

UPDATING WYOMING'S REGIONAL COST ADJUSTMENT: A RECAP

A PRESENTATION TO
THE JOINT EDUCATION COMMITTEE

OCTOBER 18, 2011

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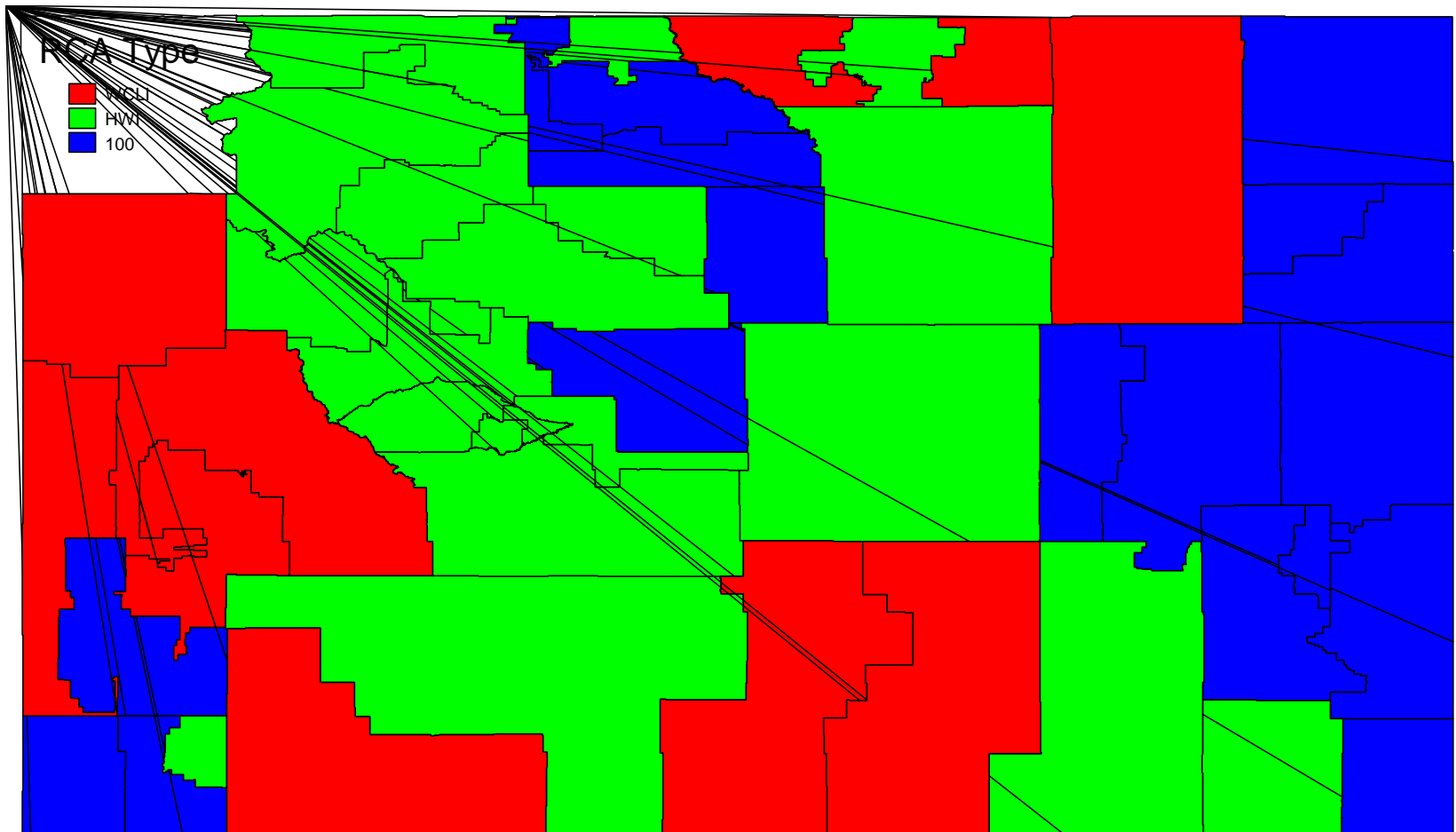
Wyoming's RCA Policy Choice

2

- Wyoming's regional cost adjustment (RCA) is designed to provide additional resources to school districts with higher labor costs
 - ▣ The RCA applies only to the salary components of the funding model
 - ▣ Only districts with above average costs receive an RCA
- Each school district's RCA is the larger of
 - ▣ The Wyoming Cost of Living Index (WCLI)
 - ▣ The 2005 Wyoming Hedonic Wage Index (HWI)
 - ▣ 100

The Determinants of the Wyoming RCA

3



Concerns about Using the WCLI for Regional Cost Adjustment

4

- Any cost of living index overstates the cost of living in locations that have attractive amenities
- The WCLI overstates the cost of living in Wyoming counties with relatively high housing costs
 - Residents of Wyoming spend a smaller share of their budgets on housing than the residents of any other state except Iowa and North Dakota
 - The CPI-U and WCLI are constructed assuming that families spend 32 percent of their incomes on shelter, which is the national average for urban households
- The housing component of the WCLI includes education and communications, which are considered a separate category in the construction of the CPI-U

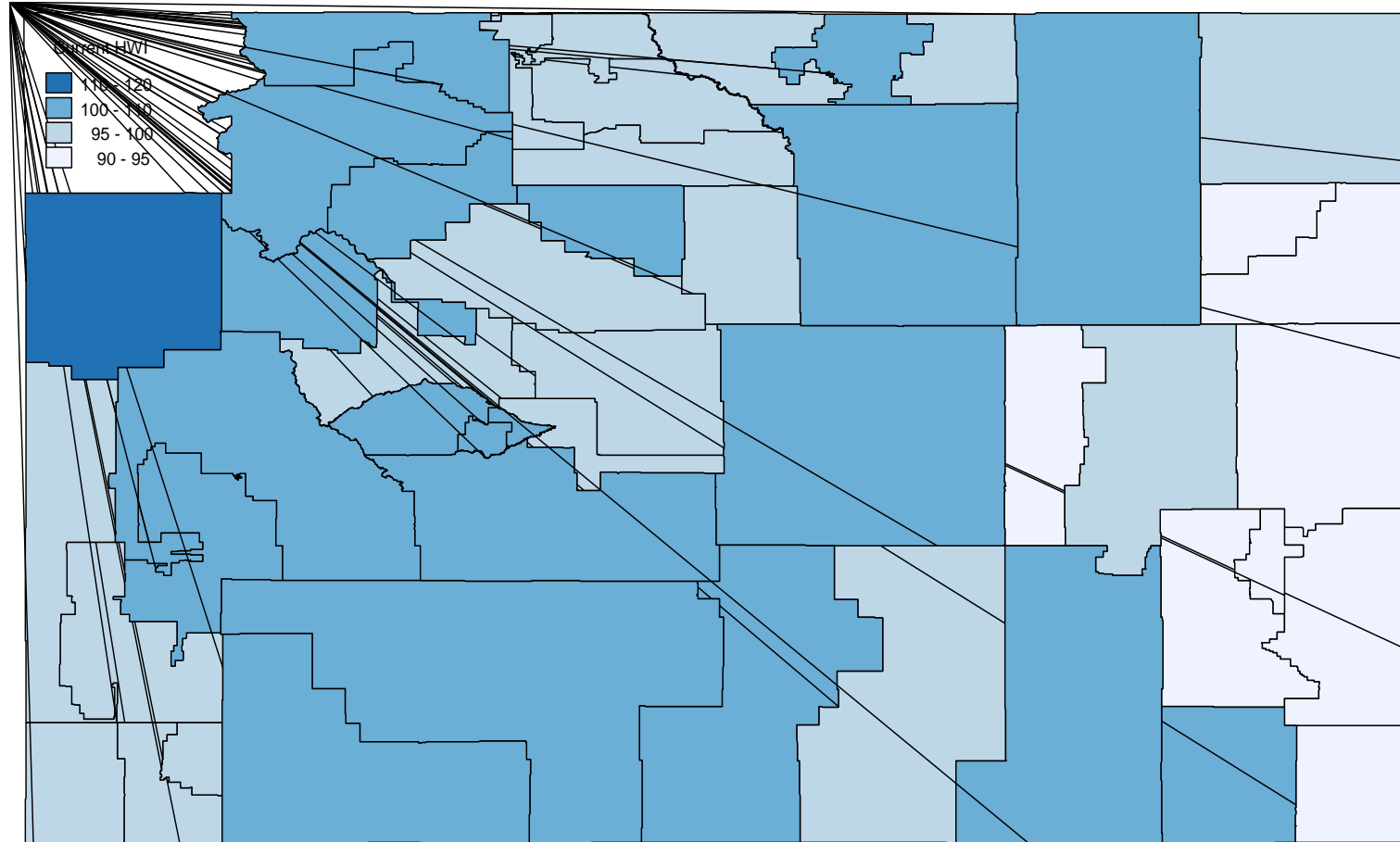
The 2005 Wyoming HWI

5

- Based on regression analysis of teacher salary data from 2003-04 and 2004-05
- Regression analysis used to separate observed variation in teacher “base” salaries into that which is attributable to
 - ▣ Discretionary factors (such as teacher characteristics, and length of the school year) and
 - ▣ Factors outside of school district control
- The HWI is based on the predicted, full-time base salary in each school district, holding constant the influence of discretionary factors

The 2005 Hedonic Wage Index

6



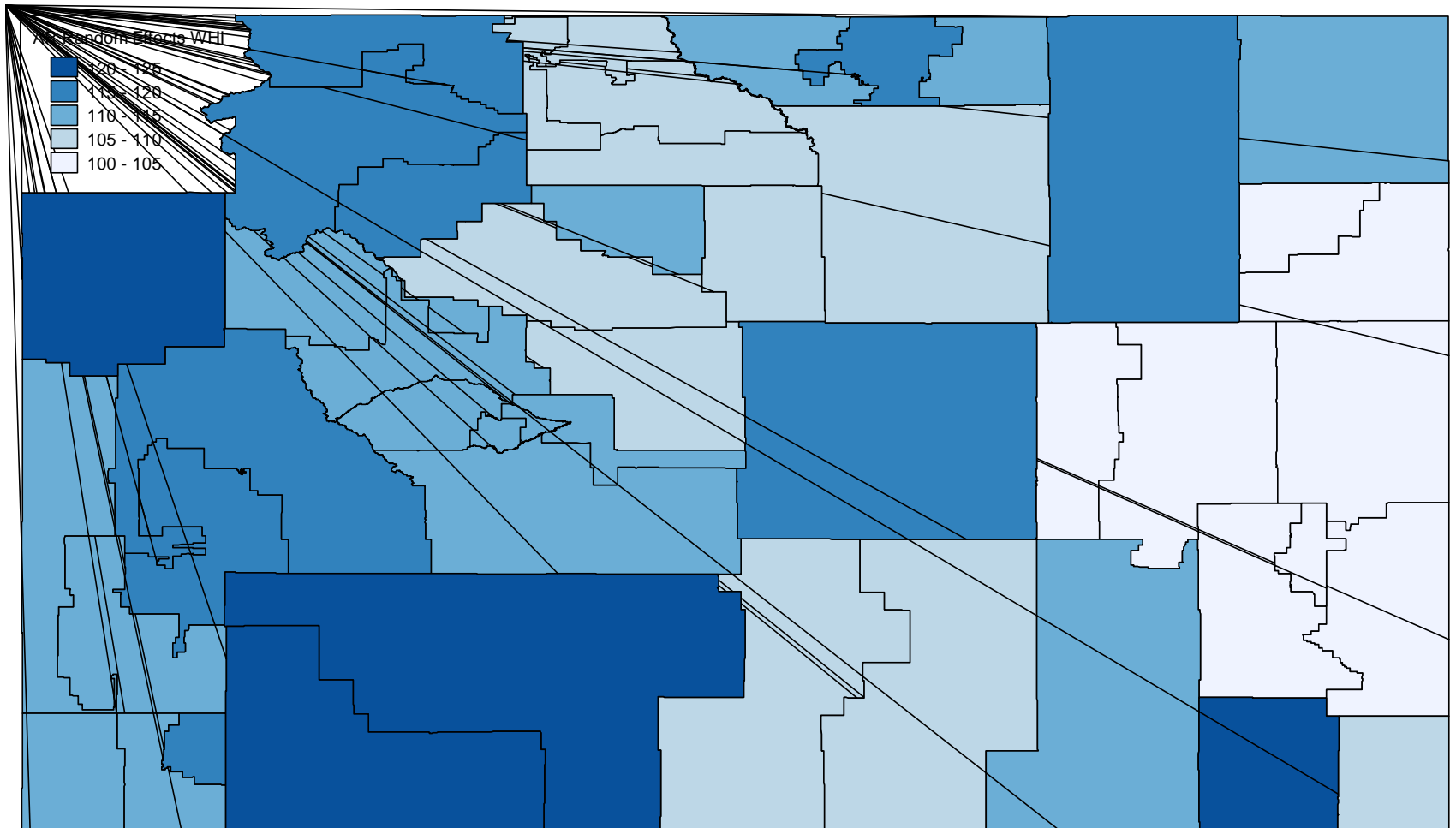
Five Updates to the HWI

7

- The update uses more recent data and a much longer time series
- The update uses a hedonic model of total salary, not just base salary
- The update uses a much richer set of discretionary factors
- The update revises and expands the set of uncontrollable cost factors to improve the predictive power of the hedonic wage model
- The update includes an extended version of the NCES's Comparable Wage Index (CWI) as one of the uncontrollable cost factors

The AR Random Effects HWI

8



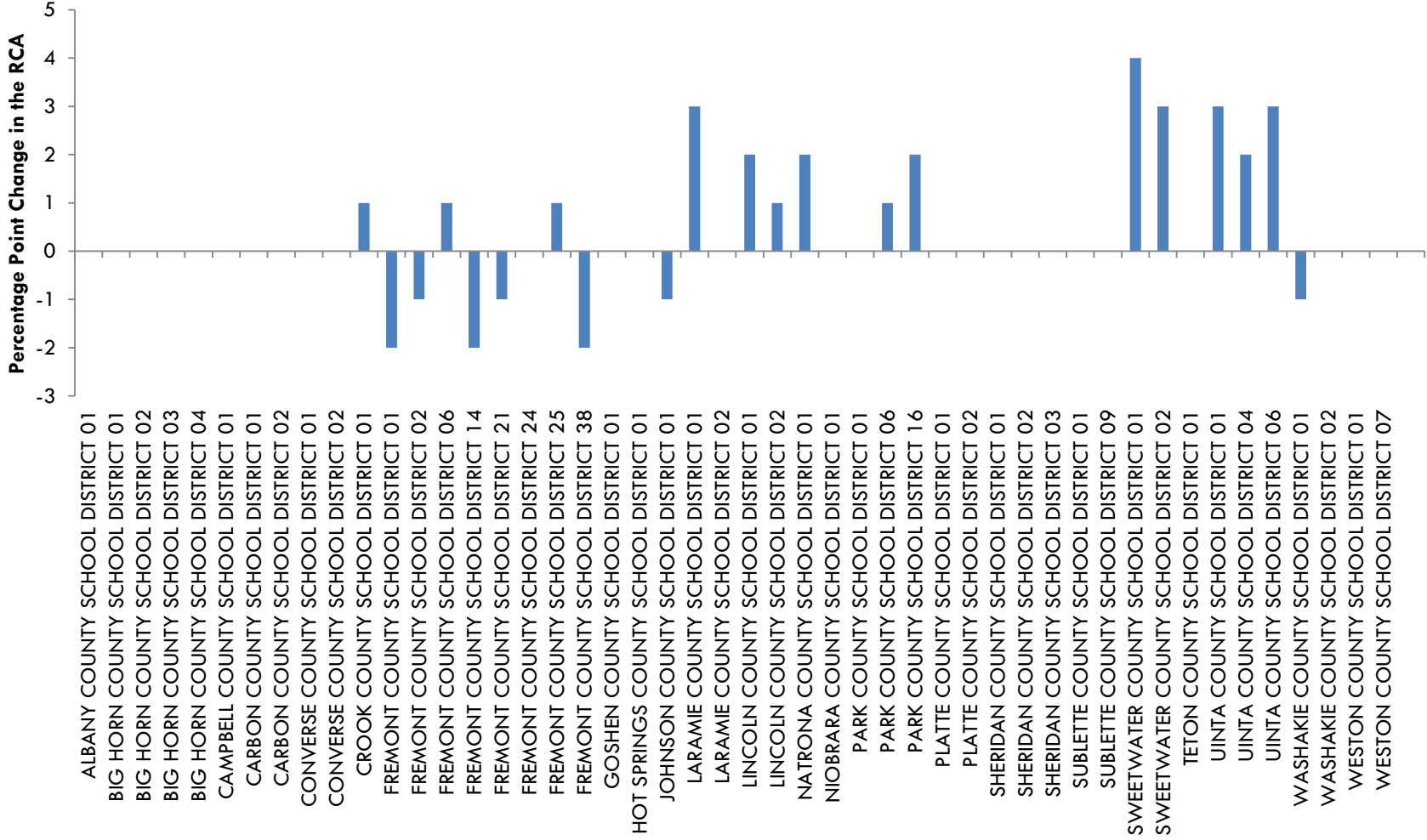
Questions Raised About the HWI

- The cost of living is higher in some places than would be reflected by the CWI.
 - This is why the WCLI, the CWI, and the county population density are all included in the hedonic wage analysis
 - This combination of factors does a better job of explaining teacher salaries than any single factor alone
- Why does the analysis include geographic indicators like the distance to Yellowstone or to the nearest city?
 - Previous analyses of teacher salaries have indicated that a lack of access to the amenities of urban life (hospitals, restaurants, ...) has an important influence on the salaries teachers are willing to accept
 - These are the indicators used in the 2005 HWI

Equity Implications

- Defining the RCA as the greater of three alternatives—the WCLI, the HWI or 100—has unintended consequences for school funding equity that will not be resolved by updating the HWI
- From a strict equity perspective, continuing to apply the regional costs index only to districts with above-average costs will overfund more than a third of the school districts in Wyoming
- Continuing to offer the WCLI option will also overfund some districts because
 - any cost of living index overstates the cost of hiring in locations that have attractive amenities
 - the WCLI overstates the cost of living in Wyoming counties with relatively high housing costs

The Impact on the RCA of Updating Using the AR Random Effects HWI



The Count of School Districts Receiving Each Type of RCA

12

	HWI	WCLI	100
2011 AR Random Effects HWI	22	9	17
2005 Wyoming HWI	20	10	18

Conclusions

- The cost of education varies widely within the state, offering strong support for regional cost adjustments
- Because of the three-way design of the RCA, only 22 of the 48 school districts in Wyoming would receive the regional cost adjustment indicated by the updated HWI
 - ▣ The remaining districts would receive a larger adjustment
- Equity goals in Wyoming would be better served if the Legislature replaced the three-way design of the RCA, and simply used the updated HWI as the sole source of regional cost adjustments

14

Thank you