for Community and Economic Research
- Occupation Spotlight: Heavy & Tractor-Trailer Truck Drivers

October - <http://doe.state.wy.us/lmi/trends/1015/1015.pdf>

- Local Jobs and Payroll in Wyoming in First Quarter 2015: Job Losses Appear in the Oil & Gas Sector
- Employment and Wages by Size Class and Industry, 2015Q1
- Total Wages, Average Monthly Employment and Average Monthly Wage Changes for Wyoming by Year/Quarter: 2006Q2 to 2015Q2
- Wyoming Occupational Fatalities Increase to 37 in 2014

- Persons Working in Jobs Covered by Wyoming State Unemployment Insurance, Second Quarter 2015
- Quarterly Turnover Statistics by Industry, First Quarter 2015

November - <http://doe.state.wy.us/lmi/trends/1115/toc.htm>

- WE Connect, Part 1: Wyoming High School Students' Earnings and Postsecondary Enrollment
- WE Connect, Part 2: Opportunity Cost of Pursuing a Postsecondary Education in Wyoming (Abstract)
- WE Connect, Part 3: Graduation and Work Experience for Students with Special Needs (Abstract)
- WE Connect, Part 4: Turnover Rate and Labor Market Outcomes for Wyoming High School Students (Abstract)
- WE Connect, Part 5: Wyoming High School Students; Postsecondary Enrollment and Awards
- Methodological Note: Changes to Projections

December - <http://doe.state.wy.us/lmi/trends/1215/toc.htm>

- Evidence from the New Hires Survey: Education and Opportunity in Wyoming's Labor Market
- Benefits Survey 2014: Fewer Jobs Offered Access to Benefits
- Wyoming's Occupational Employment Grew by 15.4% from 2004 to 2014

January - <http://doe.state.wy.us/lmi/trends/0116/toc.htm>

- Higher Wages and More Work: Impact Evaluation of a State-Funded Incumbent Worker Training Program
- Employment and Wage Change for Selected Industries in Wyoming, 2005Q3-2015Q3
- Total Wages, Average Monthly Employment, and Average Monthly Wage Changes for Wyoming by Year/Quarter: 2005Q3 to 2015Q3
- Quarterly Turnover Statistics by Industry, Second Quarter 2015

- Persons Working in Jobs Covered by Wyoming State Unemployment Insurance, Third Quarter 2015

February - <http://doe.state.wy.us/lmi/trends/0216/toc.htm>

- How Out-of-State Claimants Affect Wyoming's Unemployment Rate
- Current Population Survey Estimates for Wyoming: What Does the State's Unemployment Rate Really Mean?
- The Education and Work Experience of Youth in Wyoming's Counties
- Wyoming Short-Term Industry and Occupational Projections, 2015-2017

March - <http://doe.state.wy.us/lmi/trends/0316/toc.htm>

- Initial Unemployment Insurance Claims Increase 22.9% in 2015
- The Survey of Occupational Injuries and Illnesses for 2014
- Estimated Employment and Wages for Occupations in Coal Mining (NAICS 2121) in Wyoming, May 2015

April - <http://doe.state.wy.us/lmi/trends/0416/toc.htm>

- Workforce Planning Report 2016
 - Introduction
 - Chapter 1: Economic Analysis
 - Chapter 2: Global Demand for Oil, Gas, and Coal
 - Chapter 3: What Does Wyoming's Unemployment Rate Really Mean?
 - Chapter 4: Initial Unemployment Insurance Claims Increase 22.9% in 2015
 - Chapter 5: Wyoming Employment Growth Lags Behind Surrounding States
 - Chapter 6: Wyoming Employment and Sector Analyses
 - Total Wages, Average Monthly Employment, and Average Monthly Wages Changes for Wyoming by Year/Quarter: 2005Q4 to 2015Q4

- Persons Working in Jobs Covered by Wyoming State Unemployment Insurance, Fourth Quarter 2015
- Quarterly Turnover Statistics by Industry, Third Quarter 2015

May - <http://doe.state.wy.us/lmi/trends/0516/toc.htm>

- Impact Evaluation of a Wyoming Employment Assistance Program

June - <http://doe.state.wy.us/lmi/trends/0616/0616.pdf>

- Postsecondary Academic Program Choice and Workforce Outcomes Excerpted from *Wyoming's Hathaway Scholarship Program: A Workforce Outcomes Evaluation of a State Merit-Based Scholarship Initiative Using Administrative Records*

Other Resources:

Wyoming Long-Term Industry and Occupational Projections, 2014-2024, July 2016

http://doe.state.wy.us/LMI/projections/2016/projections_2014-2024.htm

Wyoming Short- Term Industry and Occupational Projections, 2015-2017, March 2016

<http://doe.state.wy.us/LMI/trends/0216/a4.htm>

New Hires Survey Results, 2011Q3 – 2014Q2, July 2015

<http://doe.state.wy.us/lmi/newhires.htm>

iv. Customer Consultations

The customer consultation cycle did not change in PY 2015. When conducting customer consultations, R&P worked closely with the customer to understand and meet the objective. R&P maintains a monthly

report of the customer contacts made by R&P staff regarding data or trainings conducted. Some of the entities for whom R&P conducted a customer contact are listed below.

- Wyoming Community College Commission
- Community College Institutional Researcher Council
- Governor's Office
- Department of Workforce Services
- Legislative Services Office
- Natrona County School Board
- Natrona County Star Lane Academy
- Wyoming Workforce Development Council
- University of Wyoming
- Wyoming Department of Education
- WDE Career Technical Education
- Wyoming State Senate
- Wyoming House of Representatives
- Casper Area Economic Development Alliance, Inc.
- Private sector employers

While some of the partnerships built by customer consultations continued from PY 2013 and PY 2014, such as that with the Wyoming Workforce Development Council, others were built in PY 2015. R&P began working with the Community College Institutional Researcher (IR) Council to follow community college graduates into the workforce for reporting on graduate job placement. This data, along with data from UW, was also used in the Hathaway Scholarship evaluation for the Wyoming Legislature.

v. Activities undertaken to meet customer needs

During PY 2015, R&P attended and presented at meetings of the Wyoming Workforce Development Council (WWDC). R&P began attending WWDC meetings in an advisory role in PY 2013 as requests for LMI increased. In May 2016, R&P presented the Quarterly Census of Employment and Wages for Wyoming and the mining industry. The presentation titled, *The Context of Wyoming's Current Economic Downturn*, can be found at http://doe.state.wy.us/lmi/presentations/QCEW_2015Q4_05132016.pdf.

In late 2015, R&P was contacted by a teacher at one of the local high schools to give a presentation to the students on being an economist. The presentation would introduce the students to analyzing data collected based on the current condition of the economy. To complete the project, the high school students were required to create a five year strategic plan using data, such as total employment and employment by industry, to help young people make informed decisions about job availability and training needs. R&P staff spent three days working with students and helping them gain the knowledge to form their strategic plan. The students presented their projects to the Natrona County Pathways Innovation Center Steering Committee at the end of March 2016.

R&P, WCCC, and the IR council meet monthly to discuss data elements and analyses completed by R&P. During the meetings, R&P presents more about the agency and its abilities. This review gives R&P the opportunity to talk more about what we do as a statistical entity and the types of research R&P conducts. R&P presented preliminary tables and figures in an attempt to understand definitions as well as whether the IR's were in agreement with what was being found in the data file. Several definitions and concepts were discussed such as enrollment, credit hour designation, and degree-seeking. These concepts are important for R&P to adequately control for variables that might influence outcomes both

in college and in the labor market. R&P continues to regularly meet with the IR Council and WCCC to better understand the data sent between the agencies.

A link for labor market information is on the website of some of Wyoming's community colleges and takes the user directly to R&P's site. Although the link on the sites is available to community college students, it may not be seen as a useful resource for the labor market needs or career planning of the student population. R&P is currently working towards an effective way to distribute data so that it is easily understandable to users of all skill levels.

In March 2016, the Natrona County School District Superintendent and a member of the Natrona County School Board met with R&P staff about data in *Occasional Paper No. 8: The Education and Work Experience of Youth in Wyoming's Counties*. R&P explained that R&P has been able to track students into the workforce with funding from the WDQI grant. Natrona County School District expressed their interest in wanting to better prepare students for postsecondary education and the workforce upon high school graduation and wanted to know how R&P could help. R&P explained that they are able to group individuals into households, and can assume that a student may have graduated in another state if their parents are found in wage records, or the student may have dropped out to work if they are found in wage records. In the future, R&P will try to begin looking at data at the school district level and occupations of students who were awarded the Hathaway Scholarship.

In October 2015, R&P staff attended a meeting with the new Department of Workforce Services (DWS) Director, John Cox, on Unemployment Insurance claims data. During the meeting, it came to R&P's attention that Unemployment Insurance data was not being distributed to other offices within DWS. Rather than sending the claims data exclusively to DWS Leadership, it was decided that R&P would

distribute the data directly to all of DWS. The distribution of the claims data was transformed when the number of local offices, program managers and other contacts to whom R&P sent the data and all other product announcements increased from seven individuals outside of R&P to 77 individuals, including 52 individuals who are Wyoming State employees and 25 who are not.

vi. New tools and resources

R&P's Longitudinal Data Warehouse

In PY 2015, R&P's data warehouse expanded from secondary students to kindergarten students to high school graduates from Wyoming Department of Education, and postsecondary data from UW and Wyoming Community College Commission (WCCC). In PY 2015 financial aid data, vital records, and records from Wyoming Workforce Development Training fund were added to the warehouse, which still also includes wage records, National Student Clearinghouse, QCEW, and student records. The data warehouse allows R&P to longitudinally follow students from kindergarten through high school and college, and into the workforce.

vii. Efforts to create and support partnerships and collaborations

As noted earlier, several of R&P's partnerships from PY 2013 and PY 2014 continued through PY 2015. R&P continues to attend and present economic data at Wyoming Workforce Development Council meetings. The presentation titled, *The Context of Wyoming's Current Economic Downturn*, presented to the Council in May 2016 can be found at

http://doe.state.wy.us/lmi/presentations/QCEW_2015Q4_05132016.pdf.

During PY 2015, R&P provided letters of support for the Wyoming Department of Education (WDE) and Northern Wyoming Community College District (NWCCD). R&P committed to providing data outcomes for grant participants for NWCCD. WDE applied for the National Skills for Youth Grant Program and DWS committed to using labor market information and other innovative tools to support career readiness of young adults in Wyoming.

R&P collaborated with LMI shops in Idaho, Nebraska, South Carolina, and South Dakota to publish *Access and Use of Drivers' License Files by State Labor Market Information Offices; Advancing the Cause*. Contributions from Connecticut, Minnesota, and Virginia were also included in the publication informing states without access to driver's license files of the benefits of gaining access and ways to promote gaining access to files in their state. This publication can be found at http://doe.state.wy.us/lmi/w_r_research/NASWA_DMV_May_2016.pdf.

Multiple agencies within the Department of Workforce Services teamed up to create the draft Workforce Innovation and Opportunity Act (WIOA) Unified State Plan. R&P used student and licensing board data with the approval of WDE and the Wyoming Licensing Board to analyze the healthcare, public administration, educational services, mining, manufacturing, and construction industries and the supply of workers in Wyoming, including those with barriers to employment. An outline of R&P's responsibilities in the Wyoming's WIOA Unified Plan can be found in Attachment A.

viii. Activities to leverage WLMI funding

Due to the decline in oil prices, many Wyoming State agencies have been affected by budget cuts.

Throughout PY 2015, R&P continued to partner with South Dakota and Nebraska on the WE Connect

effort. R&P has also expanded on the WDQI database with the intent to apply for the next round of WDQI awards.

Throughout PY 2015, R&P's focus has been primarily on education and student outcomes. In order to acquire and publish data on this topic, R&P developed partnerships with educational entities. This network leverages WLMI funding by demonstrating the capacity of R&P's data warehouse to answer a variety of research questions.

ix. Recommendations to ETA for changes and improvement to future WIGS requirements

Several years ago, R&P developed a new approach to creating industrial and occupational projections using the QCEW and Wyoming's wage records. Upon the availability of QCEW data, the results of R&P's systematic approach to creating projections were compared to the QCEW data and were found to be more accurate than other methods of creating projections. Wyoming recommends states create projections rather than use the Projections Management Partnership to produce data that is potentially a closer estimate to reality.

Currently, the WIG does not fund program evaluation, to determine if a training program is effective or if occupational projections are accurate. Rather than put resources towards short-term projections, to better understand the extent to which demand drives supply, resources should go to acquiring student records and program completion data.

The quality and timeliness of local LMI is affected by the out-of-date software and declining funding for the QCEW and Occupational Employment Statistics (OES) programs. In addition, transforming OES into a

time series would significantly impact the production of “real time” occupational demand. Wyoming recommends that ETA request funds for the necessary upgrades of the QCEW and OES programs to reverse the decay of the infrastructure.