THE K–12 PUBLIC SCHOOL EMPLOYEE HEALTH BENEFITS REPORT

FINANCIAL MODELING

Washington State Health Care Authority

HCA 52-151 (12/2011) VOLUME 3

MILLIMAN CLIENT REPORT

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The Washington State Health Care Authority

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Milliman was retained by the Washington State Health Care Authority (HCA) to collect and process data underlying the current Washington K-12 health care benefits and to perform financial modeling of a consolidated purchasing system for those benefits. This report contains the results of our analysis, as well as a discussion of the data collection, validation and modeling.

Entities providing data from the 2010-2011 school year to support the modeling included the following.

- The Washington School Information Processing Cooperative (WSIPC)
- The Washington Office of the Superintendent of Public Instruction (OSPI)
- Over 175 school districts
- Regence BlueShield of Washington and Kaiser Permanente

The foundation of our financial models is the WSIPC data, which was provided at the individual member level. While this data included no information that would allow for the actual identification of any individual, it did provide essential member-level data such as benefit FTE status and actual FTE status. For each enrollee and for each benefit (medical, dental, vision, etc.), the data identified the benefit plan selected, the enrollment tier, the aggregate plan premiums, and the member payroll deduction.

Also critical to the analysis was a similar data contribution by several large school districts that did not participate in WSIPC insurance tracking during the baseline period.

While we were unable to collect data for all K-12 employees, we do believe that the sample collected is representative of the whole. This report documents the reconciliation of the collected data to other sources and the efforts to validate its use for this analysis. We used the OSPI data as the comprehensive source of information on employees in the 2010-2011 school year. WSIPC data and the individually-provided district information were aggregated and formed the baseline from which modeling of the consolidated system could be performed.

After adjusting the member level data to be consistent with the OSPI data, the starting member and cost distributions are summarized below as Tables 1 and 2, respectively. We verified that these totals are reasonably consistent with the baseline data contained in the HayGroup report.

Table 1
Original and Adjusted Individual-Level Data
Employees by FTE Level and Employment Type

	Total Employees: Original Data			Total Employees: Adjusted Data		
Benefit FTE	Certificated	Non Certificated	Total	Certificated	Non Certificated	Total
under 0.40	195	758	953	301	1,252	1,552
0.40 - 0.49	161	725	886	253	1,199	1,451
0.50 - 0.59	1,285	2,405	3,690	1,986	3,938	5,925
0.60 - 0.69	907	2,631	3,538	1,430	4,240	5,670
0.70 - 0.79	260	3,850	4,110	397	6,313	6,709
0.80 - 0.89	925	5,018	5,943	1,426	8,736	10,163
0.90 - 0.99	268	2,827	3,095	422	4,843	5,265
1.0	38,182	17,657	55,839	63,509	29,517	93,025
Total	42,183	35,871	78,054	69,723	60,038	129,761

Table 2
Adjusted Employee-Level Data
Total Premiums, Employee Contributions,
and Employer Contributions by Benefit

Benefit Type	Premium [1]	Employee Contribution [1]	Employer Contribution [1]
Medical	$1,083.6	$236.7 [2]	$846.9
Dental	173.2	1.3	171.8
Vision	25.6	0.0	25.5
LTD/Life	16.3	0.0	16.3
Total	$1,298.6	$238.1	$1,060.5

[1] Total dollars are in millions.

[2] The 21.8% average employee contribution for medical coverage reflects the base year mix of employees/dependents and full-time vs. part-time employees.

The report section “Overview of Current Enrollment, Premium, and Contribution Data” contains numerous tables that summarize the data from the 2010-2011 school year, based on the information received from the sources cited above.

Financial Modeling

The financial model created from the member-level data described previously is intended to quantify the impact on employer and employee costs resulting from several policy decisions contained in a consolidated purchasing system. Note that this model uses the 2010-2011 school year to restate the employer and employee costs under a uniform employer contribution approach. In addition, we have modeled the movement of members between products and tiers that would result from these changes. In the context of this model, employer contributions reflect amounts paid by the school district employer, regardless of the source of these funds (State, local levy, federal, etc.).

At this time, the model is not a forward-looking projection. Such a forecast would require the incorporation of enrollment changes associated with the current school year open enrollment, revisions to carrier pricing strategies, cost trends, renegotiated local bargaining agreements, and many other factors. Also, as the model is discussed below, it is important to keep in mind that no aggregate "savings" are projected as part of this modeling effort. Rather, costs are shifted, primarily between the Employee tiers with dependents and the Employee Only tier, between premiums and additional point-of-service cost-sharing in the chosen plan designs, and in some cases, between employer and employee.

Due to timing issues, this study was conducted with data for the 2010-2011 school year. Based on a preliminary analysis of emerging data for the 2011-2012 school year, we noted that employees appear to have migrated from richer plans (e.g., WEA Plans 1 and 5) to less rich plans (e.g., WEA Plans 2, 3, and Easy Choice). Therefore, some of the migration of employees to less rich plans, as modeled in this analysis, has already occurred in the 2011-2012 school year.

The initial model, referred to as the baseline scenario, is designed to be approximately budget-neutral from the employer perspective, on a Statewide basis. Several other scenarios are presented in subsequent sections of the report.

We note that results for individual districts will vary, potentially significantly, from the Statewide analysis presented here. The model is not intended to project results at a district level, and districts will need to perform their own analyses

Key Assumptions – Baseline Scenario

The key assumptions in the baseline scenario are as follows:

- Baseline Plan: WEA Plan 2 is used as the baseline plan for the calculation of the employer financial contributions for benefits.
- Employee Contributions: For full-time employees, we assumed the employee would contribute 15% of the premiums for employees and 35% of the premiums for dependents, based on the baseline WEA Plan 2. For the Employee/Spouse, Employee/Child(ren), and Family tiers, the 35% contribution was applied to the marginal portion of the premium (e.g., the total premium less the Employee Only premium for the same plan). In the 2010-2011 school year, full-time employees contributed an average of 4% for employee only coverage and a marginal dependent contribution of 73%.
- Pro-Ration of Employer Contributions for Part-Time Employees: We maintained the current pro-ration method regarding the employer contribution for part-time employees.

- Grandfathering of Part-Time Employees: The model reflects grandfathering of benefit eligibility for any employees with FTE status of less than 0.5. We assumed that these employees would receive employer contributions at the same levels as employees with an FTE status of 0.5.
- Employee Contributions for More Expensive Plans: For employees selecting more expensive plans than WEA Plan 2, we assumed that employees would be responsible for any differential in premium rates. In other words, if a richer plan were selected, employees would pay the full difference between that plan's premium and the premium for WEA Plan 2.
- Employee Contributions for Less Expensive Plans: For employees selecting less expensive plans than WEA Plan 2, we assumed that employees would benefit from the lower premiums, and their contributions would be correspondingly lower. Employee premiums for leaner plans were set at a minimum of $0 (i.e., no premium credits were assumed) for the Employee-Only tier and at $40, $10, and $50 for the Employee/Spouse, Employee/Child(ren), and Family tiers, respectively. The design team included a meaningful employee contribution requirement in the benchmark plan for several reasons, including achieving a design that is competitive in the Washington employer market and in comparison to school employers across the nation on average; and imposing a level of required employee engagement in assuring the system is managed effectively.
- Waived Coverage: For employees waiving medical coverage, we assumed no credits or other compensation.
- Migration: We assumed that employees would migrate to richer or leaner benefit plans, based on the modeled employee contribution changes. We further assumed that employees would migrate between tiers, based on the changing employer contribution methodology.

Results of Baseline Scenario

For the baseline scenario, the high-level results are as follows. Note that these figures do not include the impact of employees choosing to select leaner or richer benefits as a result of the changes to premium contribution requirements. While those changes are modeled in the report, from a summary perspective we perceive the financial impact of those choices as cost-neutral in aggregate as members trade premiums for point-of-service cost sharing in the selected benefits.

- From the employer perspective, the changes modeled in the baseline scenario are nearly benefit-neutral (with net savings of $2.4 million projected).
- Employees currently selecting the Employee Only tier will see annual contribution increases of roughly $73.9 million, through additional employee contributions and a reduced benefit package from an employer funding perspective. Note that this is a cost shift from the employer to the employees. This estimate does not include premium reductions that might be realized by employees who choose leaner benefit plans in exchange for greater point-of-service cost-sharing.
- Employees selecting dependent coverage will see annual reductions in employee contributions of approximately $54.9 million. Note that this is a cost shift from the employees to the employer.
- Employers (school districts) are estimated to spend an additional $16.3 million as a result of additional employees opting to cover their dependents. This is an increased expenditure to the

employer for the coverage of additional lives. Similarly, employees see an increase in costs for the additional coverage.

Additional Scenarios Modeled

In addition to the baseline scenario, we also modeled several other scenarios regarding the employer funding levels. The results from the scenarios modeled are as follows:

Table 3
High Level Results for Scenarios Modeled

		Employee Contribution for:		Projected Impact on:		
Scenario	Baseline Plan	Employee Portion	Dependent Portion	Total Premium [1]	Employee Contribution [1]	Employer Contributions [1]
Scenario 1 (Baseline): WEA 2/ 15%/ 35%	WEA 2	15%	35%	$9.8	$12.2	($2.4)
Scenario 2: WEA 2/ 18%/ 35%	WEA 2	18%	35%	7.7	31.2	(23.5)
Scenario 3: WEA 2/ 10%/ 25%	WEA 2	10%	25%	39.5	(37.0)	76.5
Scenario 4: WEA 2/ 15%/ 30%	WEA 2	15%	30%	10.9	0.3	10.5
Scenario 5: WEA 2/ 20%/ 40%	WEA 2	20%	40%	(10.8)	51.7	(62.5)
Scenario 6: WEA 2/ 25%/ 50%	WEA 2	25%	40%	(32.5)	105.3	(137.8)
Scenario 7: UMP/ 15%/ 35%	UMP	15%	35%	(12.5)	96.9	(109.3)

[1] Total dollars are in millions.

Data Limitations

While we believe that the data collected is a representative sample from which reasonable conclusions can be reached in the aggregate, it is worth noting some of the limitations of the study, largely driven by the inability to collect more comprehensive data.

- The model does not incorporate any of the administrative costs associated with running the current or the consolidated K-12 benefit programs. There is speculation that consolidated purchasing and administration can introduce efficiencies into the system and produce savings, but this report makes no attempt to quantify such savings.
- Coding inconsistencies between school districts require judgment and estimation to create the consistencies needed for modeling. Variations in coding employee types, coverage tiers, benefit plans and FTE status are just a few examples. The development of coding standards would be an added value of a consolidated system and could potentially occur in the current system.
- A comprehensive understanding of future costs in a consolidated system should incorporate actual claim experience. Such claim experience is unavailable today, largely because of legitimate apprehension about releasing personally identifiable health information. In addition, questions of data ownership and access rights were prohibitive with regard to securing such data in the timeline given for this report.
- Significant uncertainty exists with respect to member behavior in a system with fairly dramatic changes in employee contributions, as contemplated in this analysis. The number of employees

who add dependents as a result of lower dependent contributions or the number of employees who seek coverage through the plan of a spouse as a result of higher Employee Only contributions is unknown. We believe our model makes reasonable assumptions, but our point estimates could differ from actual results by a material amount.

Caveats, Limitations, and Considerations

This report was commissioned by the Washington State Health Care Authority (HCA). This analysis is subject to the terms and conditions of the Contract between the Washington HCA and Milliman. We are members of the American Academy of Actuaries, and we meet the qualification standards for performing the analyses in this report. Milliman does not intend to endorse any product or to benefit any third party through this report; the report reflects the findings of the authors.

Any reader of this report must possess a certain level of expertise in areas relevant to this analysis to appreciate the significance of the assumptions and the impact of these assumptions on the illustrated results. The reader should be advised by their own actuaries or other qualified professionals competent in the subject matter of this report, so as to properly interpret the material.

The analysis in this report is based on K-12 data for the 2010-2011 school year, Milliman research, and our experience working with similar organizations. Actual experience will vary from our analysis for many reasons, including differences in enrollment patterns, in actual premium levels, and in employer funding levels, as well as in other non-random and random factors. It is important that actual experience be monitored and that adjustments are made, as appropriate.

Our projected estimates are not predictions of the future; they are projections based on the assumptions. If the underlying data or other listings are inaccurate or incomplete, this analysis may also be inaccurate or incomplete. Emerging results should be carefully monitored with assumptions adjusted as appropriate.

Reliance on Data Provided by Others

In performing our analysis, we relied on data and other information provided to us by the Washington HCA, the Washington Office of Superintendent of Public Instruction (OSPI), the Washington School Information Processing Cooperative (WSIPC), and individual K-12 school districts, for the 2010-2011 school year. Specifically, the data we received includes, but is not limited to, 2010-2011 enrollment counts by district; employee-specific benefit and premium information; information regarding employer funding levels; responses to district-level survey information; and medical, dental, and vision plan benefit descriptions. We did not receive complete data for all districts. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency. We noted several issues with the data. We have implemented modifications, where appropriate, and have attempted to account for gaps in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

VALIDATION OF K-12 DATA RECEIVED FOR 2010-2011 SCHOOL YEAR

We performed a reconciliation between the various sources of data received for the 2010-2011 school year. Employee-level data was provided by:

- The Washington Office of Superintendent of Public Instruction (OSPI)
- The Washington School Information Processing Cooperative (WSIPC), for districts participating in WSIPC insurance tracking for the 2010-2011 school year
- Other Washington K-12 districts that did not participate in WSIPC insurance tracking for the 2010-2011 school year

In addition, over 175 school districts responded to a request for summarized data regarding enrollment, expenditures and eligibility criteria. This district-provided information was used to validate the completeness of the individual level data provided.

Demographic Data from OSPI

The OSPI demographic data was taken from the S-275 Personnel Report for the 2010-2011 school year. The report contains individual data for each K-12 employee in Washington State who was under contract as of October 1, 2010, for the 2010-2011 school year. The data includes each employee's staff role, school district, age, and gender. Certain employees are excluded from the OSPI data, including certain classes of substitute teachers and any employees who are anticipated to work 20 or fewer school days in the same assignment. The report does not include any employee benefit data.

The OSPI data was used to adjust and reconcile the individual data that was received from WSIPC and from individual school districts.

Employee-Level Data for K-12 Districts Participating in WSIPC Insurance Tracking

The primary source of data in our analysis is the individual employee-level data for the month of February 2011 provided by WSIPC. This data is an extract of employee payroll data for a single month, for districts that participated in WSIPC insurance tracking in the 2010-2011 school year.

There are two key differences between the WSIPC and OSPI data sources:

- Types of Employees: The scope of types of employees covered in the WSIPC data is much larger than that of the OSPI data. The WSIPC data includes anyone who received a paycheck, including all substitutes and employees who worked 20 or fewer school days.
- Scope of Data: The scope of time for the WSIPC data is smaller than that of the OSPI data. The OSPI data reflects any employee who, as of October 1, 2010, was contracted or hired to provide services at any time during the period from September 1, 2010 through August 31, 2011. By contrast, the WSIPC data reflects a single month of employee benefits data (February 2011, for our analysis). Therefore, an employee who is under contract for the 2010-2011 school year (as of October 1, 2010), but who did not work in the sample month included in the WSIPC data, would be included in the OSPI data but not in the WSIPC data.

In addition to differences in the types of employees and scope of data between the two sources, there are also potential differences due to the impact of seasonality and mid-year staffing changes. Since the OSPI data is as of October 1, 2010, the effect of unforeseen staffing changes would not be reflected in this data. The WSIPC data, by contrast, would reflect the impact of any mid-year staffing changes, as only current employees would be included in the February 2011 data. For these reasons, we believe it is reasonable that the WSIPC data reflects lower employee counts than does the OSPI data.

It is important to note that our comparisons of WSIPC and OSPI data relied upon "actual FTE" status and not the "benefit FTE" status. Both fields were populated in the WSIPC data but only the actual FTE status was contained in the OSPI data. Therefore, the comparisons between the two sources relied upon the actual FTE field, even though the benefit FTE field was used in the analytics involving the WSIPC data.

Employee-Level Data for K-12 Districts Not Participating in WSIPC Insurance Tracking

At the time that data requests were issued to all school districts, it was not clear that many WSIPC-participating districts do not use WSIPC from an insurance tracking perspective. As a result, the WSIPC insurance data does not cover as much of the K-12 population as originally anticipated. We were aware of many larger districts that did not participate in WSIPC and specifically requested similar insurance information at the member level from each. Several of these districts (Clover Park, Everett, Federal Way, Northshore, Seattle, Spokane, and Tacoma) provided detailed employee-level data, in a similar format to the WSIPC data, for the 2010-2011 school year. Outstanding data issues precluded the inclusion of the data from the Northshore and Spokane school districts at this time.

Reconciliation of Data Sources

The following is a reconciliation of the individual-level employee data (from both WSIPC and non-WSIPC districts) to the OSPI data. The discrepancy between the OSPI and the individual-level data is discussed in more detail in the report Appendix.

Exhibit 1
Reconciliation of Data Used to OSPI Data

Districts with Individual-Level Data

	Employees	Count of Districts [1]
Districts Participating in WSIPC Insurance Tracking		
Total Individuals	104,494	138
Individuals Excluded [2]	(41,665)	
Individuals Retained	62,829	
Districts Not Participating in WSIPC Insurance Tracking		
Total Individuals	20,069	5
Individuals Excluded [2]	(4,844)	
Individuals Retained	15,225	
Total	78,054	143
OSPI Employee Count for Districts with Individual-Level Data	84,072	
% Difference	-7%	

Districts without Individual-Level Data

	Employees in OSPI	Count of Districts [1]
All Districts	45,689	163

Totals

Employees in Individual-Level Data	78,054
Employees in Districts without Individual Level Data	45,689
Total	123,743
Employee Count in OSPI Data	129,761

[1] Count of districts includes ESDs that were present in OSPI database.
[2] See Appendix for detail regarding adjustments to individual-level data.

OVERVIEW OF CURRENT ENROLLMENT, PREMIUM, AND CONTRIBUTION DATA

After the completion of the data validation, the WSIPC data containing benefit information and the individually-provided district information were aggregated and formed the baseline from which modeling of the consolidated system could be performed. For the purpose of modeling the expenditure impacts of policy decisions, the sample membership was increased to reflect the Statewide K-12 population, under the assumption that the sample is representative of the whole. On the next several pages, we have provided tables that summarize the enrollment, premiums and contribution data for the 2010-2011 school year.

Adjustment of Employee-Level Data to OSPI Totals

As discussed previously, our sample does not include individual employee-level data from all school districts. In order to adjust our analysis to reflect the Statewide data for the 2010-2011 school year, we adjusted the employee-level data from the WSIPC and non-WSIPC districts using scalar factors. Scalar factors were calculated and applied separately to four categories, based on geographic location (Eastern vs. Western Washington) and larger districts vs. smaller districts.

We adjusted the data for each of these four categories separately by scalar factors, in order to attain the number of target unique employees for each category, from the OSPI data.

Exhibit 2 shows the total employees by FTE level and employment type (Certificated/Non-Certificated), based on the WSIPC and non-WSIPC data. The exhibit first shows the employee counts based on the actual data, and then shows the modeled data (after adjustments to account for missing data).

Exhibit 3 provides the total benefit-related expenditures separately by benefit type (e.g., medical, dental, etc.) for the 2010-2011 school year, based on the adjusted data. We also verified that these totals reconcile reasonably closely to the data from the HayGroup report. We have concluded that the adjusted sample forms a reasonable baseline for our modeling purposes.

Exhibit 2
Original and Adjusted Individual-Level Data
Employees by FTE Level and Employment Type

	Total Employees: Original Data			Total Employees: Adjusted Data		
Benefit FTE	Certificated	Non Certificated	Total	Certificated	Non Certificated	Total
under 0.40	195	758	953	301	1,252	1,552
0.40 - 0.49	161	725	886	253	1,199	1,451
0.50 - 0.59	1,285	2,405	3,690	1,986	3,938	5,925
0.60 - 0.69	907	2,631	3,538	1,430	4,240	5,670
0.70 - 0.79	260	3,850	4,110	397	6,313	6,709
0.80 - 0.89	925	5,018	5,943	1,426	8,736	10,163
0.90 - 0.99	268	2,827	3,095	422	4,843	5,265
1.0	38,182	17,657	55,839	63,509	29,517	93,025
Total	42,183	35,871	78,054	69,723	60,038	129,761

Exhibit 3
Adjusted Employee-Level Data
Total Premiums, Employee Contributions,
and Employer Contributions by Benefit

Benefit Type	Premium [1]	Employee Contribution [1]	Employer Contribution [1]
Medical	$1,083.6	$236.7	$846.9
Dental	173.2	1.3	171.8
Vision	25.6	0.0	25.5
LTD/Life	16.3	0.0	16.3
Total	$1,298.6	$238.1	$1,060.5

[1] Total dollars are in millions.

All of the tables and analyses that follow in this report use the adjusted data in the presentation.

Data for Non-Medical Benefits

The employee-level data includes information for medical, dental, vision, life, LTD, and other benefits. We reviewed the data for the dental benefits, which comprised the second-largest portion of the employee benefits (with medical being the largest). In our sample data, we noted that dental benefits were almost exclusively paid by 100% employer contributions. We also reviewed the dental data by plan, and noted that the vast majority of individuals in identifiable plans (over 80%) were enrolled in WEA Dental Plan A. Due to this situation, we made no changes to the dental benefits in our modeling, and allowed the benefit to continue as nearly 100% employer-paid. As discussed in a subsequent section, we did adjust the employer contribution to reflect the 100% employer-funding of the dental benefit in the historic data, even in those cases where employees are being asked to share in that cost in the current system.

Data for vision, life, and LTD benefits represent a small subset of the total premium dollars and this data was not examined separately in our analysis. However, we did preserve current cost levels in our modeling process.

Summaries of Enrollment, Premium, and Contribution Data

Exhibit 4a provides a similar summary as that in Exhibit 2, but separately by coverage tier, as well as employment type. Exhibit 4b provides a distribution of the employees in Exhibit 4a. See Appendix 1 for a discussion of the assignment of employee type codes contained in the data to the certificated and non-certificated categories.

Exhibit 5 provides the employee contribution percentage, separately by employment type, coverage tier, and FTE level. This exhibit highlights the concern about contribution equity between single employees and those with dependents. What the table does not clearly show is that the marginal dependent contribution

rates for a full-time employee in the baseline data is 73%. This concept of marginal dependent contribution rates is discussed in greater detail in the Financial Model section of the report.

Exhibit 6 provides a distribution of employees by benefit relativity (using WEA Plan 2 as the 1.00 Plan), separately by employment status and coverage tier (Employee Only vs. Employees with Dependents). This exhibit demonstrates that full-time employees and those purchasing employee-only coverage tend to purchase richer benefits.

Exhibits 7a, 7b, and 7c provide a distribution of employee counts by benefit relativity, separately for the Employee Only tier vs. Employees with Dependents. The tables provide distributions for full-time employees, part-time employees, and all employees, respectively.

Exhibit 8a provides a summary of enrollment counts by benefit plan and tier. Exhibit 8b provides a distribution of the employees in Exhibit 8a. Please note that, within the employee-level data, we were unable to determine the exact benefit plan for numerous employees.

Exhibit 4a
Adjusted Employee-Level Data
Employees by Medical Coverage Tier/ FTE Level/ Employment Type

	Employees by Medical Coverage Tier - Certificated Employees					
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	No Coverage	Total
under 0.40	53	9	21	20	199	301
0.40 - 0.49	57	4	24	11	156	253
0.50 - 0.59	564	59	294	138	931	1,986
0.60 - 0.69	562	55	194	103	516	1,430
0.70 - 0.79	164	26	76	39	92	397
0.80 - 0.89	652	96	287	127	263	1,426
0.90 - 0.99	209	31	84	33	65	422
1.0	28,743	5,410	16,418	8,350	4,587	63,509
Total	31,005	5,690	17,398	8,822	6,809	69,723

	Employees by Medical Coverage Tier - Non Certificated Employees					
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	No Coverage	Total
under 0.40	231	24	42	45	910	1,252
0.40 - 0.49	236	27	53	26	857	1,199
0.50 - 0.59	1,235	148	266	153	2,136	3,938
0.60 - 0.69	1,742	248	366	214	1,671	4,240
0.70 - 0.79	2,812	415	833	330	1,924	6,313
0.80 - 0.89	4,164	700	1,394	468	2,010	8,736
0.90 - 0.99	2,347	429	797	322	947	4,843
1.0	13,687	3,628	5,968	2,709	3,525	29,517
Total	26,454	5,618	9,719	4,267	13,980	60,038

	Employees by Medical Coverage Tier - All Employees					
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	No Coverage	Total
under 0.40	283	32	63	64	1,109	1,552
0.40 - 0.49	293	32	77	37	1,013	1,451
0.50 - 0.59	1,799	207	560	292	3,067	5,925
0.60 - 0.69	2,305	303	560	317	2,186	5,670
0.70 - 0.79	2,976	440	909	369	2,016	6,709
0.80 - 0.89	4,816	796	1,681	596	2,274	10,163
0.90 - 0.99	2,556	460	881	355	1,012	5,265
1.0	42,430	9,038	22,386	11,060	8,112	93,025
Total	57,458	11,308	27,117	13,089	20,789	129,761

Exhibit 4b
Adjusted Employee-Level Data
Distribution of Employees by Medical Coverage Tier/ FTE Level/ Employment Type

	Distribution of Certificated Employees by Medical Coverage Tier					
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	No Coverage	Total
under 0.40	18%	3%	7%	7%	66%	100%
0.40 - 0.49	23%	2%	10%	4%	62%	100%
0.50 - 0.59	28%	3%	15%	7%	47%	100%
0.60 - 0.69	39%	4%	14%	7%	36%	100%
0.70 - 0.79	41%	6%	19%	10%	23%	100%
0.80 - 0.89	46%	7%	20%	9%	18%	100%
0.90 - 0.99	50%	7%	20%	8%	15%	100%
1.0	45%	9%	26%	13%	7%	100%
Total	44%	8%	25%	13%	10%	100%

	Distribution of Non Certificated Employees by Medical Coverage Tier					
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	No Coverage	Total
under 0.40	18%	2%	3%	4%	73%	100%
0.40 - 0.49	20%	2%	4%	2%	71%	100%
0.50 - 0.59	31%	4%	7%	4%	54%	100%
0.60 - 0.69	41%	6%	9%	5%	39%	100%
0.70 - 0.79	45%	7%	13%	5%	30%	100%
0.80 - 0.89	48%	8%	16%	5%	23%	100%
0.90 - 0.99	48%	9%	16%	7%	20%	100%
1.0	46%	12%	20%	9%	12%	100%
Total	44%	9%	16%	7%	23%	100%

	Distribution of All Employees by Medical Coverage Tier					
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	No Coverage	Total
under 0.40	18%	2%	4%	4%	71%	100%
0.40 - 0.49	20%	2%	5%	3%	70%	100%
0.50 - 0.59	30%	3%	9%	5%	52%	100%
0.60 - 0.69	41%	5%	10%	6%	39%	100%
0.70 - 0.79	44%	7%	14%	5%	30%	100%
0.80 - 0.89	47%	8%	17%	6%	22%	100%
0.90 - 0.99	49%	9%	17%	7%	19%	100%
1.0	46%	10%	24%	12%	9%	100%
Total	44%	9%	21%	10%	16%	100%

Exhibit 5
Adjusted Employee-Level Data
Employee Medical Contribution Percentages
by FTE Level/ Medical Coverage Tier/ Employment Type

	Employee Medical Contribution Percentage - Certificated Employees [1]				
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	Total
under 0.40	12%	61%	18%	57%	32%
0.40 - 0.49	48%	71%	51%	67%	54%
0.50 - 0.59	46%	71%	59%	72%	58%
0.60 - 0.69	35%	60%	52%	61%	46%
0.70 - 0.79	19%	59%	34%	62%	37%
0.80 - 0.89	15%	57%	37%	59%	34%
0.90 - 0.99	6%	42%	29%	54%	24%
1.0	4%	39%	22%	44%	22%
Total	6%	40%	24%	45%	24%

	Employee Medical Contribution Percentage - Non Certificated Employees [1]				
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	Total
under 0.40	25%	45%	35%	42%	32%
0.40 - 0.49	31%	58%	43%	50%	39%
0.50 - 0.59	24%	48%	43%	39%	33%
0.60 - 0.69	15%	46%	35%	47%	27%
0.70 - 0.79	9%	41%	25%	46%	21%
0.80 - 0.89	4%	37%	21%	44%	18%
0.90 - 0.99	4%	34%	15%	35%	16%
1.0	5%	32%	17%	37%	18%
Total	7%	35%	19%	39%	19%

	Employee Medical Contribution Percentage - All Employees [1]				
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	Total
under 0.40	23%	49%	29%	47%	32%
0.40 - 0.49	34%	60%	46%	55%	42%
0.50 - 0.59	31%	55%	52%	56%	43%
0.60 - 0.69	20%	49%	41%	52%	32%
0.70 - 0.79	9%	42%	26%	48%	23%
0.80 - 0.89	6%	40%	24%	47%	20%
0.90 - 0.99	4%	35%	17%	37%	16%
1.0	4%	36%	21%	42%	21%
Total	6%	38%	22%	43%	22%

[1] Employee Contributions are calculated as total employee contributions divided by total premium.

Exhibit 6
Adjusted Employee-Level Data
Composite Medical Benefit Relativities
by FTE Level/ Medical Coverage Tier/ Employment Type

	Composite Medical Benefit Relativity - Certificated Employees				
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	Total
under 0.40	1.021	0.982	1.031	0.996	1.015
0.40 - 0.49	0.978	0.951	1.009	0.978	0.985
0.50 - 0.59	0.989	1.001	0.989	0.974	0.988
0.60 - 0.69	0.988	0.982	0.993	0.978	0.987
0.70 - 0.79	1.011	0.991	0.948	0.971	0.989
0.80 - 0.89	1.008	1.022	1.004	0.990	1.006
0.90 - 0.99	1.023	0.955	1.015	0.991	1.012
1.0	1.046	1.006	1.021	0.994	1.028
Total	1.043	1.006	1.019	0.993	1.026

	Composite Medical Benefit Relativity - Non Certificated Employees				
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	Total
under 0.40	0.970	0.966	1.036	0.961	0.976
0.40 - 0.49	0.970	0.902	0.981	0.950	0.965
0.50 - 0.59	0.988	0.989	0.976	1.006	0.988
0.60 - 0.69	0.999	0.982	0.988	0.996	0.995
0.70 - 0.79	0.998	0.977	0.985	0.954	0.990
0.80 - 0.89	1.016	0.990	0.997	0.981	1.007
0.90 - 0.99	1.028	1.001	1.005	0.980	1.017
1.0	1.035	0.998	1.009	0.988	1.019
Total	1.022	0.994	1.003	0.985	1.011

	Composite Medical Benefit Relativity - All Employees				
Benefit FTE	Employee Only	Employee Spouse	Employee Child	Family	Total
under 0.40	0.979	0.970	1.034	0.972	0.985
0.40 - 0.49	0.971	0.909	0.990	0.958	0.969
0.50 - 0.59	0.988	0.992	0.983	0.991	0.988
0.60 - 0.69	0.996	0.982	0.990	0.990	0.993
0.70 - 0.79	0.999	0.977	0.981	0.956	0.990
0.80 - 0.89	1.015	0.994	0.998	0.983	1.007
0.90 - 0.99	1.028	0.998	1.006	0.981	1.016
1.0	1.043	1.003	1.018	0.993	1.025
Total	1.033	1.000	1.013	0.990	1.020

(1) Benefit relativities are calculated with WEA Plan 2 as 1.0.

Exhibit 7a
Adjusted Employee-Level Data
Employee Counts by Medical Benefit Relativity/ Employment Type/ Medical Coverage Tier
Excluding Employees without Medical Coverage
Full Time Employees

Benefit Relativity [1]	Full Time, Certificated Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	1,953	6,795	8,748	7%	23%	15%
0.95 - 0.99	1,570	1,821	3,391	5%	6%	6%
1.0 - 1.05	10,302	11,560	21,863	36%	38%	37%
1.05 +	14,918	10,003	24,920	52%	33%	42%
Total	28,743	30,179	58,922	100%	100%	100%

Benefit Relativity [1]	Full Time, Non Certificated Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	1,433	3,044	4,477	10%	25%	17%
0.95 - 0.99	1,006	1,167	2,173	7%	9%	8%
1.0 - 1.05	5,327	4,924	10,251	39%	40%	39%
1.05 +	5,920	3,171	9,091	43%	26%	35%
Total	13,687	12,305	25,992	100%	100%	100%

Benefit Relativity [1]	Full Time, All Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	3,387	9,839	13,225	8%	23%	16%
0.95 - 0.99	2,577	2,987	5,564	6%	7%	7%
1.0 - 1.05	15,629	16,484	32,114	37%	39%	38%
1.05 +	20,838	13,173	34,011	49%	31%	40%
Total	42,430	42,483	84,914	100%	100%	100%

[1] Benefit relativities are calculated with WEA Plan 2 as 1.0.

Exhibit 7b
Adjusted Employee-Level Data
Employee Counts by Medical Benefit Relativity/ Employment Type/ Medical Coverage Tier
Excluding Employees without Medical Coverage
Part Time Employees

Benefit Relativity [1]	Part Time, Certificated Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	600	537	1,138	27%	31%	28%
0.95 - 0.99	130	122	251	6%	7%	6%
1.0 - 1.05	802	621	1,423	35%	36%	36%
1.05 +	729	451	1,181	32%	26%	30%
Total	2,261	1,731	3,992	100%	100%	100%

Benefit Relativity [1]	Part Time, Non Certificated Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	3,045	2,414	5,458	24%	33%	27%
0.95 - 0.99	621	336	957	5%	5%	5%
1.0 - 1.05	4,698	2,696	7,395	37%	37%	37%
1.05 +	4,403	1,853	6,256	34%	25%	31%
Total	12,767	7,299	20,066	100%	100%	100%

Benefit Relativity [1]	Part Time, All Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	3,645	2,951	6,596	24%	33%	27%
0.95 - 0.99	751	458	1,208	5%	5%	5%
1.0 - 1.05	5,500	3,317	8,817	37%	37%	37%
1.05 +	5,132	2,305	7,437	34%	26%	31%
Total	15,028	9,031	24,059	100%	100%	100%

[1] Benefit relativities are calculated with WEA Plan 2 as 1.0.

Exhibit 7c
Adjusted Employee-Level Data
Employee Counts by Medical Benefit Relativity/ Employment Type/ Medical Coverage Tier
Excluding Employees without Medical Coverage
All Employees

Benefit Relativity [1]	All Certificated Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	2,553	7,333	9,886	8%	23%	16%
0.95 - 0.99	1,700	1,942	3,642	5%	6%	6%
1.0 - 1.05	11,104	12,181	23,285	36%	38%	37%
1.05 +	15,647	10,454	26,101	50%	33%	41%
Total	31,005	31,910	62,914	100%	100%	100%

Benefit Relativity [1]	All Non Certificated Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	4,478	5,457	9,935	17%	28%	22%
0.95 - 0.99	1,627	1,503	3,130	6%	8%	7%
1.0 - 1.05	10,025	7,620	17,646	38%	39%	38%
1.05 +	10,323	5,024	15,347	39%	26%	33%
Total	26,454	19,604	46,058	100%	100%	100%

Benefit Relativity [1]	All Employees					
	Employees			Distribution		
	Employee Only	Employee + Dependents	Total	Employee Only	Employee + Dependents	Total
under 0.95	7,032	12,790	19,821	12%	25%	18%
0.95 - 0.99	3,327	3,445	6,772	6%	7%	6%
1.0 - 1.05	21,130	19,801	40,931	37%	38%	38%
1.05 +	25,970	15,478	41,448	45%	30%	38%
Total	57,458	51,514	108,972	100%	100%	100%

[1] Benefit relativities are calculated with WEA Plan 2 as 1.0.

Exhibit 8a
Adjusted Employee-Level Data
Employees by Medical Plan/ Medical Coverage Tier

	Total Employees				
Plan	Employee Only	Employee Spouse	Employee Child	Family	Total
WEA 1	11,689	1,259	2,885	929	16,762
WEA 2	5,062	1,056	2,753	1,161	10,032
WEA 3	3,473	1,407	3,205	1,852	9,937
WEA 5	12,070	1,387	4,924	1,373	19,755
WEA Unknown	2,495	526	1,339	555	4,915
WEA EasyChoice	1,793	964	1,505	1,265	5,527
Aetna	837	101	348	99	1,384
Group Health	8,473	2,134	4,653	2,568	17,828
Kaiser	1,422	445	903	502	3,271
KPS	1,008	334	768	392	2,502
PEBB	318	225	284	569	1,396
Premera Non-WEA	3,476	402	1,183	363	5,423
Regence	4,233	867	1,698	819	7,617
Other	1,110	201	669	642	2,622
Employees w/ Med Coverage	57,458	11,308	27,117	13,089	108,972
No Medical Coverage	n/a	n/a	n/a	n/a	20,789
Total	57,458	11,308	27,117	13,089	129,761

Exhibit 8b
Adjusted Employee-Level Data
Distribution of Employees by Medical Plan/ Medical Coverage Tier

	Total Employees				
Plan	Employee Only	Employee Spouse	Employee Child	Family	Total
WEA 1	70%	8%	17%	6%	100%
WEA 2	50%	11%	27%	12%	100%
WEA 3	35%	14%	32%	19%	100%
WEA 5	61%	7%	25%	7%	100%
WEA Unknown	51%	11%	27%	11%	100%
WEA EasyChoice	32%	17%	27%	23%	100%
Aetna	60%	7%	25%	7%	100%
Group Health	48%	12%	26%	14%	100%
Kaiser	43%	14%	28%	15%	100%
KPS	40%	13%	31%	16%	100%
PEBB	23%	16%	20%	41%	100%
Premera Non-WEA	64%	7%	22%	7%	100%
Regence	56%	11%	22%	11%	100%
Other	0	0	0	0	100%
Employees w/ Med Coverage	53%	10%	25%	12%	100%
No Medical Coverage	n/a	n/a	n/a	n/a	n/a
Total	44%	9%	21%	10%	n/a

FINANCIAL MODEL

Overview of Model

The financial model created from the member-level data described previously is intended to quantify the impact on employer and employee costs resulting from several policy decisions contained in a consolidated purchasing system. Note that this model uses the 2010-2011 school year to restate the employer and employee costs under a uniform employer contribution approach. In addition, we have modeled the movement of members between products and tiers that would result from these changes.

At this time, the model is not a forward-looking projection. Such a forecast would require the incorporation of enrollment changes associated with the current school year open enrollment, revisions to carrier pricing strategies, cost trends, renegotiated local bargaining agreements, and many other factors. Also, as the model is discussed below, it is important to keep in mind that no aggregate "savings" are projected as part of this modeling effort. Rather, costs are shifted, primarily between the employee tiers with dependents and the Employee Only tier, between premiums and additional point-of-service cost-sharing in the chosen plan designs, and in some cases, between employer and employee.

The initial model is designed to be approximately budget-neutral from the employer perspective. Several other scenarios are discussed in the subsequent section of the report.

The following steps are reflected in the model.

- Step 1: 2010-2011 school year data, before changes implemented
- Step 2: Changes to Employee/Employer Contribution Methodology
- Step 3: Benefit Richness Adjustment
- Step 4: Migration between Tiers

Step 1: 2010-2011 school year data, before policy changes

Step 1 shows the following information for the 2010-2011 school year, before the impact of any adjustments:

- Employees
- Total Premium (Medical only)
- Employee Contribution
- Employee Contribution Percentage
- Average Medical Benefit Plan Relativity (Note that our analysis defined the actuarial value of the WEA Plan 2 as a 1.00 factor. A richer benefit package, that is, one with less employee point-of-service cost-sharing requirements, would have a factor greater than 1.00. A leaner benefit package would have a factor less than 1.00.)

Exhibit 9a shows the 2010-2011 school year data, before any adjustments.

Exhibit 9a
All Employees
Medical Benefits Only
Step 1: Before Policy Change

Annual Aggregate Benefits

	Step 1: Before Policy Change				
Medical Coverage Tier	Employees	Total Premium [1]	Employee Contribution [1]	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	57,458	$441.1	$27.7	6%	1.033
Employee Spouse	11,308	154.7	58.1	38%	1.000
Employee Child	27,117	280.6	62.1	22%	1.013
Family	13,089	207.2	88.9	43%	0.990
No Coverage	20,789	0.0	0.0	na	na
Subtotal - Covered Employees	108,972	$1,083.6	$236.8	22%	1.020
Total	129,761	$1,083.6	$236.8	22%	

Monthly Benefits per Employee

	Step 1: Before Policy Change				
Medical Coverage Tier	Employees	Average Premium	Average Employee Contribution	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	57,458	$640	$40	6%	1.033
Employee Spouse	11,308	1,140	428	38%	1.000
Employee Child	27,117	862	191	22%	1.013
Family	13,089	1,319	566	43%	0.990
No Coverage	20,789	0	0	na	na
Subtotal - Covered Employees	108,972	$829	$181	22%	1.020
Total	129,761				

[1] Total Dollars are in millions.

Step 2: Changes to Employee/Employer Contribution Methodology

Step 2 shows the impact to the assumed employee contributions, to reflect the revised employer contribution strategy.

Baseline Employer Contribution – Based on WEA Plan 2

- WEA Plan 2 is used as the baseline plan for the calculation of the employer financial contributions for benefits.
- We assumed the employer would contribute a fixed percentage of the premiums for employees and a separate fixed percentage for dependents, based on the premiums for WEA Plan 2. For the

Employee/Spouse, Employee/Child(ren), and Family tiers, the dependent percentage contribution was applied to the marginal portion of the premium (e.g., the total premium less the employee only premium for the same plan). The benchmark employer contribution is pro-rated by an employee's benefit FTE value after an adjustment to account for the employer contribution for non-medical benefits. The employer contributions are shown by tier in the following table, for each of the scenarios:

Table 4
Benchmark Employer Contribution, under Modeled Scenarios

		Employee Contribution for:		Benchmark Employer Contribution, by Coverage Tier			
Contribution Scenario	Baseline Plan	Employee Portion	Dependent Portion	Employee Only	Employee Spouse	Employee Child	Employee Spouse Child
Scenario 1 (Baseline): WEA 2/ 15%/ 35%	WEA 2	15%	35%	535	919	698	1,081
Scenario 2: WEA 2/ 18%/ 35%	WEA 2	18%	35%	516	900	679	1,062
Scenario 3: WEA 2/ 10%/ 25%	WEA 2	10%	25%	567	1,009	754	1,197
Scenario 4: WEA 2/ 15%/ 30%	WEA 2	15%	30%	535	948	710	1,123
Scenario 5: WEA 2/ 20%/ 40%	WEA 2	20%	40%	504	858	654	1,008
Scenario 6: WEA 2/ 25%/ 50%	WEA 2	25%	40%	472	767	597	892
Scenario 7: UMP/ 15%/ 35%	UMP	15%	35%	433	760	679	1,006

- Tier Relativities: In this analysis, we did not rebase the premium tier relativities for WEA Plan 2 or for any other plans. The premium tier relativities for the PEBB plans are currently 1.0 / 2.0 / 1.75 / 2.75 (Employee Only, Employee/Spouse, Employee/Child(ren), and Family, respectively). There was significant variation in the tier relativities of the most popular plans in the data that we used in modeling. For the 15 most popular medical plans, the tier relativity of the Employee/Spouse tier varied between 1.5 and 2.0. The tier relativity for the Employee/Child(ren) tier varied from 1.2 to 1.4. The tier relativity for the Family tier varied between 1.8 and 2.4. Given the contribution strategy described in this section, we anticipate that the rebasing of the tier relativities would have a minor impact on the overall results. In addition, we have noted based on a sample of plans for the current school year that these tier ratios have changed from our baseline year.
- The model reflects grandfathering of benefit eligibility for any employees with FTE status of less than 0.5. We assumed that these employees would receive employer contributions at the same levels as employees with an FTE status of 0.5.

Assumed Employer Contributions for Other Plans

- Employee Contributions for More Expensive Plans: For employees selecting more expensive plans than WEA Plan 2, we assumed that employees would be responsible for any differential in premium rates. In other words, if a richer plan were selected, employees would pay the full difference between that plan's premium and the premium for WEA Plan 2.
- Employee Contributions for Less Expensive Plans: For employees selecting less expensive plans than WEA Plan 2, we assumed that employees would benefit from the lower premiums, and their contributions would be correspondingly lower. Employee premiums for leaner plans were capped at

$0 (i.e., no premium credits were assumed) for the Employee Only tier and capped at $40, $10, and $50 for the Employee/Spouse, Employee/Child(ren), and Family tiers, respectively.

- Waived Coverage: For employees waiving medical coverage, we assumed no credits or other compensation.

Examples of Contribution Changes for Individual Employees

The following table shows examples of contribution changes for four individual employees, based on the proposed changes to the employer contributions. In each case, we have assumed the baseline benefit plan choice both before and after the contribution change. Under the proposed cost sharing methodology, the employee would bear the full cost of richer benefits and would benefit from the full cost differential of leaner benefits, subject to the contribution minimums discussed above.

Table 5
Illustrative Examples of Changes to Contributions

Employee-Only Coverage Tier, with WEA Plan 2

	Full Time Employee (1.0 FTE)		Part Time Employee (0.8 FTE)	
	Before Policy Change	After Policy Change	Before Policy Change	After Policy Change
Benchmark Employer Contribution [1]		$535.00		$406.60
Premium	$629.80	$629.80	$629.80	$629.80
Employee Contribution	$30.00	$94.80	$150.00	$223.20

Family Coverage Tier, with WEA Plan 2

	Full Time Employee (1.0 FTE)		Part Time Employee (0.8 FTE)	
	Before Policy Change	After Policy Change	Before Policy Change	After Policy Change
Benchmark Employer Contribution [1]		$1,081.00		$847.50
Premium	$1,469.85	$1,469.85	$1,469.85	$1,469.85
Employee Contribution	$650.00	$388.85	$900.00	$622.35

[1] The Benchmark Employer Contribution is pro-rated by the employee's benefit FTE status and adjusted to reflect a full employer contribution to Dental and Vision benefits.

Exhibit 9b shows the results of the modeling, after changes to the employer contribution methodology.

Exhibit 9b
All Employees
Medical Benefits Only
Step 2: Changes to Employer Contribution Methodology

Annual Aggregate Benefits

	Step 2: Changes to Employer Contribution Methodology				
Medical Coverage Tier	Employees	Total Premium [1]	Employee Contribution [1]	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	57,458	$441.1	$101.7	23%	1.033
Employee Spouse	11,308	154.7	38.5	25%	1.000
Employee Child	27,117	280.6	65.7	23%	1.013
Family	13,089	207.2	50.0	24%	0.990
No Coverage	20,789	0.0	0.0	na	na
Subtotal - Covered Employees	108,972	$1,083.6	$255.8	24%	1.020
Total	129,761	$1,083.6	$255.8	0%	

Monthly Benefits per Employee

	Step 2: Changes to Employer Contribution Methodology				
Medical Coverage Tier	Employees	Average Premium	Average Employee Contribution	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	57,458	$640	$147	23%	1.033
Employee Spouse	11,308	1,140	283	25%	1.000
Employee Child	27,117	862	202	23%	1.013
Family	13,089	1,319	318	24%	0.990
No Coverage	20,789	0	0	na	na
Subtotal - Covered Employees	108,972	$829	$196	24%	1.020
Total	129,761				

[1] Total Dollars are in millions.

Step 3: Benefit Richness Adjustment

This step reflects an estimated benefit richness adjustment to the benefit plans selected as a result of the new employer contribution structure. We assumed that if the change in employee contribution is significant, individuals may choose to buy a plan that is different from their current plan. Employees whose contributions are projected to increase (mainly those with Employee Only coverage) are assumed to choose plans with benefits that are less rich. Employees whose contributions are projected to decrease (mainly those with dependent coverage) are assumed to choose plans with richer benefits. Note that this pattern is supported by the current selections within the K-12 system. Step 3 reflects the re-calculation of

premiums and contributions to reflect these new assumed benefits. Note that this step has no impact on the employer contributions, which have been established on a benchmark plan.

Exhibit 9c shows the results of the modeling, after implementation of the benefit richness adjustment.

Exhibit 9c
All Employees
Medical Benefits Only
Step 3: Benefit Richness Adjustment

Annual Aggregate Benefits

	Step 3: Benefit Richness Adjustment				
Medical Coverage Tier	Employees	Total Premium [1]	Employee Contribution [1]	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	57,458	$427.2	$87.9	21%	1.011
Employee Spouse	11,308	156.0	39.6	25%	1.014
Employee Child	27,117	276.9	62.2	22%	1.006
Family	13,089	209.7	51.9	25%	1.010
No Coverage	20,789	0.0	0.0	na	na
Subtotal - Covered Employees	108,972	$1,069.7	$241.6	23%	1.010
Total	129,761	$1,069.7	$241.6	0%	

Monthly Benefits per Employee

	Step 3: Benefit Richness Adjustment				
Medical Coverage Tier	Employees	Average Premium	Average Employee Contribution	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	57,458	$620	$127	21%	1.011
Employee Spouse	11,308	1,150	292	25%	1.014
Employee Child	27,117	851	191	22%	1.006
Family	13,089	1,335	330	25%	1.010
No Coverage	20,789	0	0	na	na
Subtotal - Covered Employees	108,972	$818	$185	23%	1.010
Total	129,761				

[1] Total Dollars are in millions.

Step 4: Migration between Tiers

The last step of the model assumes that employees also migrate between tiers, due to the changes in the employer contributions. The key migration assumptions are as follows:

- Migration of Employee Only Tier to Employee/Dependent Coverage: We assumed that approximately 5% of employees currently in the Employee Only tier will now elect dependent coverage due to lower relative employee contributions for dependents.
- Migration of Employee/Child(ren) Tier to the Family Tier: We assumed that 3% of employees currently selecting Employee/Child(ren) coverage will elect family coverage due to the lower relative employee contributions for the dependent tiers.
- Migration of Employees with Waived Coverage to Selected Coverage: We assumed that approximately 4% of employees currently waiving coverage will elect coverage in one of the dependent coverage tiers.
- Employees Waiving Coverage: We assumed that approximately 3% of employees currently selecting Employee Only coverage will waive coverage due to the increased employee contribution requirements, likely finding it more affordable to add as a dependent on a spouse's benefit plan.
- We assumed no migration of those currently selecting the Employee/Spouse or Family tiers as a result of the changes to employee contribution requirements.
- Under this model, districts will acquire the new risk of varying employer contributions, depending on whether an employee selects Employee Only coverage, or coverage including dependents. In the current system, the employer's funding allocation is independent of the employee's benefit selection. The new system will require districts to bear the added risk of varying employer contributions, based on employees' tier selections. While an expected amount of tier migration is built into the modeling, migration in excess of expectations will result in additional district costs.

Exhibit 9d details the model results after the migration between tiers.

Exhibit 9d
All Employees
Medical Benefits Only
Step 4: Migration Between Tiers

Annual Aggregate Benefits

	Step 4: Migration Between Tiers				
Medical Coverage Tier	Employees	Total Premium [1]	Employee Contribution [1]	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	52,862	$393.0	$80.9	21%	1.011
Employee Spouse	12,091	166.8	42.4	25%	1.014
Employee Child	27,086	276.6	62.1	22%	1.006
Family	16,042	257.0	63.6	25%	1.010
No Coverage	21,681	0.0	0.0	na	na
Subtotal - Covered Employees	108,080	$1,093.3	$249.0	23%	1.010
Total	129,761	$1,093.3	$249.0	23%	

Monthly Benefits per Employee

	Step 4: Migration Between Tiers				
Medical Coverage Tier	Employees	Average Premium	Average Employee Contribution	Employee Contribution Percentage	Medical Benefit Relativity
Employee Only	52,862	$620	$127	21%	1.011
Employee Spouse	12,091	1,150	292	25%	1.014
Employee Child	27,086	851	191	22%	1.006
Family	16,042	1,335	330	25%	1.010
No Coverage	21,681	0	0	na	na
Subtotal - Covered Employees	108,080	$843	$192	23%	1.010
Total	129,761				

[1] Total Dollars are in millions.

We ran several scenarios testing the sensitivity of the migration assumptions above and found that reasonable variations from our assumptions can have a material impact on the final budget impact to the employer. Our results ranged from a reduction to employer costs of $10.5M to an increase of $9.5M.

SUMMARY OF RESULTS

Using the model described above, seven scenarios of varying contribution requirements for employee and dependent coverage were examined. Each is presented below, identifying how costs are shifted between participants. It should be noted again that premium reductions resulting from changes in benefit choices resulting from premium increases should not be considered to be savings as these are offset by members assuming greater cost sharing requirements in the plan choices. The table below summarizes the results of the seven scenarios:

Exhibit 10
High Level Results for Scenarios Modeled

		Employee Contribution for:		Projected Impact on:		
Scenario	Baseline Plan	Employee Portion	Dependent Portion	Total Premium [1]	Employee Contribution [1]	Employer Contributions [1]
Scenario 1 (Baseline): WEA 2/ 15%/ 35%	WEA 2	15%	35%	$9.8	$12.2	($2.4)
Scenario 2: WEA 2/ 18%/ 35%	WEA 2	18%	35%	7.7	31.2	(23.5)
Scenario 3: WEA 2/ 10%/ 25%	WEA 2	10%	25%	39.5	(37.0)	76.5
Scenario 4: WEA 2/ 15%/ 30%	WEA 2	15%	30%	10.9	0.3	10.5
Scenario 5: WEA 2/ 20%/ 40%	WEA 2	20%	40%	(10.8)	51.7	(62.5)
Scenario 6: WEA 2/ 25%/ 50%	WEA 2	25%	40%	(32.5)	105.3	(137.8)
Scenario 7: UMP/ 15%/ 35%	UMP	15%	35%	(12.5)	96.9	(109.3)

[1] Total dollars are in millions.

Scenario 1 (Baseline Scenario): WEA Plan 2 / Employee Contributions of 15%/35%

The baseline scenario uses WEA Plan 2 to calculate the employer benchmark contributions. This scenario reflects employee contributions of 15% for the employee portion of premium, and 35% for the dependent portion of premium. From the employer perspective, the changes modeled in the baseline scenario are nearly benefit-neutral (with savings of $2.4 million projected).

Exhibit 11a
Scenario 1 (Baseline): WEA 2/ 15%/35% Employee Contributions
Medical Benefits Only
High Level Model Results

	Impacts on All Coverage Tiers					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	255.8	$0.0	$19.0	($19.0)
Benefit Richness Adjustment	108,972	1,069.7	241.6	(13.8)	(14.2)	0.3
Migration Between Tiers	108,080	1,093.3	249.0	23.6	7.3	16.3
Total				$9.8	$12.2	($2.4)

	Impacts on Employee-Only Coverage Tier					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	101.7	$0.0	$73.9	($73.9)
Benefit Richness Adjustment	57,458	427.2	87.9	(13.9)	(13.8)	(0.2)
Migration Between Tiers	52,862	393.0	80.9	(34.2)	(7.0)	(27.1)
Total				($48.1)	$53.1	($101.2)

	Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	154.1	$0.0	($54.9)	$54.9
Benefit Richness Adjustment	51,514	642.5	153.7	0.1	(0.4)	0.5
Migration Between Tiers	55,218	700.3	168.1	57.8	14.4	43.4
Total				$57.8	($41.0)	$98.8

[1] Total dollars are in millions.

The exhibit shows the following information separately for employees with Employee Only coverage and for employees with dependents:

- Employees, Premium, and Contributions before changes: The exhibit below first shows the assumed number of employees with medical coverage, the total premium dollars, and the total employee contributions before any policy changes are made.
- Projections after Changes to Employer/Employee Contribution Methodology: The second line of each section shows the anticipated changes due to the revisions to the employer/employee contributions methodology.

  - Employees currently selecting the Employee Only tier will see annual contribution increases of roughly $73.9 million through additional employee contributions and a reduced benefit package from an employer funding perspective.
  - Employees selecting dependent coverage will see annual reductions in employee contributions of approximately $54.9 million.

- Projections Reflecting Benefit Richness Adjustment: The third line of each section shows the projected impact due to revisions in benefit richness. As discussed previously, in this step, we assumed that employees will select richer or leaner benefit plans than their current selections, based on the modeled changes in employee contributions. This change is projected to decrease employee contributions by approximately $14.2 million.
- Migration between Tiers: The final modeling step projects the impact of migration between tiers due to the modeled changes in employee contributions. As discussed previously, this includes both employees migrating from one coverage tier to another, as well as employees without current coverage opting into the medical benefits program.
- Employers (school districts) are estimated to spend an additional $16.3 million as a result of additional people opting to cover their dependents. Employees are estimated to spend an additional $7.3 million.

Scenario 2: WEA Plan 2 / Employee Contributions of 18%/35%

Scenario 2 also uses WEA Plan 2 to calculate the employer benchmark contributions. This scenario assumes employee contributions of 18% for the employee portion of premium and 35% for the dependent portion of premium. The purpose of this scenario was to estimate the increase in employee contribution that would be required to offset a 3% reduction in the state funding rate.

Exhibit 11b
Scenario 2: WEA 2/ 18%/35% Employee Contributions
Medical Benefits Only
High Level Model Results

	Impacts on All Coverage Tiers					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	277.1	$0.0	$40.3	($40.3)
Benefit Richness Adjustment	108,972	1,067.6	260.9	(16.0)	(16.3)	0.3
Migration Between Tiers	108,080	1,091.2	267.9	23.6	7.1	16.6
Total				$7.7	$31.1	($23.5)

	Impacts on Employee-Only Coverage Tier					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	113.3	$0.0	$85.6	($85.6)
Benefit Richness Adjustment	57,458	426.3	98.7	(14.8)	(14.6)	(0.2)
Migration Between Tiers	52,862	392.2	90.8	(34.1)	(7.9)	(26.2)
Total				($48.9)	$63.1	($112.0)

	Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	163.8	$0.0	($45.3)	$45.3
Benefit Richness Adjustment	51,514	641.3	162.2	(1.2)	(1.6)	0.5
Migration Between Tiers	55,218	699.1	177.1	57.7	15.0	42.8
Total				$56.6	($31.9)	$88.5

[1] Total dollars are in millions.

Scenario 3: WEA Plan 2 / Employee Contributions of 10%/25%

Scenario 3 also uses WEA Plan 2 to calculate the employer benchmark contributions. This scenario reflects employee contributions of 10% for the employee portion of premium and 25% for the dependent portion of premium. This scenario reflects the lowest employee contribution scenario contemplated by the Design Team. Note that this scenario requires an additional $76.5 million in employer funding when compared to the current system.

Exhibit 11c
Scenario 3: WEA 2/ 10%/25% Employee Contributions
Medical Benefits Only
High Level Model Results

	Impacts on All Coverage Tiers					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	199.0	$0.0	($37.8)	$37.8
Benefit Richness Adjustment	108,972	1,074.6	189.7	(9.0)	(9.3)	0.3
Migration Between Tiers	109,358	1,123.0	199.8	48.4	10.1	38.3
Total				$39.5	($37.0)	$76.5

	Impacts on Employee-Only Coverage Tier					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	82.8	$0.0	$55.1	($55.1)
Benefit Richness Adjustment	57,458	428.2	70.4	(12.9)	(12.4)	(0.5)
Migration Between Tiers	52,287	389.6	64.1	(38.5)	(6.3)	(32.2)
Total				($51.5)	$36.3	($87.8)

	Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	116.2	$0.0	($92.9)	$92.9
Benefit Richness Adjustment	51,514	646.4	119.3	3.9	3.1	0.9
Migration Between Tiers	57,071	733.4	135.7	87.0	16.4	70.5
Total				$90.9	($73.3)	$164.2

[1] Total dollars are in millions.

Scenario 4: WEA Plan 2 / Employee Contributions of 15%/30%

Scenario 4 also uses WEA Plan 2 to calculate the employer benchmark contributions. This scenario reflects employee contributions of 15% for the employee portion of premium and 30% for the dependent portion of premium.

Exhibit 11d
Scenario 4: WEA 2/ 15%/30% Employee Contributions
Medical Benefits Only
High Level Model Results

Impacts on All Coverage Tiers

Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	244.2	$0.0	$7.4	($7.4)
Benefit Richness Adjustment	108,972	1,070.8	231.0	(12.8)	(13.2)	0.4
Migration Between Tiers	108,080	1,094.4	237.1	23.7	6.1	17.6
Total				$10.9	$0.3	$10.5

Impacts on Employee-Only Coverage Tier

Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	101.7	$0.0	$73.9	($73.9)
Benefit Richness Adjustment	57,458	427.2	87.9	(13.9)	(13.8)	(0.2)
Migration Between Tiers	52,862	393.0	80.9	(34.2)	(7.0)	(27.1)
Total				($48.1)	$53.1	($101.2)

Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)

Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	142.5	$0.0	($66.5)	$66.5
Benefit Richness Adjustment	51,514	643.6	143.1	1.1	0.6	0.5
Migration Between Tiers	55,218	701.4	156.2	57.8	13.1	44.7
Total				$58.9	($52.8)	$111.7

[1] Total dollars are in millions.

Scenario 5: WEA Plan 2 / Employee Contributions of 20%/40%

Scenario 5 also uses WEA Plan 2 to calculate the employer benchmark contributions. This scenario reflects employee contributions of 20% for the employee portion of premium and 40% for the dependent portion of premium.

Exhibit 11e
Scenario 5: WEA 2/ 20%/40% Employee Contributions
Medical Benefits Only
High Level Model Results

Impacts on All Coverage Tiers

Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	303.5	$0.0	$66.7	($66.7)
Benefit Richness Adjustment	108,972	1,064.7	284.7	(18.9)	(18.8)	(0.0)
Migration Between Tiers	107,010	1,072.8	288.5	8.1	3.8	4.3
Total				($10.8)	$51.7	($62.5)

Impacts on Employee-Only Coverage Tier

Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	121.2	$0.0	$93.5	($93.5)
Benefit Richness Adjustment	57,458	426.0	106.2	(15.1)	(15.0)	(0.1)
Migration Between Tiers	52,718	390.9	97.5	(35.1)	(8.8)	(26.4)
Total				($50.2)	$69.7	($120.0)

Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)

Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	182.3	$0.0	($26.7)	$26.7
Benefit Richness Adjustment	51,514	638.7	178.4	(3.8)	(3.9)	0.1
Migration Between Tiers	54,292	681.9	191.0	43.2	12.6	30.7
Total				$39.4	($18.0)	$57.5

[1] Total dollars are in millions.

Scenario 6: WEA Plan 2 / Employee Contributions of 25%/50%

Scenario 6 also uses WEA Plan 2 to calculate the employer benchmark contributions. This scenario reflects employee contributions of 25% for the employee portion of premium and 50% for the dependent portion of premium. This scenario reflects the highest level of employee contributions considered by the Design Team.

Exhibit 11f
Scenario 6: WEA 2/ 25%/50% Employee Contributions
Medical Benefits Only
High Level Model Results

	Impacts on All Coverage Tiers					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	367.3	$0.0	$130.5	($130.5)
Benefit Richness Adjustment	108,972	1,058.6	342.3	(25.0)	(25.0)	(0.0)
Migration Between Tiers	105,941	1,051.1	342.0	(7.5)	(0.3)	(7.2)
Total				($32.5)	$105.2	($137.7)

	Impacts on Employee-Only Coverage Tier					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	141.1	$0.0	$113.3	($113.3)
Benefit Richness Adjustment	57,458	425.0	125.0	(16.1)	(16.0)	(0.1)
Migration Between Tiers	52,574	388.9	114.4	(36.1)	(10.6)	(25.5)
Total				($52.2)	$86.7	($138.9)

	Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	226.2	$0.0	$17.2	($17.2)
Benefit Richness Adjustment	51,514	633.6	217.3	(8.9)	(8.9)	0.0
Migration Between Tiers	53,366	662.2	227.6	28.6	10.3	18.3
Total				$19.7	$18.6	$1.1

[1] Total dollars are in millions.

Scenario 7: PEBB Uniform Medical Plan / Employee Contributions of 15%/35%

Scenario 7 uses the PEBB Uniform Medical Plan (UMP) to calculate the employer benchmark contributions. This scenario reflects employee contributions consistent with the baseline scenario of 15% for the employee portion of premium and 35% for the dependent portion of premium. Such a significant reduction in the benchmark plan choice produces significant savings for the employer, shifting those costs to employees.

Exhibit 11g
Scenario 7: UMP/ 15%/35% Employee Contributions
Medical Benefits Only
High Level Model Results

	Impacts on All Coverage Tiers					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	108,972	$1,083.6	$236.8			
Changes to Employer Contribution Methodology	108,972	1,083.6	353.4	$0.0	$116.6	($116.6)
Benefit Richness Adjustment	108,972	1,063.0	332.8	(20.6)	(20.6)	0.0
Migration Between Tiers	107,010	1,071.1	333.6	8.1	0.8	7.3
Total				($12.5)	$96.8	($109.3)

	Impacts on Employee-Only Coverage Tier					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	57,458	$441.1	$27.7			
Changes to Employer Contribution Methodology	57,458	441.1	166.1	$0.0	$138.3	($138.3)
Benefit Richness Adjustment	57,458	424.5	149.5	(16.6)	(16.6)	(0.0)
Migration Between Tiers	52,718	389.5	137.1	(35.0)	(12.3)	(22.7)
Total				($51.6)	$109.4	($161.0)

	Impacts on All Dependent Coverage Tiers (ES, EC, and ESC)					
Policy Change	Employees with Medical Coverage	Total Premium [1]	Total Employee Contribution [1]	Impact on Premium [1]	Impact on Employee Contribution [1]	Impact on Employer Contribution [1]
Before Policy Change	51,514	$642.5	$209.0			
Changes to Employer Contribution Methodology	51,514	642.5	187.4	$0.0	($21.7)	$21.7
Benefit Richness Adjustment	51,514	638.5	183.4	(3.9)	(4.0)	0.0
Migration Between Tiers	54,292	681.7	196.5	43.1	13.1	30.0
Total				$39.2	($12.5)	$51.7

[1] Total dollars are in millions.

CONCLUSION

The modeling documented in this report demonstrates the feasibility of a budget neutral (from the employer perspective) approach to revised contribution strategy consistent with the design being developed for the Health Care Authority consolidation of the K-12 benefit purchasing. As we have noted in the report, such budget neutrality is not the general rule for many individual members, who may realize increases or decreases in contribution requirements and in the relative value of their benefit package. We also recognize that subsets of employees, such as local districts or bargaining units within districts, will have results that vary from the average.

We hope that the descriptions contained herein will allow any local entity with access to the appropriate data to determine the impact on their individual members and on their collective group. Evaluation of each individual district and bargaining unit were beyond the scope of our engagement with the Health Care Authority.

We wish to thank the many people and organizations that contributed to the accumulation and understanding of the data supporting this analysis, including WSIPC, OSPI, the Advisory Team, the Design Team, Regence, Kaiser Permanente and the more than 175 participating school districts. We recognize that this was a significant effort with a short turnaround at a busy time of year. The contributions of all of these people have helped to ensure an adequate sample of data from which to construct the models.

APPENDIX 1: DETAILED ADJUSTMENTS TO DATA

Adjustments to WSIPC Data

Our analysis relied primarily on data received from the Washington School Information Processing Cooperative (WSIPC). WSIPC assists the majority of Washington State school districts with payroll processing and is the best source of benefit information to which we were granted access. WSIPC employees created a data extract from their database that included de-identified, individual-level data for participating school districts as of February 2010 and February 2011. Many of the fields in the extract represent current information rather than the information in their data at those times, but insurance information is from February 2010 and 2011.

Insurance premiums and deductions affect payroll, and we therefore consider WSIPC's information on dollars spent by the included districts to be credible information for the districts participating in insurance tracking. WSIPC does not, however, validate the data that it receives, nor does it place restrictions on what districts can enter. As such, other fields in the data required heavy cleaning and consolidation before they could be used for our purposes. In some cases, the WSIPC data contained thousands of unique descriptions. A table outlining the primary fields we mapped is below.

Field	Data Cleaning and Mapping Description
Benefit FTE	Identify districts with an unreasonable distribution
Actual FTE	Identify districts with an unreasonable distribution
Coverage Tier	Map to 4 tiers (Employee Only, Employee/Spouse, Employee/Child(ren), Family)
Benefit Description	Identify type of benefit (medical, dental, etc.); identify districts not participating in insurance tracking
Carrier	Map to carrier and benefit plan
Employee Type and Insurance Pool Description	Map types of employees to certificated or other (non-certificated) status (discussed in more detail below)

Another drawback of the WSIPC data is that it does not identify which employees are eligible for benefits or are in a position that is eligible if the person meets the benefits eligibility cutoff. The OSPI S-275 Personnel Report excludes many district employees that were considered outside of the scope of our benefit eligibility calculations, such as substitutes working in a position that is reported elsewhere in the OSPI reporting. We considered the reported OSPI employees as a target for the employees that should be included in our analysis (i.e., potentially eligible for benefits under the most lenient alternative). WSIPC data included

anyone on the payroll, which for many districts meant that WSIPC had over 30% more employees than OSPI.

We considered several methods of restricting the WSIPC data to a set similar to what is found in OSPI, including (a) keeping everyone, (b) keeping anyone who has any insurance information or is part of an insurance pool (but may lack any benefits), and (c) keeping those who have at least one benefit and dropping everyone without any benefits. Our decision was to go with the third option, to drop everyone unless they had at least one insurance benefit. Doing this led to about 7% less data than what was found in OSPI in the districts for which we had data. However, when we compared the distribution of actual FTEs in the WSIPC data to that in the OSPI data, we felt this was the most appropriate group. Adding in those who had no insurance benefits but an insurance pool led to a disproportionate number of people with coded FTE status of 0.0, and our final analysis group matched the distribution in OSPI surprisingly well.

It is important to note that a person with some benefits (such as dental) but not all benefits (for example, medical) would be included, with the missing benefit types (medical) waived. Many people have vision or dental benefits but no medical.

WSIPC does not cover several of the large school districts in Washington, such as Seattle Public Schools and the Tacoma School District. A data request was sent to many of these districts to get data similar to what was in the WSIPC data. Data for the districts that responded was subjected to the same process as described for WSIPC, and treated identically in our modeling.

Employees Waiving Dental Coverage

From our understanding, there are some concerns that employees may be waiving dental coverage, in order to apply more of the employer contribution to their medical benefit plan. We summarized the average medical premium and employee medical contribution in the historic data for employees with and without dental coverage. From our analysis, the percentage of employees waiving dental coverage is approximately 7%, and the average employee medical contributions for these employees do not appear significantly lower than the employee contributions for employee who have medical coverage. We believe this issue will have a relatively minor impact on the overall financial modeling, and we have not attempted to quantify or analyze its specific impact in our modeling.

Data Mapping Example – Certificated Assignment Methodology

Identification of certificated staff relied upon fields labeled ‘TypeDescription’ and ‘InsurancePoolGroupDesc’ in the WSIPC data. The data had nearly 6,000 unique combinations of these two fields, which necessitated an automated process to assign members. Our approach relied upon searching for key words in the fields. Our initial assignment logic split people into certificated employees and all other, or non-certificated employees.

Our algorithm searched for the following strings to identify certificated employees: teach, tch, cert, REA, superint, princ, libra, couns, thera, psych, administrator, and the combination of admin and cert. Of these, the search for ‘teach’ and ‘cert’ led to the vast majority of the assignments.

Our next step was to remove from the other categories anyone who appeared to be retired or inactive, followed by those identified as substitutes. While there are many groups clearly labeled as certificated substitutes, substitutes are also frequently not identified as certificated or not, and we felt it better to

classify all substitutes consistently in the non-certificated group. For the remaining employee types where there was a concern of misclassification, we ignored search words that are less likely to lead to confidence in the classification, such as the search for REA.

Because our default logic was to place employees in the non-certificated group, it is likely that our estimate of certificated employees is slightly understated. This has no impact on our modeling, but does affect some of the summary tables.

It is also worth noting that the assignment to classes was done early in our process, before eliminating data for other reasons, such as people with coded FTE status of 0.0, no insurance information, or entire districts with other data issues. An example where this has an impact on the ultimate distribution is where substitutes were often eliminated due to no FTE or insurance information.

APPENDIX 2: PLAN BENEFIT RELATIVITIES

Methodology and Assumptions (Medical Plans)

Modeling changes to employee and employer contributions under the prescribed methodologies contained in the financial model required the computation of relative values of each of the health plan offerings. These relative values reflect the covered services, the point-of-service cost-sharing requirements (deductibles, copays, etc.), and the impact that these cost-sharing requirements have on the utilization of services. We made the following assumptions in creating the plan benefit relativities:

- Milliman Health Cost Guidelines (HCGs): We developed the benefit relativities using the HCGs. The HCGs provide a flexible but consistent basis for the determination of claim costs for a wide variety of health benefit plans. These rating structures are used to anticipate future claim levels, evaluate past experience and establish interrelationships between different health coverages.

  The Milliman HCGs are developed as a result of Milliman's continuing research on healthcare costs. They were first developed in 1954 and have been updated and expanded annually since then. These guidelines are continually monitored as we use them in measuring the experience or evaluating the rates of our clients and as we compare them to other data sources.

  The HCGs are a cooperative effort of all Milliman health actuaries and represent a combination of our experience, research and judgment. An extensive amount of data is used in developing these guidelines, including published and unpublished data. In most instances, cost assumptions are based upon our evaluation of several data sources and, hence, are not specifically attributable to a single source. Since these guidelines are a proprietary document of Milliman, they are only available for release to specific clients that lease these guidelines and to Milliman consulting health actuaries.

- Benefit Plan Designs: We analyzed major plan designs offered across the state, as well as some individual district plans, based on the publicly available information regarding these plans.

- Demographic Assumptions: We used the Milliman standard demographics in our analysis.

- Utilization and Cost Assumptions: The starting utilization and allowed cost per service assumptions are based on the 2011 Milliman HCGs and actuarial judgment. We adjusted our models using geographic adjustments, to reflect anticipated utilization and cost levels in the Statewide Washington area.

- Out-of-Network Assumptions: For PPO plans, we blended in the in-network and out-of-network claim costs using typical commercial assumptions.

- Trend Assumptions: We used the CY 2011 Milliman HCGs and applied no trend factors in our analysis.

- Assumed Reimbursement: In our analysis, we used typical commercial reimbursement levels for the Statewide Washington areas, based on Milliman research and actuarial judgment.

- Degree of Healthcare Management (DoHM) Assumptions: Milliman uses a DoHM to approximate the utilization management level of a healthcare delivery system. A DoHM of 0% represents a

loosely managed healthcare delivery system, while a DoHM of 100% represents a well managed delivery system.

The well managed utilization and average charge targets in the HCGs represent potential cost levels for managed care plans that effectively apply utilization management principles across all categories of care. In most areas of the United States, successes in utilization management have been primarily in the area of inpatient care, with much less success in managing outpatient hospital and office-based care. However, some managed care plans have been successful in managing ambulatory care as well.

In our analysis, we used a DoHM of 25% for in-network services and 0% for out-of-network services.

- Simplifying Assumptions: In order to expedite our analysis, we made simplifying assumptions regarding the pricing of specific benefits. In certain cases, the benefit descriptions provided only high-level details, and it was necessary to make simplifying assumptions regarding member cost-sharing levels. We also made simplifying assumptions regarding the pricing of certain benefits (e.g., vision hardware, hearing aids, etc.). We believe that these simplifying assumptions have a minimal impact on the overall results.
- Administration/Risk/Profit Margin: We conducted our analysis using only the projected medical costs for each benefit plan design, and excluded the impact of administrative costs and risk/profit margin.

Benchmark Plan and the Range of Current Offerings

In our analysis, we used WEA Plan 2 as the benchmark plan. As a comparison, we have computed that this plan is approximately 5.5% richer than the current PEBB Uniform Medical Plan when the relativities are compared using Milliman's actuarial tools.

The primary features of WEA Plan 2 are:

- $100 deductible
- $1,375 in-network out-of-pocket maximum (not including deductible)
- 20% in-network member coinsurance
- $25 in-network office visit copayment
- Inpatient Hospitalization copay of $150 (days 1-3 only)
- Prescription Drug Benefit: $10/$20/$35 copays for generic/preferred brand/non-preferred brand drugs

By contrast, the primary features of the PEBB Uniform Medical Plan are as follows:

- $250 deductible
- $2,000 out-of-pocket maximum (not including deductible)
- 15% in-network member coinsurance
- In-network Inpatient Hospitalization copay of $200 (days 1-3 only)

- Prescription Drug Benefit:
    - $100 deductible for brand-name drugs
    - Retail coinsurance of 10%/30%/50% for generic/preferred brand/non-preferred brand drugs (coinsurance maximum copay of $75 for generic and preferred brand drugs)
    - Mail-order copays of $10/$50/$100 for generic/preferred brand/non-preferred brand drugs

Based on the data provided by the school districts, we conclude that there are likely hundreds of unique plan offerings throughout the current K-12 system. The plans with richer benefit relativities than our chosen benchmark WEA Plan 2 have features including:

- Deductibles ranging from $0 to $200
- Member coinsurance ranging from 0% to 20%
- Office visit copays ranging from $5 to $25
- Out-of-pocket maximums ranging from $0 to $2,000

The plans with leaner benefit relativities than the benchmark WEA Plan 2 have features including:

- Deductibles ranging from $0 to $1,500
- Member coinsurance ranging from 0% to 35%
- Office visit copays ranging from $15 to $35
- Out-of-pocket maximums ranging from $1,000 to $7,500

Even though there are many combinations of cost-sharing parameters in the plan offerings today, we believe a portfolio with as few as 10 PPO benefit plan offerings and three HMO offerings (although offered through multiple HMOs depending on geographic area) could reasonably encompass the current range of benefit plans. A reasonable range of plan values could be constructed to give members an option with minimal differences in plan value from the selection they have today.

At the same time, it should be noted that a consolidated system may reduce the number of participating health plans, perhaps if only geographically. As such, members may find that a particular physician is no longer accessible as an in-network provider. While efforts should be made through the consolidated system procurement process to minimize such patient-provider disruption, it is unlikely that a competitive procurement will completely avoid such disruption.

APPENDIX 3: DISTRICT-LEVEL DATA

As indicated previously, our analysis used individual-level data from districts participating in WSIPC Insurance Tracking, as well as from individual districts. In addition, numerous districts also responded to Milliman's survey regarding employee benefits. The following tables detail the districts providing various sources of data.

Appendix 3
Listing of District-Level Data

School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
Aberdeen School District	X		
Adna School District	X		X
Anacortes School District	X		X
Arlington School District	X		X
Auburn School District	X		X
Bainbridge Island School District	X		
Battle Ground School District	X		X
Bellingham School District			X
Bethel School District	X		X
Blaine School District			X
Boistfort School District	X		
Bremerton School District	X		X
Brewster School District	X		X
Bridgeport School District			X
Brinnon School District	X		
Burlington-Edison School District	X		X
Camas School District	X		X
Cape Flattery School District	X		X
Cascade School District	X		
Cashmere School District	X		X
Castle Rock School District			X
Central Kitsap School District	X		X
Central Valley School District			X
Centralia School District	X		X
Chehalis School District	X		
Cheney School District	X		X
Chewelah School District	X		X
Chimacum School District	X		X
Clarkston School District	X		X
Cle Elum-Roslyn School District			X
Clover Park School District		X	X
Colfax School District	X		X
College Place School District			X
Colton School District	X		X
Columbia (Walla Walla) School District			X
Colville School District	X		X
Concrete School District			X

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School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
College Place School District			X
Colton School District	X		X
Columbia (Walla Walla) School District			X
Colville School District	X		X
Concrete School District			X
Conway School District			X
Coulee-Hartline School District			X
Crescent School District	X		
Creston School District			X
Cusick School District			X
Davenport School District			X
Dayton School District	X		X
Deer Park School District	X		X
Dieringer School District	X		
East Valley School District (Spokane)	X		X
East Valley School District (Yakima)	X		X
Eastmont School District	X		X
Eatonville School District			X
Edmonds School District	X		X
Ellensburg School District	X		X
Endicott School District			X
Enumclaw School District	X		
Ephrata School District	X		
Evaline School District			X
Everett School District		X	X
Evergreen School District (Stevens)			X
Federal Way School District		X	X
Fife School District	X		X
Finley School District			X
Franklin Pierce School District	X		
Freeman School District			X
Garfield School District			X
Goldendale School District			X
Grand Coulee Dam School District			X
Grandview School District			X
Granite Falls School District	X		
Grapeview School District	X		

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School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
Great Northern School District			X
Green Mountain School District	X		X
Griffin School District	X		X
Highline School District			X
Hockinson School District	X		
Hoquiam School District	X		X
Inchelium School District			X
Index School District	X		X
Issaquah School District	X		X
Kalama School District			X
Keller School District	X		X
Kelso School District	X		X
Kent School District	X		X
Kettle Falls School District			X
Kiona-Benton City School District			X
Kittitas School District	X		
Klickitat School District			X
La Center School District	X		
LaCrosse School District			X
Lake Quinault School District	X		
Lake Stevens School District	X		X
Lake Washington School District	X		X
Lakewood School District	X		X
Lamont School District			X
Longview School District			X
Loon Lake School District			X
Lopez Island School District			X
Lyle School District	X		X
Lynden School District	X		X
Mabton School District			X
Mansfield School District			X
Mary M Knight School District	X		
Marysville School District	X		X
McCleary School District	X		
Mercer Island School District			X
Meridian School District	X		
Methow Valley School District			X

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School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
Mill A School District			X
Monroe School District	X		X
Montesano School District	X		X
Morton School District	X		
Moses Lake School District	X		X
Mossyrock School District			X
Mount Adams			X
Mount Baker School District	X		
Mount Vernon School District	X		X
Mukilteo School District	X		X
Naches Valley School District	X		
Napavine School District	X		X
Nespelem School District			X
Nine Mile Falls School District			X
Nooksack Valley School District	X		X
North Beach School District	X		
North Central Esd			X
North Franklin School District	X		X
North Kitsap School District	X		X
North Mason School District	X		X
North River School District			X
North Thurston Public Schools	X		X
Northport School District			X
Northshore School District			X
Oak Harbor School District	X		
Oakesdale School District	X		X
Oakville School District	X		
Ocean Beach School District	X		
Ocosta School District	X		X
Odessa School District			X
Okanogan School District			X
Olympia School District	X		
Omak School District	X		X
Onalaska School District	X		
Orchard Prairie School District			X
Orient School District			X
Orondo School District			X

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School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
Oroville School District			X
Orting School District			X
Othello School District	X		X
Palouse School District			X
Paterson School District			X
Pe Ell School District	X		
Peninsula School District	X		
Pioneer School District	X		X
Port Angeles School District	X		X
Port Townsend School District	X		X
Prosser School District	X		
Puget Sound Esd (121)			X
Pullman School District	X		X
Puyallup School District			X
Queets-Clearwater School District	X		
Quilcene School District	X		X
Quincy School District	X		
Rainier School District			X
Raymond School District	X		X
Reardan-Edwall School District	X		X
Renton School District	X		X
Republic School District			X
Richland School District			X
Ridgefield School District	X		X
Riverside School District	X		
Riverview School District	X		X
Rochester School District	X		
Roosevelt School District			X
Royal School District			X
San Juan Island School District	X		
Seattle Public Schools		X	X
Sedro-Woolley School District	X		X
Selah School District	X		
Selkirk School District			X
Sequim School District			X
Shelton School District	X		
Shoreline School District	X		

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School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
Skamania School District			X
Skykomish School District			X
Snohomish School District	X		X
Snoqualmie Valley School District	X		
Soap Lake School District	X		
South Bend School District	X		X
South Kitsap School District			X
Southside School District	X		
Spokane School District			X
St. John School District			X
Stanwood-Camano School District	X		
Star School District			X
Steilacoom Hist. School District			X
Steptoe School District			X
Stevenson-Carson School District	X		X
Sultan School District			X
Sumner School District	X		X
Sunnyside School District			X
Tacoma School District		X	X
Taholah School District	X		
Tahoma School District	X		X
Tekoa School District			X
Tenino School District	X		
Toledo School District	X		X
Tonasket School District			X
Touchet School District			X
Toutle Lake School District			X
Trout Lake School District			X
Tukwila School District	X		X
Tumwater School District	X		X
Union Gap School District			X
University Place School District	X		X
Valley School District			X
Vancouver School District	X		X
Vashon Island School District	X		X
Walla Walla Public Schools	X		X
Warden School District			X

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School District	Individual-Level Benefit Information Provided: Used WSIPC Data	Individual-Level Benefit Information Provided: Used District-Provided Data	District Remitted Data to Milliman Survey
Washougal School District	X		
Washtucna School District			X
Wenatchee School District	X		
West Valley (Yak)	X		
West Valley School District (Spokane)			X
White Pass School District	X		X
White River School District	X		X
White Salmon Valley School District	X		
Willapa Valley School District			X
Wilson Creek School District			X
Winlock School District	X		X
Wishkah Valley School District	X		
Wishram School District	X		X
Woodland School District	X		
Yelm School District	X		X