

RESEARCH & PLANNING

WYOMING DEPARTMENT OF WORKFORCE SERVICES



<http://doe.state.wy.us/LMI>

Revised February 2017

Overview

Research & Planning (R&P) is a unique statistical entity operating within state government in Wyoming. With the purpose of informing decision making, R&P analyzes data and publishes reports about the labor market. We collect large amounts of data to describe the market, and store it for longitudinal analysis to predict demand and evaluate training programs. Our funding is primarily federal and our performance as a statistical entity is both recognized in the federal statistical community and acknowledged through our success in obtaining competitively awarded federal research and development funds. Those awards would not be possible without the support of DWS leadership and other affected and interested parties, in particular, the education community in Wyoming. One long-time customer is the College of Health Sciences at the University of Wyoming. Other long-term customers include high school career guidance counselors and Community College grant writers. Our customer base is broad and includes Economic Analysis (at A&I) as participants in the Consensus Revenue Estimating Group. We have produced customized work for the Cheyenne Metropolitan Planning Organization, the Wyoming Business Council, Casper Area Economic Development Association, and more recently, entered into an agreement with UW to identify student labor market outcomes. As a recipient of U.S. Department of Labor funds, R&P draws on the expertise of State statistical agencies in other states bringing their experiences to bear to understand labor market issues in Wyoming. In effect, R&P is more than just what is represented on an organization chart. R&P is the sum of our experiences over time and the sum of our relationships within the state and across the country.

R&P is somewhat unique in state government for several reasons. First, all staff within R&P (and our counterparts in other states) are designated as Federal Agents by the Commissioner of the U.S. Department of Labor's Bureau of Labor Statistics (BLS). Pursuant to the Confidential Information Protection and Statistical Efficiency Act of 2002, each employee signs a BLS Agent Agreement upon becoming an employee while the Cooperating Representative (Section Manager) signs an Agent Agreement as part of the annual cooperative agreement funding cycle. R&P staff are state employees, and at the same time have access to confidential employer payroll information as a function of their federal status. R&P staff are subject to federal penalties for failing to protect the confidentiality and security of that information.

Our state-federal relationship also makes the information technology systems we utilize subject to the Federal Information Security Management Act, and National Institute of Standards and Technology information security controls. To this extent, R&P shares a security framework with other parts of DWS, notably the Unemployment Insurance (UI) program whose administrative records are central to our statistical function.

R&P is also unique to the extent that our program activities are exclusively statistical. We are prohibited by federal law from accessing administrative data from any source to make determinations about the rights, privileges, or benefits of any individual or employer. Beyond providing

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training for customers in the use of our products and services, R&P does not operate educational or training programs. R&P is functionally separate from either enforcement or training programs, which contributes to our credibility as a source of Labor Market Information (LMI).

Labor Market Information is defined on the opening page of R&P's web site as: "an applied science. It is the systematic collection and analysis of data which describes and predicts the relationship between labor demand and supply." Perhaps the most widely reported R&P products in the media are the monthly unemployment rate for the state and counties, and workplace deaths from the Census of Fatal Occupational Injuries (CFOI) program.

R&P receives matching funds from Workers' Compensation for our workplace safety statistical work and receives about 13% of our funding in the form of School Foundation funds to evaluate the workplace outcomes of the Hathaway Scholarship program and to support the Legislature's interest in understanding the competitiveness of school district compensation in the context of a multi-state regional economy. The remainder of our budget is federal and administered either in the form of BLS cooperative agreements (substantial federal involvement), or in the form of grants from the Department of Labor's Employment and Training Administration. BLS funds may only be used for cooperative agreement functions while grant funds leave some flexibility provided that grant requirements are met.

Multiple funding sources means that we are managing resources across the Federal

Fiscal Year limited to 12 months, the Federal Program Year (three-year funding), and the State Fiscal Year. R&P is subject to the contingencies of the federal appropriations process, periodically sending staff home without pay if a federal appropriation is not signed into law, and following the rules of Continuing Resolutions on a regular basis.

The starting point for much of our work is quarterly administrative records files from the UI system: employer tax reports and records of employee pay by social security number. UI records of claims amounts paid to the unemployed are available weekly. These records are used in statistical models to forecast UI trust fund balances and to calculate the average weekly UI claims benefit amounts pursuant to federal law and state statute.

In general, information from our statistical programs is used to align resources (e.g. educational and training inputs) with current and future employer demand for labor, and then evaluate the effectiveness of the system that manages the alignment of inputs. As indicated in the following pages, we collect and publish employment and rate of compensation by type of occupation, produce occupational projections for career and educational planning purposes, identify labor shortages, the provision of employer provided benefits, and measures of employer hiring practices. Many of the statistical series and reports we produce are directly comparable with other states and at the national level, while other products are unique to Wyoming or a few states with whom we work closely on cutting edge products.



Tom Gallagher, Manager
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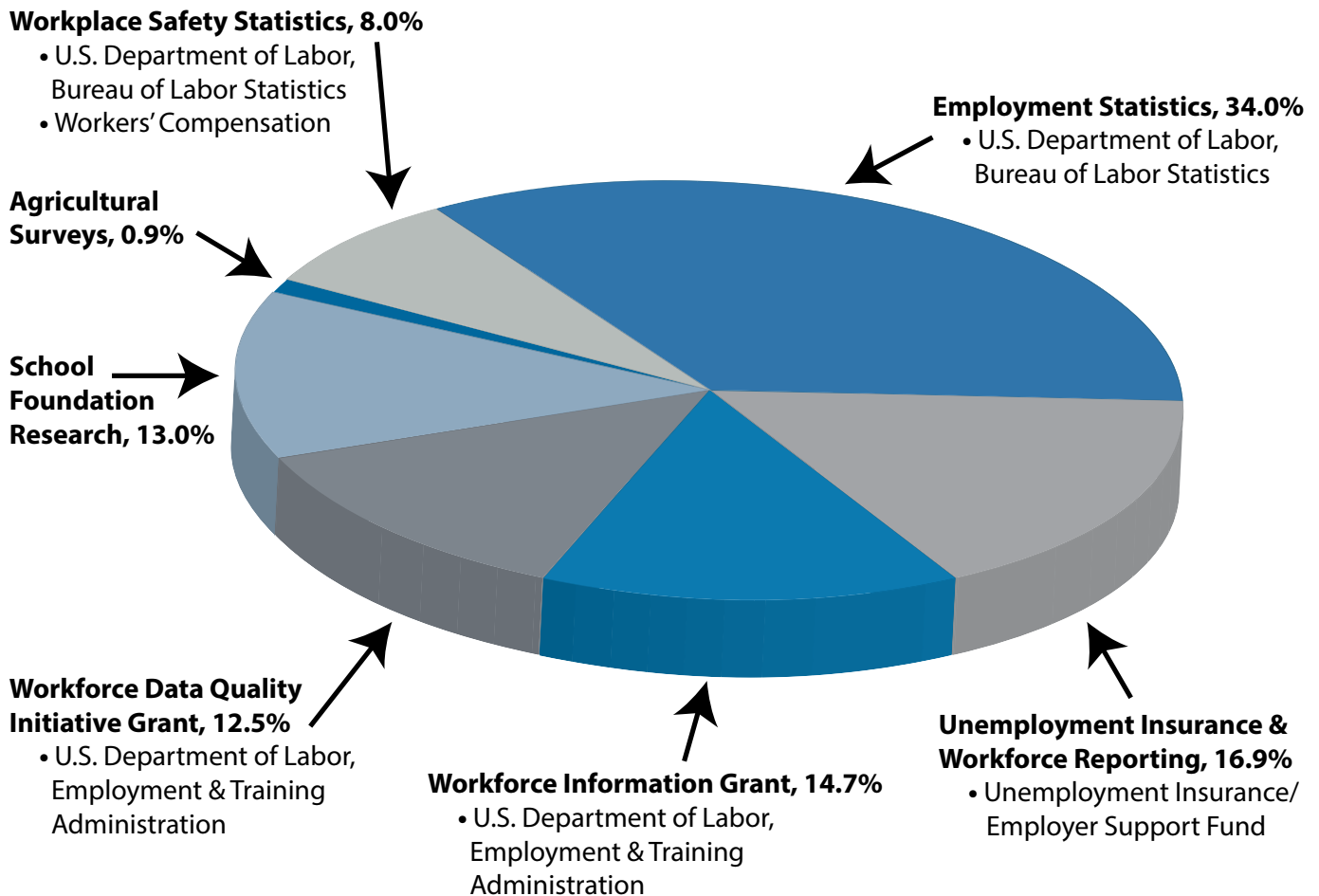
Who We Are

Research & Planning (R&P) is a separate, exclusively statistical entity that collects, analyzes, and publishes timely and accurate labor market information (LMI) meeting established statistical standards. Labor market information is “an applied science; it is the systematic collection and analysis of data which describes and predicts the relationship between labor demand and supply.” — The States’ Labor Market Information Review, ICESA, 1995, p. 7.

Staff consists of 14 full-time researchers, most holding graduate degrees, with backgrounds in economics, demography, sociology, psychology, statistics, and geology. R&P also has two editors with backgrounds in journalism, two administrative support staff, and a part-time public relations specialist.

How We Are Funded

Funding Sources and Annual Budget: \$2 Million Program Year 2015/Fiscal Year 2016



What We Do

U.S. Bureau of Labor Statistics

- Unemployment rate (household survey and administrative records)
- Wyoming Wage Survey (survey of 1,200 firms)
- Unemployment Insurance payroll (administrative records)
- Survey of Occupational Injuries and Illnesses (survey of 2,700 firms)
- Monthly employment estimates
- Census of Fatal Occupational Injuries

U.S. Employment & Training Administration

- Workforce Information Database
- Industry and occupational projections
- Develop relevant economic analysis
- Post information to Internet
- Partner and consult with Workforce Investment Board and others

Unemployment Insurance (UI), Benefits Survey, Employment Support Fund, & Other

- Benefits Survey (2,380 firms)
- New Hires Survey
- Research

How We Do It

Research Methods

- Survey Research
- Content Analysis & Text Mining
- Quasi-Experimental Design
- Evaluation
- Focus Group & Structured Interview
- Feasibility Analysis
- **Linked Administrative Databases**
- Cost Benefits
- Input-Output Analysis Geospatial
- Socio-economic

Statistical Methods

- Descriptive Analysis
- Regression Analysis
- Factor Analysis
- Analysis of Variance
- Means Test

Table 5: Number and Percent of Individuals from Each Cohort by Primary State of Wages

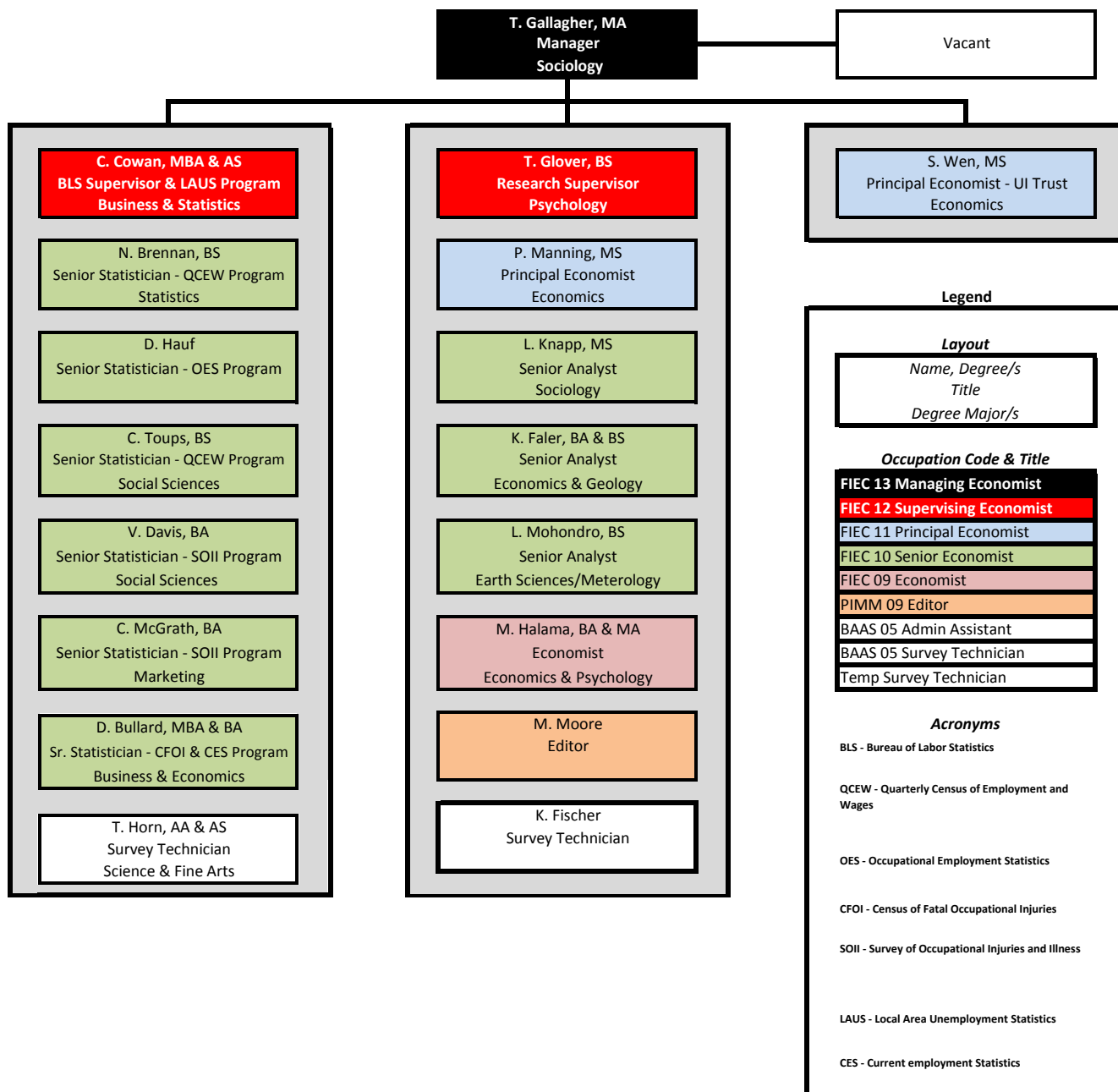
Cohort	Year	Age	Found Working in WY or a Partner State						Not Found Working in WY or a Partner State	
			Total		Partner State		WY		N	%
			N	%	N	%	N	%		
2002 Cohort (N = 7,373)	2002	18	7,373	100.0%	441	6.0%	6,932	94.0%	0	0.0%
	2003	19	6,463	87.7%	754	10.2%	5,708	77.4%	910	12.3%
	2004	20	6,033	81.8%	988	13.4%	5,044	68.4%	1,340	18.2%
	2005	21	5,821	78.9%	1,129	15.3%	4,692	63.6%	1,552	21.1%
	2006	22	5,704	77.4%	1,261	17.1%	4,444	60.3%	1,669	22.6%
	2007	23	5,569	75.5%	1,365	18.5%	4,204	57.0%	1,804	24.5%
	2008	24	5,420	73.5%	1,411	19.1%	4,009	54.4%	1,953	26.5%
	2009	25	5,195	70.5%	1,396	18.9%	3,799	51.5%	2,178	29.5%
	2010	26	5,068	68.7%	1,384	18.8%	3,684	50.0%	2,305	31.3%
	2011	27	5,047	68.5%	1,438	19.5%	3,610	49.0%	2,326	31.5%
	2012	28	4,987	67.6%	1,454	19.7%	3,533	47.9%	2,386	32.4%

Sources: Unemployment Insurance Wage Records, Driver's License File, Wage Records from Partner States.

Harris, P, et. al. (2015). Youth Transitions: Life Events and Labor Market Behavior. *Wyoming Labor Force Trends*, 52(5).

Retrieved from <http://doe.state.wy.us/LMI/trends/0515/a1.htm>

Research & Planning, Wyoming Department of Workforce Services, Organizational Chart 02/01/2017.



*Dual Majors listed if second area study outside of primary area of study.

*Brief biographical sketches are available on our website at <http://doe.state.wy.us/lmi/rpstaff.htm>.

Wyoming Labor Force Trends
<http://doe.state.wy.us/LMI/trends.htm>



Recent Articles

- Youth Transitions: Life Events and Labor Market Behavior
- Local Jobs and Payroll in Wyoming in Third Quarter 2014: Nearly Half of New Jobs Are in Construction
- Understanding How Commuting Flows and Job Losses in Other States Could Affect Wyoming's Unemployment Rate
- Wyoming New Business Formation in 2012 and 2013
- Fewer Youth Working in Wyoming
- The Decline in Teen Drivers: What it May Mean for Wyoming

Upcoming Articles

- Planning vs. Performance: Why Outcome Wages May Fall Short of Accountability Measures
- Employment and Wage Changes in Wyoming's Private Coal Mining Sector
- Which Occupations Could Be Affected by a Minimum Wage Increase?
- Data Matters: Education, Employment, and Interventions for At-risk Populations

Selected Publications

<http://doe.state.wy.us/LMI/publications.htm>

- *Monitoring School District Human Resource Cost Pressures*. Presented to the Wyoming Joint Education Committee, October 2012 and 2013. (http://doe.state.wy.us/LMI/education_costs/2013/monitoring_2013.pdf)
- *Workforce Data Quality Initiative #1: School Attendance and Employment, 2006 to 2013*. (http://doe.state.wy.us/LMI/education_we_connect/WDQI_Pub1.pdf)
- *A Decade Later: Tracking Wyoming's Youth Into the Labor Market*. Presented to the Wyoming Workforce Development Council on January 9, 2013. (http://doe.state.wy.us/LMI/w_r_research/A_Decade_Later.pdf)
- *Construction Labor Shortages in Wyoming and the Nation*. (http://doe.state.wy.us/LMI/w_r_research/constr_2014.pdf)

News Releases

<http://doe.state.wy.us/LMI/releases.htm>

- Wyoming Employment and Unemployment Rate
- Census of Fatal Occupational Injuries

Education and Outreach

- "Using Labor Market Information to Inform Career Choice," in partnership with the Casper Workforce Center Youth Program, September 2015.
- Research Methods and Longitudinal Data Workshops. Offered in Casper and Cheyenne, 2014.
- "Using Labor Market Information to Inform Career Choice," in partnership with Star Lane Academy, 2014. (<http://doe.state.wy.us/LMI/presentations/StarLane-LMI-2013.pdf>)

Presentations

<http://doe.state.wy.us/LMI/presentations.htm>

- "Landmarks in Labor Market Information." Presented at the Wyoming Workforce & Safety Summit, June 2015.
- "Study of Occupational Projections," with a focus on career/technical education (CTE) and science technology engineering math (STEM) occupations. Presented to the Joint Interim Education Committee, June 2015.
- "Why State LMI Directors Should be Involved on the OES Policy Council." Presented to the U.S. Bureau of Labor Statistics LMI National Conference, May 2015.
- "Workforce Opportunities in Wyoming: Developing a Data-driven Approach to Public Sector Investment and Evaluation." Presented to the Wyoming Workforce Development Council.

Formal Partnerships Through Memoranda of Understanding

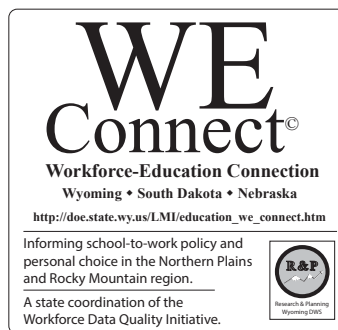
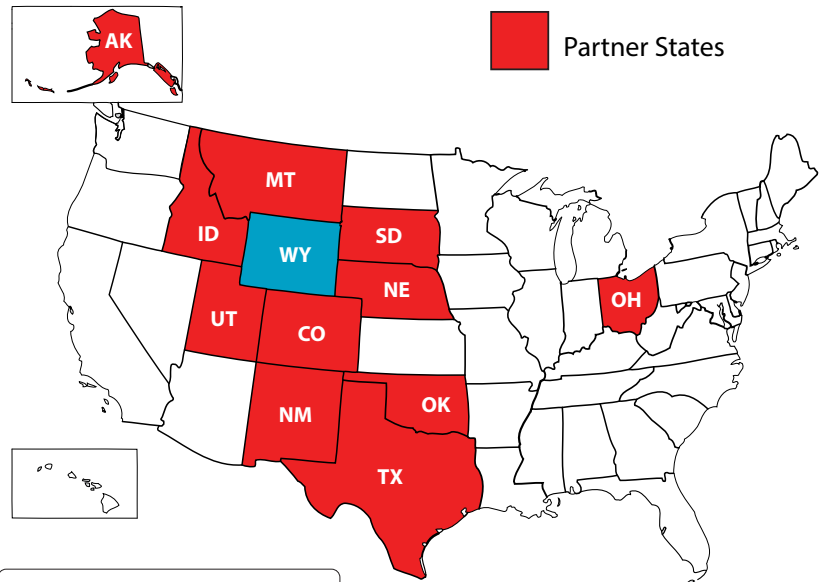
Education — Student Labor Market Outcomes

- Wyoming Community College Commission
- Wyoming Community College Commission, Adult Basic Education
- Northern Wyoming Community College District
- Wyoming Department of Education 684 Fall Staffing and Enrollment
- Professional Teaching Standards Board

Wyoming State Healthcare Boards — Health Care Workforce Demand

- Board of Nursing
- Board of Occupational Therapy
- Board of Nursing Home Administrators
- Board of Physical Therapy
- Board of Psychology
- Board of Respiratory Care
- Board of Embalming
- Board of Chiropractic Examiners
- Board of Examiners of Speech Pathology and Audiology
- Board of Hearing Aid Specialists
- Board of Dental Examiners
- Board of Examiners in Optometry
- Board of Medicine
- Board of Pharmacy
- Board of Registration in Podiatry
- Board of Radiologic Technologist Examiners
- Mental Health Professions Licensing Board

Administrative Data from Other States — Reciprocal Labor Market Analysis



Partner states are those states with Labor Market Information (LMI) offices with which Research & Planning (R&P) has data-sharing agreements.

Administrative Data from Other State Research Offices — Reciprocal Labor Market Analysis

- Alaska
- Colorado
- Idaho
- Montana
- Nebraska
- New Mexico
- Ohio
- Oklahoma
- South Dakota
- Texas
- Utah

Other

- The Bureau of Labor Statistics
- Wyoming Department of Health
- Wyoming Department of Transportation
- UI Tax and Worker's Comp
- Colorado Department of Revenue, Division of Motor Vehicles
- Vocational Rehabilitation

Selected Partners and Customers

- Fremont County Board of Cooperative Education Services
- Manufacturing-Works
- Legislative and Executive branches of Wyoming State Government
- Wyoming Center for Nursing and Health Care Partnerships
- Wyoming hospitals
- Wyoming Workforce Development Council
- Students
- Employers
- Jobseekers
- Media

R&P In the News

“We need improved services,” said Michele Holmes, a member of the Wyoming Governor’s Council on Developmental Disabilities and a spokeswoman for Workforce Services. “This work will help (the Division of Vocational Rehabilitation) do a better job serving those with disabilities.”

— Sweet independence: Wyoming agencies work to improve employment for young people with disabilities. Tom Dixon, *Casper Star-Tribune*. June 10, 2015.

The Research & Planning section of the Wyoming Department of Workforce Services reported statistics for the quarter that ended in September 2014 based on employer tax filings. The department said that during the quarter, payroll covered by unemployment insurance increased by \$196.9 million, or 6.3 percent. That was enough to raise employment by a total of more than 5,200 jobs and increase average weekly wages by \$37.

— Recession progression: How Wyoming ranks now. Staff report, *Wyoming Business Report*. May 8, 2015.

“Wyoming didn’t feel the impact of the national recession until about four or five quarters after the rest of the nation did,” [R&P Manager Tom] Gallagher said, adding that the state’s fortunes were - and still are - closely tied to the energy sector.

— Wyo. not recovered from the recession. James Chilton, *Wyoming Tribune Eagle*. March 31, 2015.

“We are definitely seeing the layoffs in oil and gas,” said David Bullard, senior economist with Wyoming Department of Workforce Services office in Casper. “Clearly, the claims are way up, and we’re seeing layoffs around the state.”

— Downturn in the oil patch. Gib Mathers, *Powell Tribune*. March 17, 2015.

“Fewer young people are getting that first exposure to the world of work,” says [R&P Manager Tom] Gallagher. “They’re going through a couple of years without having some sort of practical social experience—not just the economic experience of having a job—but the social experience of having a job. We don’t know what the long-term impacts of that are.”

— Fewer youth in Wyoming’s Workforce. Aaron Schrank, Wyoming Public Media. Dec. 18, 2014.

Last year, 16.5% of Wyoming’s 288,000 jobs required a bachelor’s degree, according to the Wyoming Department of Workforce Services. By comparison, 67.2% — more than two-thirds — required only a high school diploma.

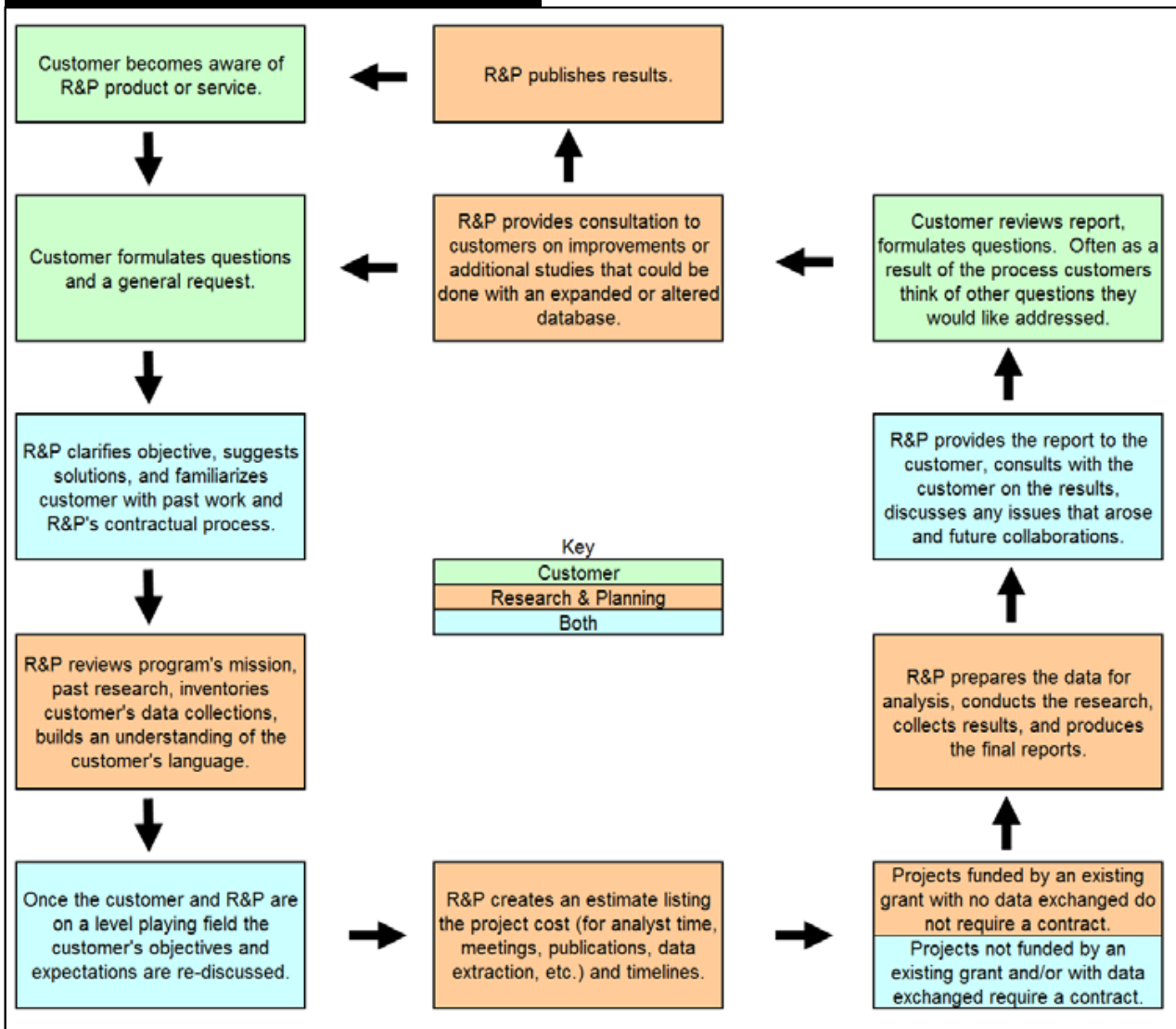
— Skipping college for Wyoming oil fields can be a boom-bust trap. John Glionna, *Los Angeles Times*. Sept. 23, 2013.



Research & Planning

Your Source for Wyoming Labor Market Information

Customer Consultation Cycle



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