10 Years of Labor Market Monitoring for Teaching Staff in Wyoming

Report to the Joint Education Committee

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Outline

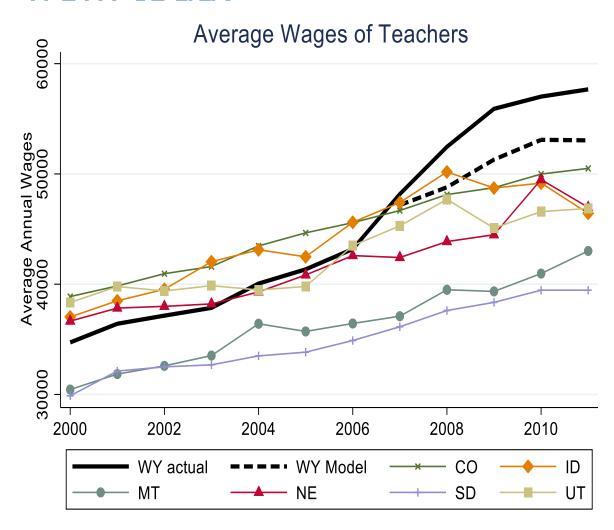
- 1. What is the purpose of the annual "Monitoring" report?
- 2. What indicators can we track?
- 3. What were the indicator levels last year?
- 4. What have we learned from monitoring over the last 10 years?

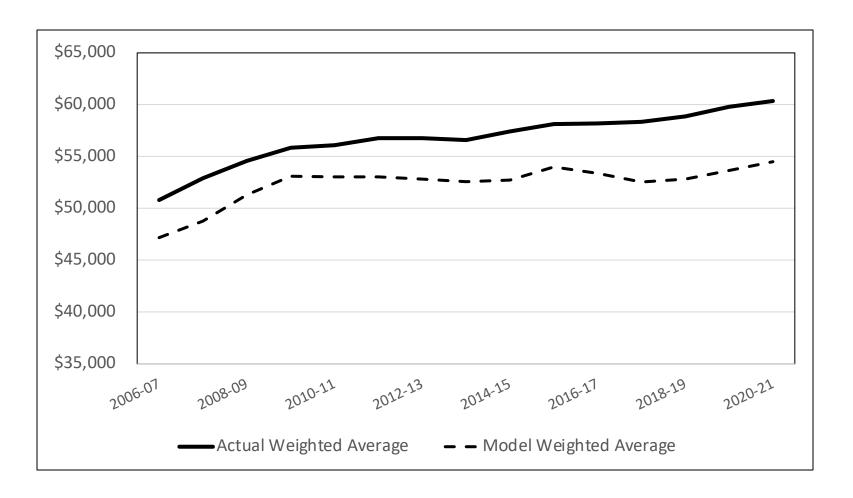
What is the purpose of the annual "Monitoring" report?

Brief History of Monitoring Report

- In the 2005 recalibration, model teaching salaries were set to actual salaries in Wyoming. The recalibration increased funding for smaller classes.
- Afterwards, many districts increased teaching salaries rather than hiring more teachers. Actual salaries rose rapidly above the model salaries.
- ➤ Other states were also struggling economically with the Great Recession more than Wyoming.
- At the 2010 recalibration, teaching salaries in Wyoming were about 25% higher than salaries in adjacent states.

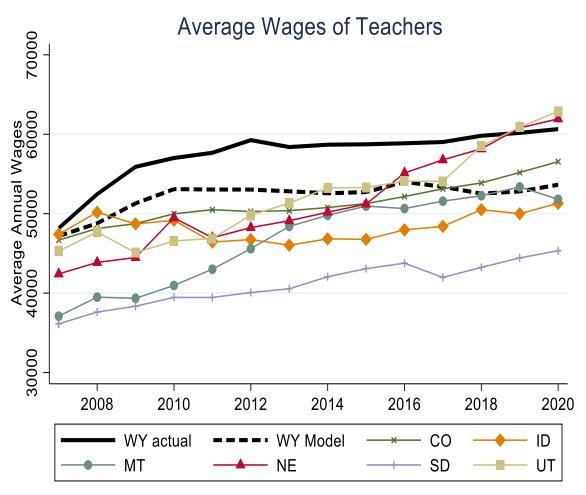
The situation when the Monitoring Report series began was very different from today



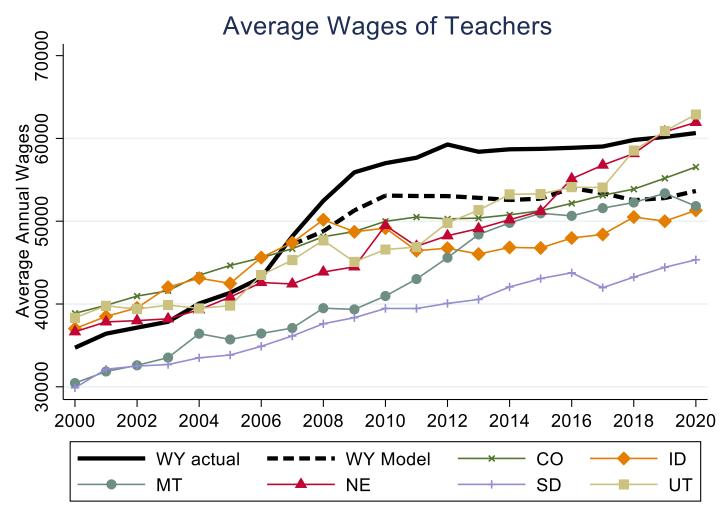


Source: Wyoming Department of Education staffing files. Model salaries from Wyoming Legislative Service Office.

The situation when the Monitoring Report series began was very different from today



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Purpose of Monitoring report

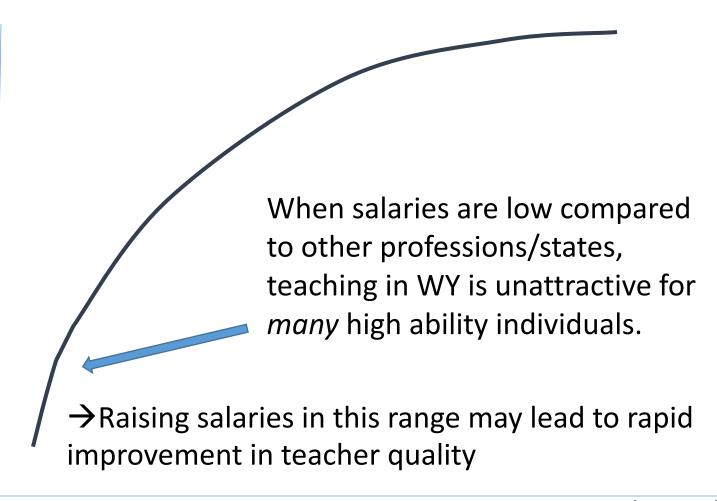
- Legislature decided to not adopt an automatic annual ECA to teacher salaries
- ➤ Goal was to increase model salaries in years where there appeared to be cost pressures from labor market
- Annual monitoring report was adopted to give legislature this aunnual information
- Annual monitoring report combines easily accessible, up to date data from many sources. In recalibration years, even more in-depth analysis.

Why Monitor Cost Pressures?

- Cost pressures are forces that require higher salaries to maintain quality of teaching pool.
- ➤ How is quality of teaching pool determined?
- ➤ Individuals decide to teach considering skills/interests and other employment options.
- ➤ High teaching salaries can attract individuals with better alternative employment options

Relationship Between Salary and Teacher Quality

Average Quality of Teaching Pool



WY Average Teacher Salary

Relationship Between Salary and Teacher Quality

Average Quality of Teaching Pool

When salaries are comparable with other states/occupations, many high ability individuals are already teaching in WY.

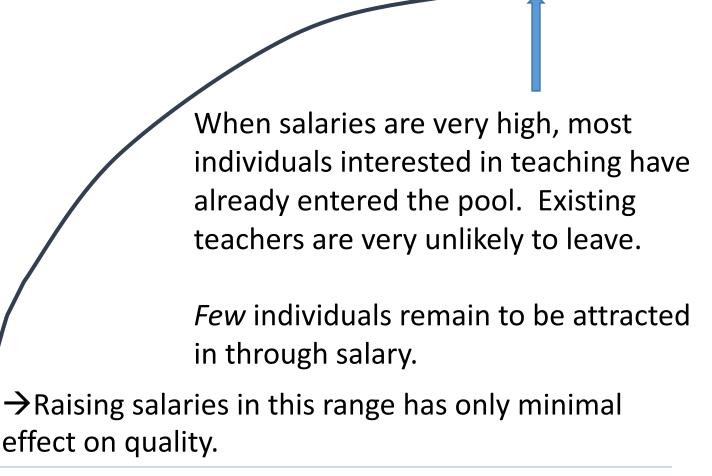
Some with strong alternative careers can be attracted with higher salary

→ Raising salaries in this range has a moderate effect on quality.

WY Average Teacher Salary

Relationship Between Salary and Teacher Quality

Average Quality of Teaching Pool



WY Average Teacher Salary

Cost Pressures Matter Because They Affect Quality of Teachers

- ➤ Relationship between salary and quality is complex
- Changes in salary can have large, moderate, or negligible effects on quality
- Quality is hard to measure
- There is no "right" level of the indicators (teacher salary, retention rates, retirement rates)
- ➤ However, changes relative to historical patterns signal cost pressures on districts

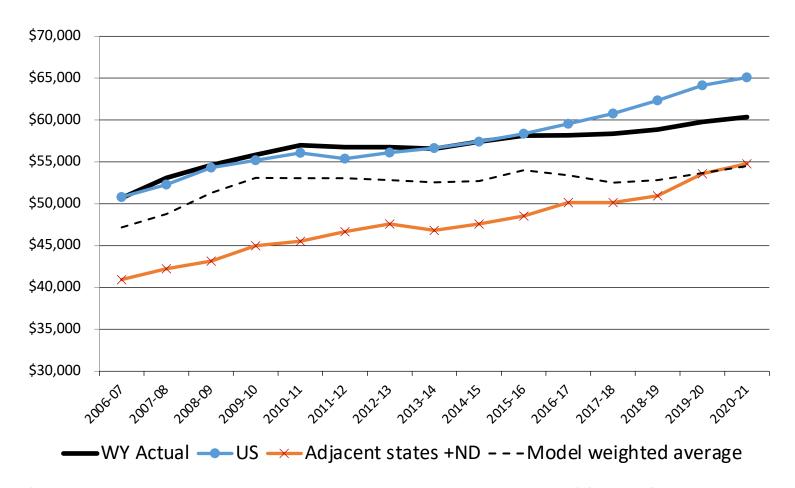
What indicators can we track?

Overview of Cost Pressure Indicators

- 1. As economic conditions change, how are salaries for comparable workers in Wyoming evolving?
- 2. How competitive are WY teaching salaries with nearby states?
- 3. Are there demographic changes that would lead to more/less open positions?
- 4. Are districts having trouble recruiting and retaining high quality teachers?

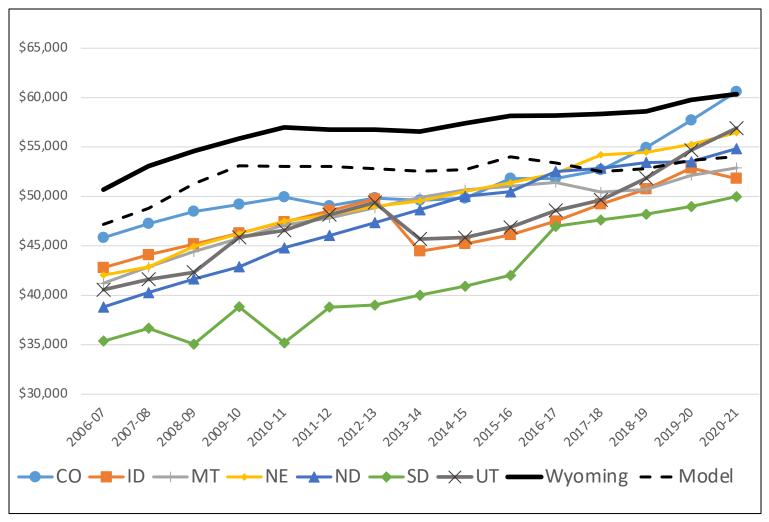
What were the indicator levels last year?

Average salaries in WY have fallen below US average Gap relative to adjacent states + ND is narrowing



Source: National Education Association, Ranking and Estimates of School Statistics. The 2020/21 salary figures are estimates; all other years are actual.

Average Teaching Salaries in Neighboring States + ND



Source: National Education Association, Ranking and Estimates of School Statistics. The 2020/21 salary figures are estimates; all other years are actual.

Teaching wages have declined significantly relative to comparable

workers 75000 -70000 -45000 40000 2006 2008 2012 2014 2016 2018 2020 2010

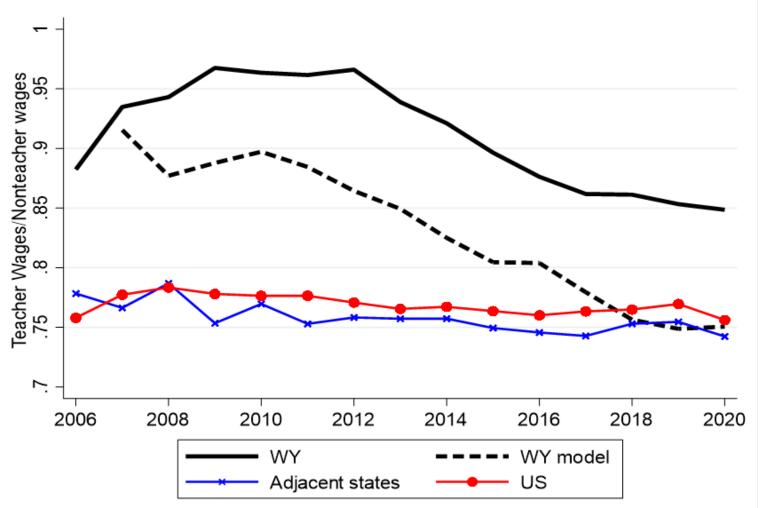
Source: U.S. Bureau of Labor Statistics May Quarterly Occupational Employment Statistics. All ownerships across all NAICS.

Prof/Tech occ

Teachers

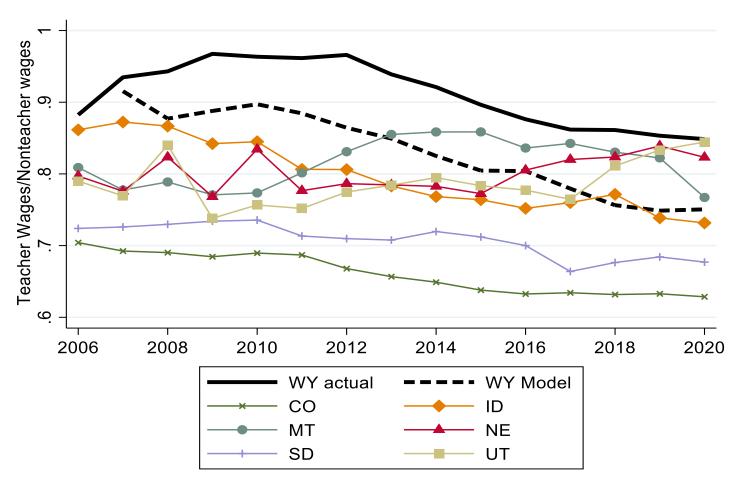
Comparable occs

Ratio remains high in Wyoming but continues to fall relative to average of other states



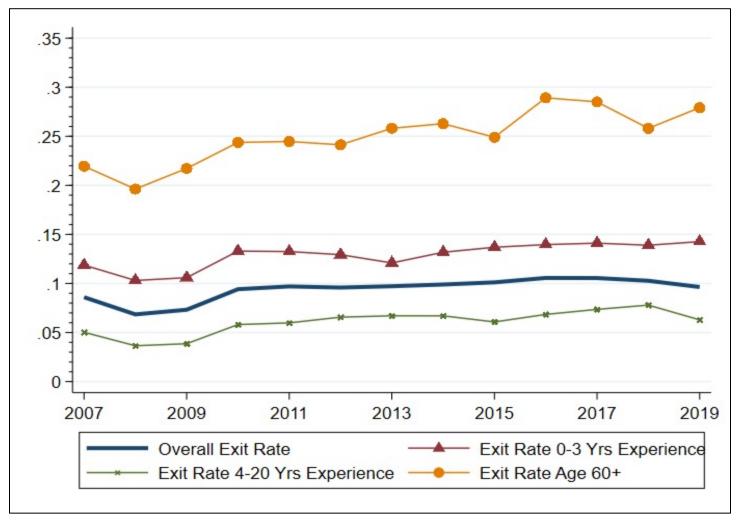
Source: U.S. Bureau of Labor Statistics May Quarterly Occupational Employment Statistics. All ownerships across all NAICS.

Actual ratio is now similar to UT, NE. Model ratio is middle of surrounding states



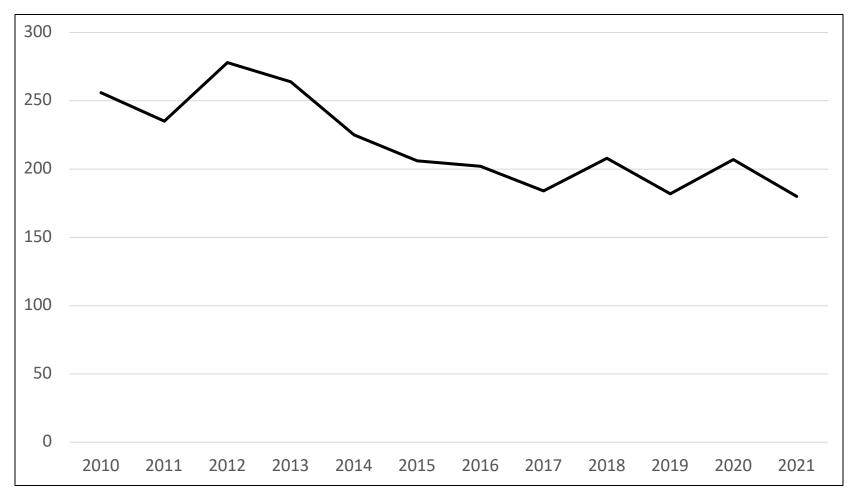
Source: U.S. Bureau of Labor Statistics May Quarterly Occupational Employment Statistics. All ownerships across all NAICS.

Trend in exit rates stable



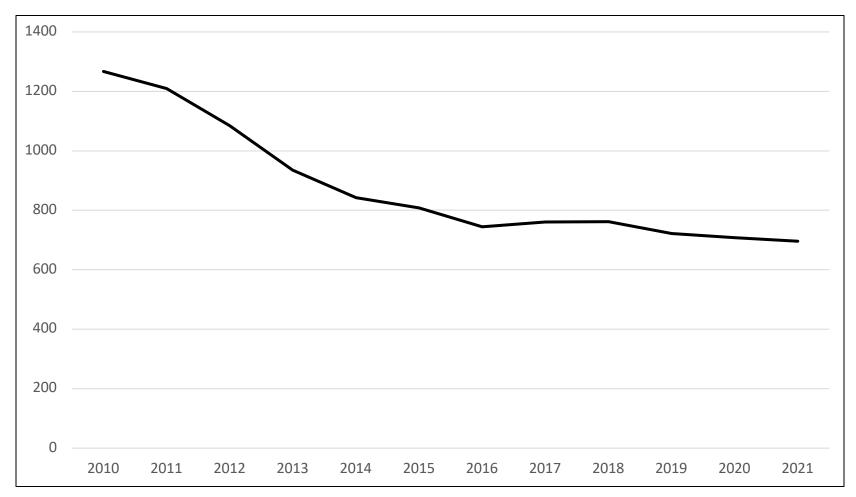
Source: Wyoming Department of Education Staffing files (WDE 602)

Number of BA Teaching Degrees from University of Wyoming Has Declined



Source: University of Wyoming Banner Information System. Degrees in education include a CIP code of 13. 2021 figures are as of September 2021 and will be finalized in October.

Number of Teaching Majors from University of Wyoming Has Also Declined



Source: University of Wyoming Banner Information System. Degrees in education include a CIP code of 13. 2021 figures are as of September 2021 and will be finalized in October.

What have we learned from monitoring over the past 10 years?

Lesson 1: Actual salary changes track model salary changes

- There have been few ECAs for teacher salaries in the last 10 years
- ➤ Wyoming teaching model salaries have remained largely flat since 2012
- ➤ So have actual salaries

May	Model Salary	Actual Teacher Salary in OES
2012	\$53,036	\$59,268
2020	\$53,648	\$60,650

Lesson 2: Teaching wages are never 100% of wages of other professional workers

- Teachers weeks of work are shorter than other professionals
- ➤ Ratio of teaching wages to non-teaching wages in US is about 75%.
- Teaching wages have fallen relative to salaries in other comparable occupations in WY, from a ratio of 97% to 85%.

May	Model	Actual Teacher Wage in OES	Professional Non- teacher wage in WY	Ratio
2012	\$53,036	\$59,268	\$61,355	96.7%
2020	\$53,648	\$60,650	\$71,472	84.9%

Lesson 3: Labor markets are more important than demographics

- ➤ Demographic changes have been negligible in WY in recent years
- ➤ Retirements and student enrollment are pretty steady
- About 10% of teachers are new hires. About 10% of teachers exit each year.
- Turnover was temporarily very low after the big salary increase in 2007, but has since 2010 has stayed relatively steady.

Lesson 4: Actual salaries in neighboring states are catching up

- ➤ Other states do not have "model salaries."
- Average teaching salaries in other states have increased at about 1-2 percent per year.
- Salaries in the **model** are now below actual average salary in nearby states.

- Average actual teaching wages in WY are 10% above the average across neighboring states and ND. The premium high was 26% in 2010/11.
- ➤ UT and NE now have average wages very close to those in WY. Other states in the region are lower.

Lesson 5: Recruitment is tougher than retention

Current teachers hardly ever leave teaching in Wyoming for a higher paid job

In recalibration years, DWS data track former teachers into other employment. The next position is almost always lower paid on average.

- The fraction of new hires coming from out of state has trended down gradually. Currently, about 50% of newly hired WY teachers come from outside WY; the high was 67%.
- The number and fraction of BA degrees in education at the University of Wyoming has been trending downward.

Lesson 6: WY does not have a good system for tracking teacher quality or recruitment

- ➤ No good data tracking number and quality of applicants
- A more centralized system for applications would enable monitoring of number of applicants per position to see how deep the applicant pool is for the state and across districts
- ➤ WY does not connect teacher and student outcomes, making it difficult to see how new teachers compare to older hires