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REPORT TO THE LEGISLATURE

UPDATE: School Transportation Efficiency

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Executive Summary

Starting September 2011, Washington state adopted a new evaluation system. The goal of the system, being part of the transportation funding system, is to encourage districts to operate in as efficient manner as possible.

We use a statistical process to determine relative efficiency ratings. The process sets a target for transportation expenditures and the number of buses operated. The results show that a majority of school districts are operating above 90 percent efficiency.

This is the fourth year of the Regional Transportation Coordinator (RTC) efficiency review process. A total of 77 districts rated less than 90 percent, which is four more than last year. Of these 77 districts, there are 18 districts that were not reviewed last year. Of the 77 districts rated less than 90 percent last year, 14 increased their efficiency rating to above 90 percent. Nine districts that were below 90 percent last year increased their efficiency rating to 100 percent. The RTCs conducted reviews on 91 school districts this year.

We also analyze the districts using three Key Performance Indicators:

- 1) Basic student average load
- 2) Special education student average load
- 3) Cost per student.

Several large school districts are in the planning stages of restructuring school bell times. Some of these districts are attempting to provide much improvement in efficiency.

Background

The 2009 Washington State Legislature adopted a new student transportation funding system. The new system, known as the Student Transportation Allocation Reporting System (STARS), was implemented on September 1, 2011. An efficiency evaluation system of school district transportation operations was included as an integral part of STARS. The Legislature intended the evaluation system to encourage school districts to operate their student transportation systems in a manner that makes efficient use of state resources. Regional Transportation Coordinators (RTC) are required to conduct efficiency reviews of those districts with ratings less than 90 percent.

The statistical system used to create the efficiency ratings is called the Target Resource Model (TRM) and was developed by Management Partnership Services, the consultant hired by the Office of Financial Management to provide options for a new student transportation funding methodology. For districts rated at less than 100 percent efficient, TRM creates a statistical “target district” from actual school districts across the state that have environmental features, size characteristics and workload requirements that are the same or more challenging and compares the district’s total transportation costs and the number of buses used with this “target.” The target district establishes the expected resource requirements (expenditures and number of buses) that would be needed to achieve a 100 percent efficiency score.

The calculation of the efficiency ratings requires district expenditure data, which is available in late December of each year. The efficiency ratings are released in early March and are available on the OSPI Student Transportation website at: <http://www.k12.wa.us/transportation/STARS/default.aspx> under the “STARS Efficiency Ratings” section. This same section provides an option to download the regional transportation coordinator efficiency reviews and the Key Performance Indicators (KPI) reports.

Update status

Three different review processes are used depending on the history of the school district rating. There is an initial review process for those districts whose rating is below 90 percent for the first time. The second review process is for those districts whose prior year and current year efficiency ratings are below 90 percent. The third review process is used for those school districts whose prior year rating is below 90 percent but the current year rating is above 90 percent.

The initial review process for those districts whose efficiency rating is below 90 percent for the first time include a written survey of transportation operations, an onsite RTC visit discussing the results of the survey and a review of the final RTC report. The survey allows districts to provide information regarding their transportation operations prior to the initial meeting between the Regional Coordinator and district staff. As a result, meetings are able to focus on substance instead of gathering background information.

After the in-person meeting, additional contact is primarily through email. The Regional Coordinator drafts descriptions and comments regarding district operations and possibilities for improving efficiency. This is then emailed to district staff for response.

For districts remaining below 90 percent for multiple years the process of the review was modified as necessary to maximize the effective use of staff time. Many small school districts will never be able to achieve a rating above 90 percent. For example, where the district's single school is located in the middle of a stretch of highway, the efficiency system target may be to only use a single bus for providing the transportation. However, using a single bus would result in excessive ride times for students. For these districts, the review process typically consists of a phone call or email exchange to identify any changes in operations. For larger school districts with more complex transportation operations, onsite visits are more productive.

Some districts had efficiency ratings below 90 percent in March 2014, increased their efficiency rating to above 90 percent in 2015 and were again below 90 percent in 2016. For these districts, the same review process was used as when a district remains below 90 percent, which is explained in the preceding paragraph.

An abbreviated review process was used for those districts whose prior year efficiency ratings were below 90 percent but whose March 2016-year rating was above 90 percent. These reviews consisted of attempting to determine any changes made in transportation operations that resulted in the increased efficiency rating in order to identify best practices.

The primary audience for the efficiency reports is school district administrative staff, local school boards and interested members of the community. OSPI and RTCs generate KPIs to compare district transportation operations in three categories:

- 1) The number of basic program students per basic program bus,
- 2) The number of special education students per special education bus, and
- 3) The cost per student transported.

While KPIs have some of the same weaknesses of the statistical rating process, they provide a comparison of a district's operational performance using everyday concepts. The last three annual statewide KPIs are provided in Tables 3, 4 and 5 and show the expected ability of larger districts to take advantage of efficiencies of scale not available to small districts. A customized KPI report was generated for all school districts regardless of efficiency rating to encourage districts with efficiency ratings of 100 percent to evaluate how they compare to similar size districts. These reports are available on the OSPI website at the link above under "KPI Reports."

Due to several school districts operating transportation services for neighboring districts or operating as transportation cooperatives, there were a total of 285 districts included in the efficiency rating process.

The March 2016 rating resulted in 182 districts (63.86 percent) rated at 100 percent and 77 districts rated less than 90 percent. For a year-to-year comparison of the distribution of school district efficiency ratings, see Table 1 in Appendix B. There was an increase in the number of districts rated 100 percent and a decrease in the number of districts rated between 90 percent and 100 percent.

Washington state has a substantial variation in size of school districts when measured either by enrollment, land area, roadway or other characteristics. "Why are we being compared to district X?" was a frequent question in the review process. In many cases, districts are used to comparing themselves to neighboring districts regardless of disparity in size or other characteristics. Districts were evaluated by the number of student riders to ensure that comparisons were made between similar size districts. For the break points in the student count quartiles, see Table 2.

Many districts reported changes in operations to increase efficiency. These changes ranged from consolidation of school bus routes to changing bell times. A number of larger districts indicated they are in the process of implementing future bell time changes to provide multi-tiered routing of school buses. For large districts, restructuring bell times is typically a multi-year process.

Perhaps the most difficult circumstance to explain is when a district increases the average student load and cut costs by consolidating bus routes yet its latest rating shows a decrease in the efficiency. The reverse has also occurred, in which a district increases costs and the efficiency rating increases. It is in cases such as these where referring to the KPIs is particularly useful.

Tables 3, 4 and 5 provide the statewide Key Performance Indicators for the 2012–13, 2013–14 and 2014–15 school years. There were only slight changes in any of the values. The comparison of year to year values is more productive at the individual school district level.

Appendix B provides a statewide map of efficiency ratings. While there are minor variations from prior year maps, the overall pattern is unchanged. The highest concentration of low ratings is found in rural southwest Washington and scattered across the rural areas of eastern Washington.

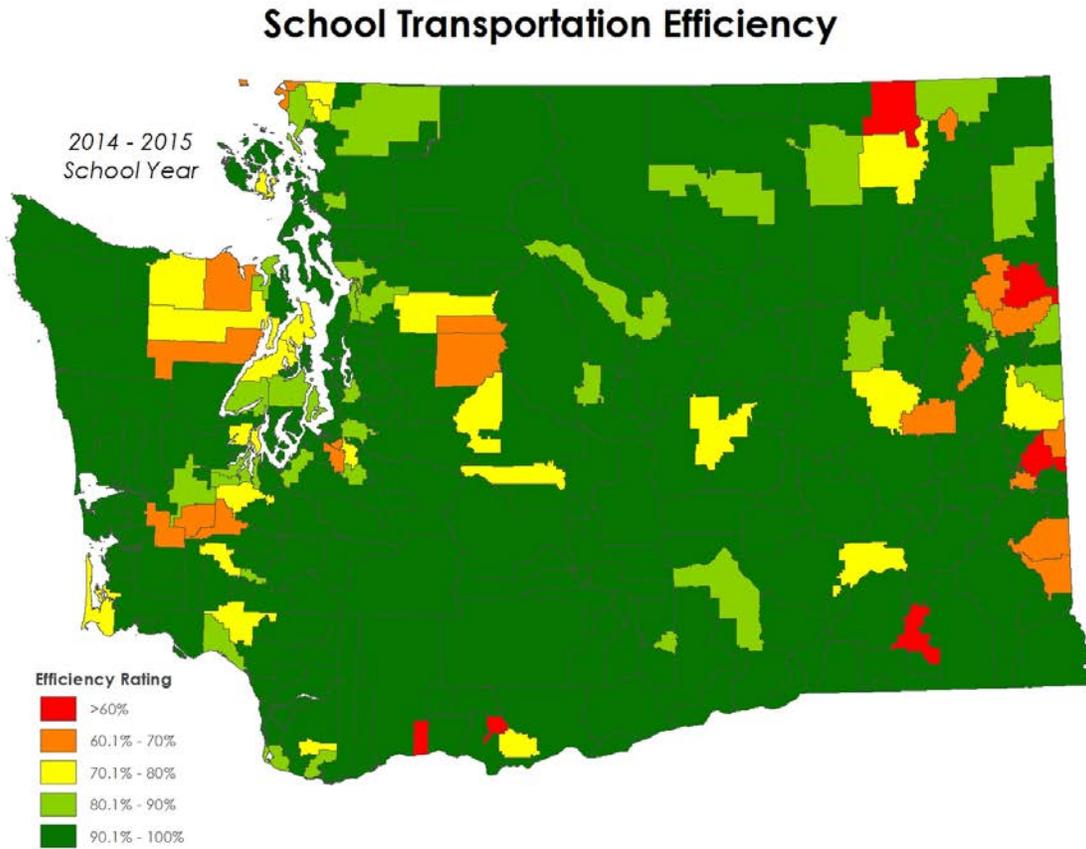
School districts remain susceptible to having their efficiency ratings drop due to one-time costs such as rebuilding a diesel engine (for a small district) or implementing a technology system. Ideally, districts should make these implementation decisions based on the impact on student safety and long range efficiencies, not the impact of the expenditure on their efficiency rating.

Conclusion and Next Steps

School districts are working to improve efficiency as a result of the implementation of the STARS efficiency rating system. This is clearly a success. The use of Key Performance Indicators has provided a useful tool that is easier to comprehend and can indicate relative efficiency, including those districts with efficiency ratings of 100 percent.

APPENDICES

Appendix A: Map of Efficiency Ratings



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Table 1: Distribution of District Efficiency Ratings

Efficiency Rating	2014 Rating	2015 Rating	2016 Rating
100%	200	180	182
90% to 99.9%	15	32	26
80% to 89.9%	28	33	29
70% to 79.9%	19	20	24
60% to 69.9%	16	13	18
Less than 60%	10	7	6

Table 2: Efficiency Quartiles by Combined AM + PM Student Count

	Minimum Student Count	Maximum Student Count
1 st Quartile	12	228
2 nd Quartile	229	774
3 rd Quartile	775	3050
4 th Quartile	3051	25,843

Table 3: 2012-13 Key Performance Indicators by Efficiency Quartiles (riders per bus is one half of combined AM + PM Student Count)

	KPI: Basic Program Riders per Basic Program Bus	KPI: Special Program Riders per Special Program Bus	KPI: Cost per Student
1 st Quartile	19	1	\$2,649.31
2 nd Quartile	36	3	\$1,567.67
3 rd Quartile	59	8	\$1,060.61
4 th Quartile	85	8	\$1,018.78

Table 4: 2013-14 Key Performance Indicators by Efficiency Quartiles (riders per bus is one half of combined AM + PM Student Count)

	KPI: Basic Program Riders per Basic Program Bus	KPI: Special Program Riders per Special Program Bus	KPI: Cost per Student
1 st Quartile	19	1	\$2,766.32
2 nd Quartile	39	3	\$1,362.16
3 rd Quartile	60	8	\$1,079.24
4 th Quartile	83	8	\$1,059.85

Table 5: 2014-15 Key Performance Indicators by Efficiency Quartiles (riders per bus is one half of combined AM + PM Student Count)

	KPI: Basic Program Riders per Basic Program Bus	KPI: Special Program Riders per Special Program Bus	KPI: Cost per Student
1 st Quartile	20	1	\$2,713.36
2 nd Quartile	39	3	\$1,333.86
3 rd Quartile	59	8	\$1,078.22
4 th Quartile	86	9	\$1,068.40

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