PRELIMINARY FINDINGS FROM A COMPARABLE WAGE ANALYSIS OF WYOMING TEACHER SALARIES

A PRESENTATION TO THE SELECT COMMITTEE ON SCHOOL FINANCE RECALIBRATION
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Analyzing Teacher Salaries

- Two strategies for examining teacher compensation in Wyoming
  - Compared with teachers in other states
  - Compared with non-teachers in Wyoming
- In either case, researchers must adjust for regional differences in labor cost
- These analyses use an extension to the National Center for Education Statistics’ Comparable Wage Index (CWI) to make such adjustments
The Intuition Behind the CWI

- All types of workers demand higher wages in areas with a higher cost of living or a lack of amenities.
- We can measure labor cost by observing systematic variations in the earnings of comparable workers who are not educators.
More Intuition

- If construction workers in Casper are paid 5 percent less than the national average construction wage, Casper engineers are paid 5 percent less than the national average engineering wage, Casper nurses are paid 5 percent less than the national average nursing wage, and so on, then the cost of hiring teachers in Casper should also be 5 percent less than the national average.
The CWI

- Index reflects predicted wages for college grads who are not educators, adjusted for differences in:
  - Occupation
  - Industry
  - Hours worked
  - Gender
  - Ethnicity
  - Age
  - Educational attainment

- Initial values based on 2000 Census

- Annual updates based on Occupational Employment Statistics (OES)
The OES

- The OES is a database on average annual earnings by occupation for states and metropolitan areas.
- Each year, the BLS samples and contacts roughly 400,000 civilian, nonfarm establishments.
- Every firm in the United States with at least 250 employees is included with near certainty each year.
- The survey respondents in the 2009 OES data set employed 74.5 percent of civilian, nonfarm workers in the United States.
The CWI 2009

Map of the United States with states shaded in various shades of blue to indicate the Comparable Wage Index 2009.
The CWI 2009
Compared with Teachers in Other States
Starting Salaries are Relatively High

Annual Starting Salaries for Teachers with a Bachelor’s Degree, 2007-08

Wyoming Average     $38,500
U.S. Average             $33,600
Wyoming Rank                  #7

Source: Schools and Staffing Survey
Cost-Adjusted They’re Even Higher

Cost-Adjusted Starting Salaries for Teachers with a Bachelor’s Degree, 2007-08

Wyoming Average     $46,500
U.S. Average             $33,600
Wyoming Rank                  #1

Source: Schools and Staffing Survey
Cost-Adjusted Salaries for Experienced Teachers Also High

Source: Schools and Staffing Survey

Wyoming Average     $60,278
U.S. Average             $49,900
Wyoming Rank                  #3

Source: Schools and Staffing Survey
Benefits are More Commonly Offered in Wyoming

Source: Schools and Staffing Survey
Housing Subsidies More Common in Wyoming

The Share of Districts Offering Housing Subsidies, 2007-08

Wyoming Share: 19.9
U.S. Average: 3.4
Wyoming Rank: #4

Source: Schools and Staffing Survey
Incentive Pay More Common in Wyoming

Source: Schools and Staffing Survey
Wyoming Districts More likely to Reward National Board Certification

Source: Schools and Staffing Survey

Wyoming
71.6%
U.S. Average
24.5%
Wyoming Rank
#8

Source: Schools and Staffing Survey
Pay Differentials for Hard-to-Staff Fields Somewhat More Common

Share of Districts Offering Pay Differentials for Shortage Fields

Wyoming 27.7%
U.S. Average 15.4%
Wyoming Rank #15

Source: Schools and Staffing Survey
Class Sizes Below Average in Wyoming

Average Class Size for Elementary Self-Contained Classrooms, 2007-08

Wyoming: 18.9
U.S. Average: 20.3
Wyoming Rank: #13

Source: Schools and Staffing Survey
Particularly at the High School Level

Average Class Size for Secondary Departmentalized Classrooms, 2007-08

Wyoming
18.7
U.S. Average
23.3
Wyoming Rank
#4

Source: Schools and Staffing Survey
Comparable Wages Have Been Growing Rapidly in Wyoming

Annual Rate of Change in the Wage/Price Level

- ECI-Education Services
- Consumer Price Index
- U.S. CWI
- Wyoming CWI

2003-2007
2007-2009
....so have Teacher Salaries

Growth in Beginning Teacher Salaries, 2003-04 to 2007-08

- Wyoming Annualized Growth Rate: 7.8%
- U.S. Average: 3.4%
- Wyoming Rank: #1

Source: Schools and Staffing Survey
Cost-adjusted Salaries Grew Faster in Wyoming than in Any Other State

Growth in Cost-adjusted Beginning Teacher Wages, 2003-04 to 2007-08
Compared with Non-Teachers in Wyoming
Relative Teacher Salaries

- Use the NCES Comparable Wage model to predict the annual salary for someone with the characteristics of the typical Wyoming teacher.
- Use a similar model and teacher salary data to predict the annual salary of a typical Wyoming teacher.
Average Teacher Salaries Now Higher than Comparable Non-teacher Salaries

![Graph showing the comparison between average teacher salaries and comparable non-teacher salaries from 2000 to 2009. The graph indicates that average teacher salaries have increased significantly, surpassing comparable non-teacher salaries.]
Relative Starting Salaries

- Use the NCES Comparable Wage model to predict the baseline salary for a 23-year-old college graduate with a bachelor’s degree
- Compare those salary predictions with the funding provided under the finance formula
- Compare those salary predictions with the first step on the teacher salary scale for each Wyoming school district
Starting Salaries for Teachers At or Above 12-month Salaries for Non-teachers

Starting Salaries, 2009-10

Comparable Wage: $38,650
Formula Funding: $38,544
First Steps: $41,889
Formula Funding Salaries as a Percent of 12-month Non-teacher Salaries
First Steps on the Salary Scale as a Percent of 12-month Non-teacher Salaries

Relative Starting Salaries, 2009-10

Wyoming School Districts
The Geography of Starting Salaries

First Steps on the Salary Scale, Adjusted Using the CWI
Conclusions

- Teacher salaries in Wyoming are among the highest in the country
- Teacher benefits are more extensive in Wyoming
- Working conditions are more favorable in Wyoming
- Many beginning teachers earn more in 10 months than comparable non-teachers earn in 12
- Non-teacher wages grew faster in Wyoming than in any other state between 2007 and 2009, but teacher wages remain very competitive
Thank you