

# **MONITORING THE COST BASIS OF THE K-12 WYOMING FUNDING MODEL**



**Prepared for:**

**The Joint Appropriations Committee  
The Joint Education Committee**

# MONITORING THE COST BASIS OF THE K-12 WYOMING FUNDING MODEL

## INTRODUCTION

The Legislature, in its 2010 recalibration of the Wyoming Education Resource Block Grant Model (the “model”), determined funding for K-12 education exceeded the cost-basis of providing the statutorily required education (known as the basket of educational goods and services) to Wyoming school children. The source of the model’s excess funding is the Legislature’s decision to provide resources – both personnel and non-personnel – above the levels specified in the 2010 recalibration report. For example, the reports provided to the Legislature in 2010 and 2011 indicate that not only does the model provide more teachers than recommended in the 2010 recalibration report, but it also provides funding for salaries that are higher than necessary to recruit and retain a well-qualified workforce.<sup>1</sup>

The 2010 recalibration effort estimated that legislative policy choices have resulted in a level of funding which exceeds cost by at least \$102 million. The details of this estimate can be found in Attachment A. This figure is exclusive of any additional funding provided by the “price” of the personnel resources (the statewide average model salary) being set higher than necessary.

Given the cost-plus status of model funding, the Legislature determined there was no need to increase overall funding during the 2010 recalibration. Based upon recommendations from the Select Committee on School Finance Recalibration, the Legislature recognized that a more sophisticated process was needed to monitor the model’s cost-basis as it converges with the funding level. The Legislature tasked the Legislative Service Office (LSO) with developing recommendations for a model monitoring process the Legislature could use to ensure funding remained cost-based between periods of recalibration.

This report outlines the monitoring process for identifying when model funding has converged with cost for each of the model’s major funding categories: certified (professional) staff, classified (non-professional) staff, non-personnel items, and utilities. The Legislature has also been provided a recommended set of price indices that can be targeted to the model categories to maintain the model’s cost-basis.

## MONITORING THE CONVERGENCE OF COST AND FUNDING

Multiple indicators have been developed for each major category of the model, but as noted in the underlying reports, the indicators must be considered collectively in deciding policy responses and not in isolation. Below are indicators for personnel and non-personnel categories of the model.

### *Personnel Indicators*

Analyses of the Wyoming education labor market suggest that current salaries paid by Wyoming school districts and salaries funded in the model are high relative to neighboring states for both professional and non-professional staff. Both funding and actual salaries are in excess of what is needed to recruit and retain a well-qualified workforce. However, the degree to which model and actual salaries exceed the

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<sup>1</sup> During the 2005 recalibration, model salaries were determined using actual school year 2005-06 salaries paid by Wyoming school districts. Since the 2005 recalibration, model salaries have been adjusted by external cost adjustments by the Legislature.

salary levels sufficient to recruit and retain a well-qualified staff is difficult, if not impossible, to know with any degree of certainty. Thus, a monitoring process is needed.

Labor market indicators have been developed for both professional and non-professional staff. A common indicator for all staff is the use of salary benchmarks from the Hay Group®. In the 2010 recalibration, the Hay Group® provided an analysis comparing model and actual salaries to State Market Policy Position (MPP) amounts for non-teacher staff. State MPP's were computed using a methodology similar in nature to that used for Wyoming executive branch employees. The Hay Group® conducted a similar analysis of teacher staff during the 2011 interim. In both studies, the Hay Group® concluded that model salaries and salaries paid by Wyoming school districts are high compared to State MPP amounts and high compared to salaries for similar positions in the region. These salary comparability studies can be used as one benchmark to monitor the convergence of labor costs and the compensation provided in the model for both professional and non-professional personnel.

#### Professional Personnel Indicators

Dr. Christiana Stoddard provided a set of indicators that can also be considered as part of the overall monitoring process. Dr. Stoddard's report details five indicators that would signal changes in sources of cost pressures on teacher salaries related to labor market and demographic patterns:

1. Changes in the ratio of teaching wages relative to wages of comparable professionals;
2. Changes in the ratio of teaching wages in Wyoming to teaching wages in other states;
3. The trend in student enrollment;
4. The trends in teacher retirement; and
5. The fraction of new hires.

Dr. Stoddard's report also includes four indicators that signal when cost pressures affect districts' abilities to hire highly qualified teachers:

1. Retention rates of current teachers;
2. Number of applicants per full time position;
3. Percent of districts hiring first choice applicant; and
4. Percent of districts reporting "very easy" or "somewhat easy" to hire high quality applicants.

These indicators will be updated on an annual basis with data provided by the Wyoming Department of Education (WDE), labor market data available from the U.S. Department of Labor, and other available sources. An annual comparison with historical trends can provide the Legislature information about current labor market conditions relative to those historical averages. If the measured indicators are outside a reasonable confidence interval around the historical averages, further investigation would be required to determine what has changed and why these indicators deviate from historical trends. This investigation would then be used to estimate the impact of those changes on the ability of Wyoming school districts to recruit and retain well-qualified staff. If there were sufficient pressures, the Legislature could decide to modify the salary levels used in the model.

Dr. Stoddard notes that quality is best measured as teacher effectiveness in improving student achievement; for example, as a value-added measure or growth measure of teacher effects on student outcomes. Future work will be needed to collect data on effectiveness of certified staff consistent with the Legislature's accountability efforts. (Effectiveness of certified staff is contemplated in Phase II of the Legislature's current education accountability efforts.) Once these effectiveness data become available, the indicators would move from monitoring the ability of Wyoming school districts to recruit and retain

*well-qualified* teaching staff to monitoring the ability of Wyoming school districts to recruit and retain a *highly effective* teaching staff.

#### Non-Professional Personnel Indicators

Specific indicators for non-professional salaries may include:

1. Turnover rates for non-teaching staff;
2. Changes in the ratio of non-teaching wages relative to wages of comparable non-professionals; and
3. Ratios of current salaries of non-teaching positions to some alternative wage(s) computed annually, and similar to those provided by Hay Group®.

Like the professional personnel indicators, if indicators for non-professional personnel are not in line with historical trends, the Legislature can choose to further investigate the source of changes and their impact on the ability of Wyoming school districts to recruit and retain well-qualified staff. Indications of labor market pressures do not automatically necessitate any particular response; rather they help identify those options that appropriately address the causes of those labor market pressures.

#### ***Non-Personnel***

Monitoring convergence of the prices in the model to cost-based levels for non-personnel resources is more easily done than personnel costs. The 2010 recalibration estimated that model funding of non-personnel resources of the model exceeded costs by \$28 million. While many non-personnel items in the model were at cost-based levels, funding for a few of these non-personnel resources exceeded their estimated 2010 costs.<sup>2</sup> Therefore, these recalibrated non-personnel costs can be compared to model funding levels on an annual basis as a means of monitoring convergence.

#### ***Existing Reports and Data***

One additional source of information that can be used to monitor the cost-basis of both personnel and non-personnel components of the model is the annual report produced by the WDE: *Continued Review of Educational Resources in Wyoming*. This report allows the Legislature to monitor school districts' resource utilization patterns compared to how resources are provided in the model. Information gained from analyses included in this WDE report should be considered together with information gained from the other indicators included in this monitoring process.

Annual monitoring of both personnel and non-personnel indicators will require the WDE and school districts to continue reporting the same data they currently report so data can be compared to historical trends. Additional data may be required of the WDE, school districts, and other state agencies to improve the quality of information used in the model monitoring process.

In order to monitor the convergence of cost and funding, the Legislature must monitor the price of both personnel and non-personnel categories of the model. When making determinations about the cost-basis of the model, personnel and non-personnel categories should be viewed in total. This careful analysis is required because if one category of the model is over-funded and another category under-funded, the Legislature can maintain the cost-basis of the model if total cost has not converged with total funding.

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<sup>2</sup> As shown in Attachment A, the model components that make up the \$28 million difference are school supplies and materials, technology and equipment; and student activities.

Further, events not necessarily related to the cost-basis of the model can impact (or affect) the indicators used to monitor the cost-basis

### **EXTERNAL COST ADJUSTMENT**

The external cost adjustments (ECAs) applied to the model since the 2005 recalibration appear to have been higher than necessary to keep the model cost-based. They appear to be higher than necessary for two reasons:

1. The ECAs chosen by the Legislature were higher than the actual inflationary pressures on prices; and
2. The historical approach to applying a single ECA to the entire model – a blanket approach.

To prevent this in the future and as part of the 2010 recalibration, the Legislature chose to take a more targeted approach by applying specific ECAs to the different categories of the model.

Dr. Lori Taylor recommends different indices be used for each model category. Those indices to be considered for each model category are:

<b>Model Category</b>	<b>Index</b>
Professional Labor	Comparable Wage Index - Wyoming
Non-Professional Labor	High School Comparable Wage Index
Energy	Producer Price Index – Commercial Electric Power (44.1% weight) Producer Price Index – Commercial Natural Gas (55.9% weight)
Materials	Producer Price Index – Office Supplies and Accessories

In a cost-based model, an ECA maintains the purchasing power at the cost-based level. To the extent that Wyoming’s model exceeds estimates of costs, applying an ECA might not be necessary until costs converge with funding levels.

The cost-monitoring process outlined herein provides the Legislature with information about the cost-basis of the model in the years between model recalibrations. In the event that adjustments are needed to one or more of the model categories based on the information gathered from the monitoring process, the Legislature has available a set of ECA options that can be targeted to specific parts of the model to maintain the cost-basis of the model as a whole.

### **ANNUAL REPORT TO LEGISLATURE**

In accordance with W.S. § 21-13-309(u), LSO will prepare an annual report to the Joint Education Committee (JEC) analyzing and interpreting all of the available monitoring data. The JEC will then make any appropriate recommendations to the Joint Appropriations Committee who then will forward their recommendations on model adjustments to the Legislature. The annual report will include the analysis of the model monitoring process described in this report.

## **CONCLUSION**

The 2010 recalibration process forwarded and funded a model which exceeds cost by at least \$102 million. The monitoring process outlined in this report enables the Legislature to ensure maintenance of the cost-basis of funding between recalibrations and allows the Legislature more precision with which to infuse any future additional funding into the model. Continued reporting of accurate data is critical and additional data may be required to continue to build upon this monitoring process. Market pressures on cost do *not* automatically require a certain response. The monitoring process is designed to identify options to address these pressures, both on model components and the *model as a whole*. LSO will collect and analyze data and, with the assistance of appropriate external expertise to interpret results of data collections and analyses, provide the Legislature with an array of options as it annually considers whether to infuse additional funding into the model. This monitoring process approach to maintain the cost-basis of the model between recalibrations is designed to avoid the pitfalls that arose with a more prescriptive blanket approach to ECAs in the past. While the new approach is more sophisticated, and requires more in-depth analysis, it yields a far more accurate view of the inflationary pressures on the model.

Est. SY 2011-12  
Wyoming Funding Model Resources  
Consultant Recommendations vs. Current Law

School-Level Resources	Consultant Recommendation			Current Law			Difference	
	FTEs	Total \$	% of Total	FTEs	Total \$	% of Total	FTEs	Total \$
Principals	274.78	\$ 31,391,395	2.50%	270.66	\$ 31,473,670	2.31%	4.11	\$ (82,275)
Assistant Principals	75.19	\$ 7,760,923	0.62%	75.19	\$ 7,856,313	0.58%	0.00	\$ (95,391)
Small/ALE School Assistant Principals	65.00	\$ 6,264,414	0.50%	70.00	\$ 6,934,112	0.51%	-5.00	\$ (669,699)
School Secretarial	323.70	\$ 17,328,580	1.38%	319.58	\$ 17,371,121	1.28%	4.11	\$ (42,541)
School Clerical	372.64	\$ 16,518,262	1.31%	368.44	\$ 16,541,671	1.22%	4.19	\$ (23,409)
Core Teachers	4,269.17	\$ 323,852,007	25.75%	4,819.59	\$ 371,587,604	27.32%	-550.42	\$ (47,735,597)
Specialist Teachers	979.48	\$ 74,282,864	5.91%	1,224.85	\$ 94,420,776	6.94%	-245.37	\$ (20,137,912)
Additional Voc Ed Teachers	0.00	\$ -	0.00%	37.41	\$ 2,872,507	0.21%	-37.41	\$ (2,872,507)
Minimum Teachers	107.13	\$ 7,814,433	0.62%	209.09	\$ 15,597,199	1.15%	-101.96	\$ (7,782,766)
Alternative School Teachers	0.00	\$ -	0.00%	143.64	\$ 11,191,251	0.82%	-143.64	\$ (11,191,251)
Small School Teachers	220.93	\$ 16,590,118	1.32%	171.65	\$ 13,199,203	0.97%	49.28	\$ 3,390,915
Small District Minimum Teachers	0.00	\$ -	0.00%	14.34	\$ 1,074,992	0.08%	-14.34	\$ (1,074,992)
Instructional Facilitators	437.70	\$ 33,201,389	2.64%	260.73	\$ 20,345,943	1.50%	176.97	\$ 12,855,446
Summer School/Extended Day Teachers	270.56	\$ 20,495,902	1.63%	161.12	\$ 12,372,786	0.91%	109.44	\$ 8,123,116
Substitute Teachers		\$ 6,239,722	0.00		\$ 6,534,783	0.48%	0.00	\$ (295,061)
Tutors	357.85	\$ 27,131,946	2.16%	352.39	\$ 27,121,033	1.99%	5.46	\$ 10,913
ELL Teachers	31.87	\$ 2,444,285	0.19%	31.69	\$ 2,488,077	0.18%	0.18	\$ (43,792)
Librarians	N/A	N/A	N/A	277.24	\$ 21,278,837	1.56%	-277.24	\$ (21,278,837)
Library Media Technicians	N/A	N/A	N/A	133.81	\$ 9,216,534	0.68%	-133.81	\$ (9,216,534)
Pupil Support	357.85	\$ 27,131,946	2.16%	352.39	\$ 27,121,033	1.99%	5.46	\$ 10,913
Secondary Guidance Counselors	171.24	\$ 12,977,168	1.03%	168.60	\$ 12,989,796	0.96%	2.64	\$ (12,628)
Supervisory Aides	624.02	\$ 22,643,623	1.80%	618.78	\$ 22,717,239	1.67%	5.24	\$ (73,616)
<b>Subtotal</b>	<b>8,939.09</b>	<b>\$ 654,068,977</b>	<b>52.01%</b>	<b>10,081.19</b>	<b>\$ 752,306,481</b>	<b>55.31%</b>	<b>-1,142.10</b>	<b>\$ (98,237,504)</b>
<b>District-Level Staff Resources</b>								
Central Office Administration	257.05	\$ 33,623,548	2.67%	275.70	\$ 36,924,021	2.71%	-18.65	\$ (3,300,474)
Central Office Clerical	294.36	\$ 16,624,308	1.32%	313.01	\$ 17,972,598	1.32%	-18.65	\$ (1,348,290)
Librarians	145.21	\$ 17,906,640	1.42%	N/A	N/A	N/A	N/A	N/A
Library Clerks	91.96	\$ 6,418,284	0.51%	N/A	N/A	N/A	N/A	N/A
Computer Technicians	473.65	\$ 6,240,771	0.50%	N/A	N/A	N/A	N/A	N/A
Custodians	722.09	\$ 35,911,679	2.86%	741.40	\$ 37,402,425	2.75%	-19.31	\$ (1,490,745)
Maintenance Workers	326.30	\$ 18,558,418	1.48%	326.30	\$ 18,858,699	1.39%	0.00	\$ (300,281)
Groundskeepers	436.04	\$ 24,839,218	1.98%	436.04	\$ 25,226,753	1.85%	0.00	\$ (387,535)
<b>Subtotal</b>	<b>2,746.65</b>	<b>\$ 160,122,867</b>	<b>12.73%</b>	<b>1,816.75</b>	<b>\$ 136,384,496</b>	<b>10.03%</b>	<b>929.90</b>	<b>\$ 23,738,371</b>
<b>Non-Staff Resources</b>								
Central Office Non-Personnel		\$ 31,290,658	2.49%		\$ 31,290,658	2.30%		\$ -
Operations and Maintenance Supplies		\$ 12,272,354	0.98%		\$ 12,272,354	0.90%		\$ -
Utilities		\$ 34,072,968	2.71%		\$ 34,072,968	2.51%		\$ -
School Supplies and Materials		\$ 13,368,882	1.06%		\$ 31,629,905	2.33%		\$ (18,261,023)
School Technology and Equipment		\$ 22,332,621	1.78%		\$ 26,075,548	1.92%		\$ (3,742,927)
Vocational Education Supplies		\$ 2,836,097	0.23%		\$ 2,836,097	0.21%		\$ -
Gifted and Talented		\$ 2,607,555	0.21%		\$ 2,607,555	0.19%		\$ -
Professional Development		\$ 10,430,219	0.83%		\$ 10,430,219	0.77%		\$ -
Assessment		\$ 3,367,375	0.27%		\$ 3,367,375	0.25%		\$ -
Student Activities		\$ 25,814,793	2.05%		\$ 31,827,476	2.34%		\$ (6,012,683)
<b>Subtotal</b>		<b>\$ 158,393,522</b>	<b>12.60%</b>		<b>\$ 186,410,156</b>	<b>13.71%</b>		<b>\$ (28,016,634)</b>
<b>Reimbursable Costs</b>								
Special Education <sup>1</sup>		\$ 203,182,284	16.16%		\$ 203,182,284	14.94%		\$ -
Transportation		\$ 66,887,136	5.32%		\$ 66,887,136	4.92%		\$ -
Other Reimbursables		\$ 14,874,655	1.18%		\$ 14,874,655	1.09%		\$ -
<b>Subtotal</b>		<b>\$ 284,944,075</b>	<b>22.66%</b>		<b>\$ 284,944,075</b>	<b>20.95%</b>		<b>\$ -</b>
<b>Total Estimated Guarantee and Categorical<sup>2,3</sup></b>	<b>11,685.74</b>	<b>\$ 1,257,529,441</b>		<b>11,897.94</b>	<b>\$ 1,360,045,209</b>		<b>-212.20</b>	<b>\$ (102,515,768)</b>

Notes:

1. Difference cannot be calculated, but consultants Special Education recommendation was a census approach to staff allocations for special education services to children with mild and moderate disabilities at the district level, but still 100% reimburse children with severe and profound disabilities.
2. Consultant recommendation uses the Hedonic Wage Index for the Regional Cost Adjustment
3. This difference is exclusive of any additional funding provided by the "price" of the personnel resources (the statewide average model salary) being set higher than necessary.