Executive Summary Monitoring School District Human Resource Cost Pressures: 2013 Presented to the Joint Education Committee Cheyenne, Wyo. October 24, 2013

The Cost Pressures Project

In 2001, the Wyoming Supreme court directed the Legislature to "design the best educational system by identifying the 'proper' educational package each Wyoming student is entitled to have whether she lives in Laramie or in Sundance," and then "take the necessary action to fund that package" (*State of Wyoming, et al., v. Campbell County School District, et al.*, 2001). The legislature, in keeping with the *Campbell* decision, immediately hired a consulting firm to determine the "services which must be made available to all Wyoming school children and which the legislature codified as a list of core knowledge and skills areas" (*State v. Campbell* 2001).

The legislative commitment to ensuring equal services for every child in Wyoming continues today. The research presented here offers one way to examine the cost of delivering educational services, and to compare that cost across school districts in Wyoming. *Monitoring 2013* is the second report in an annual series, and represents a response to the legislative directive to "the department of workforce services, office of research and planning, to conduct data collection and analysis necessary for the education resource block grant model monitoring" (General Government Appropriations, Chapter 26, Section 326[d], March 2012). *Monitoring 2013* carefully assesses the Wyoming school district labor market in an effort to better understand the factors involved in attracting and retaining high-quality teachers in the state – a key component of the services offered to children in public schools. *Monitoring 2013* expands the study of school district compensation and labor supply by incorporating an analysis of the Professional Teaching Standards Board (PTSB) licensing information to better understand which subjects and grade levels will drive the need for teachers in the future.

Understanding the demographics of the public school labor supply is a key consideration of this report. Throughout much of the labor market we see baby boomers holding on to jobs in industries requiring a higher education, such as teaching. Because of this, young workers may have difficulty finding jobs in these industries, or may choose to work outside of Wyoming. Surrounding states' economies have grown more rapidly than Wyoming's, making it necessary to consider wage competition in the historical context of more stable and diversified labor markets proving attractive to educated residents of Wyoming.

Who We Are

Research & Planning (R&P) functions as an exclusively statistical entity within the Wyoming Department of Workforce Services. R&P collects, analyzes, and publishes timely and accurate labor market information (LMI) meeting established statistical standards. We work to make the labor market more efficient by providing the public and the public's representatives with the information needed for evidence-based, informed, decision making.

Methodology

Research for the report draws on several sources of information, many of which are not publically available or are only available to state employees working under contract to the U.S. Bureau of Labor Statistics. One major source from which the report draws wage information is the Occupational Employment Statistics (OES) program, a state-federal partnership. The OES program is the only source of reliable occupational-based wage estimates in the country. R&P produced school district wage estimates using confidential OES files for Wyoming and surrounding states.

To measure other market factors, such as the earnings of school district employees who leave for the private sector, R&P analyzed a number of records from administrative databases including Unemployment Insurance (UI) employer accounts, UI wage records, Wyoming Department of Transportation drivers' license files, Wyoming Department of Education (WDE) staffing files, and files from the Professional Teaching Standards Board (PTSB). PTSB files were combined with R&P's administrative databases to better understand the current supply of teachers available for school districts.

The potential supply of licensed teachers extends beyond Wyoming's borders, as demonstrated in Appendix A. Linking PTSB licensing files to UI payroll accounts in other states can only be accomplished by Research & Planning sections of state workforce agencies. R&P knows of no other state government entity which has analyzed teacher licensing files in this manner. This strategy facilitates a rigorous and meaningful analysis of school districts' multi-dimensional labor supply.

Findings from 2013 Monitoring School District Human Resource Cost Pressures

- During the 2010-11 school year, the average annual wage for all primary, secondary, and special education teachers in Wyoming public schools was \$59,314, an increase of \$2,245 over the 2009-10 school year. This salary is higher than in surrounding states and in the U.S. as a whole (Chapter 1).
- Teacher wages in Wyoming on average are competitive with surrounding states and the nation, but this is not the case in all of Wyoming's counties (Chapter 2).
- The exit rate of individuals leaving public schools ranges from 11% in 2008-09 to 13.2% in 2010-11. Replacement need represents a recruitment cost (Chapter 3).
- Wyoming may become increasingly dependent on importing teachers as the boom generation retires. More than one-quarter of special education teachers are approaching retirement age, and represent the most immediate replacement need (Chapter 4).
- Given the rapid aging of the workforce in industries requiring postsecondary education, school districts may encounter significant competition for qualified employees (Chapter 5).

Findings from Appendix Staff Reports

- A significant portion of individuals (33.5%) can teach in at least two content areas, allowing a district to employ teachers in varying content areas during a given school year (Appendix A).
- In each age group, males' contract wages were greater. It is therefore of interest that the largest earnings gains from 2011-12 to 2012-13 were found among younger females who remained in the same district but changed occupations (Appendix B).

Recommendations

- Report findings suggest a need for succession planning, and R&P recommends that the
- WDE), potentially in conjunction with the College of Education at the University of
 Wyoming, engage school districts on this topic. While it appears that the University of
 Wyoming is producing enough new teachers to meet replacement need, it is not clear if
 the teachers produced hold endorsements in the areas which will have the most current
 and future demand.
- R&P recommends that the Wyoming Retirement Board files be made available to R&P to
 provide accurate, historic, and current identifiable trends for those retiring from public
 employment.
- WDE 602 (School District Member Staffing) files should contain position numbers and related job descriptions, to facilitate determining what districts require at a minimum to perform certain tasks and how positions evolve over time.
- R&P recommends the standardization of data collection for the WDE 633 (Certified Staff Vacancy Information) files in order to measure the duration of job openings and estimate the recruitment difficulty for specific endorsements.
- R&P recommends use of this report by policymakers, school districts, jobseekers, and other parties to positively impact labor supply issues and allow for the framing of future research questions in the context of empirical results.

Future Research

Future research using administrative databases to explore the specific circumstances under which school district employees change districts or occupations is needed. R&P will also incorporate data from the Wyoming Retirement Board in future analyses to identify current and historical trends in retirement, and to identify the level of district use of substitute teachers. Additionally, R&P has started research using databases to create household level data which will be used to explore the relationship between leavers and their partners. National and regional employment growth opportunities affecting Wyoming's market will need to be monitored, to better understand the competition our school districts face from neighboring states. Directions for future research using Professional Teaching Standards Board files are detailed in Appendix A of this report. Finally, cost pressure analysis using administrative databases is new in this country. Naming conventions for the types of phenomena we describe in this report are not established. Future research will include improving the lexicon of administrative database research so that a common language may be employed.