Office of Superintendent of Public Instruction

Student Transportation

Transportation Efficiency Review of 2016-17 School Year Transportation Operations

for LONGVIEW School District

7/2/2018

Table of Contents

Executive Summary 3

Report Process and Review Methodology 4

Section One: Review of the STARS Relative Efficiency Rating 4

Section Two: Review of the Key Performance Indicators 5

Basic Rider KPI 6

Special Education Rider KPI 6

Cost per Rider KPI 7

Section Three: Review of District Transportation Operations 8

Policies and Procedures 8

Transportation Operations 8

Geographic and Other Constraints 9

Section Four: Comments 9

Comments Regarding the STARS Efficiency Rating 9

Comments Regarding the KPI 10

Comments Regarding the District Transportation Operations Review 10

District Comments Regarding the RTC Efficiency Review Process 11

Executive Summary

Longview School District had a full time equivalent enrollment for the 2016-17 school year of 6,507.57 students. Of those enrolled, Longview School District provided home-to-school transportation service for an average of 3,379.625 basic program riders and 454.375 special program riders per day (combined AM and PM student counts). The district operated 36 school buses to provide this service, at a cost of $2,417,581.19.

The efficiency system target for Longview School District would be to operate 36. 00 school buses at a cost of $2,417,581.19. The district's relative efficiency rating based on data from the 2016-17 school year is 100%.

For school districts with a relative efficiency rating less than 90%, a review by the Regional Transportation Coordinator (RTC) is required. The RTC review was conducted by Rodney McKnight. RTCs also conduct reviews for districts moving above 90%.

The regional transportation coordinator found that the most significant factors constraining the district's transportation operating costs and efficiency were:

- Reduction in route buses
- Increase in destinations
- Increase in number of route buses by cohort school district
- Decrease in number of destinations by cohort school district

Suggested areas to evaluate for improvement in efficiency are:

- No additional comment at this time

Overall Summary:

Longview School District reported a reduction in number of route buses from the previous reporting year and also reported an increase in Destinations. Also, many of Longview School District's cohorts reported a decline in several operational efficiency factors and all but one of the cohort school districts reported an increase in number of route buses.

When comparing a district's "efficiency cohorts" it is important to note that significant one-time costs, disproportionate reoccurring costs, unique geography, sparsity of students, lack of road connectivity, socioeconomic factors, rural vs. urban, land area, length of bus routes, competitive negotiated agreements, or other unique or inequitable operational factors can impact a district's efficiency score. Unique site characteristics, like or similar to those cited above, can limit a district's ability to optimally configure routing schemes or contain costs. Consequently, when competing and inequitable factors affect the outcome, some districts may repeatedly fall below the 90% efficiency

target or fluctuate from one year to the next between being above 90% efficient and below 90% efficient.

Report Process and Review Methodology

A detailed description of the STARS efficiency rating process is available online at Student Transportation Allocation Reporting System web page under Efficiency Ratings. That webpage also provides descriptions of the rating calculation.

Key Performance Indicators (KPI) material is included in this document, but for an explanation of each indicator and the methodology, please see the Key Performance Indicators Technical Assistance Paper available online at the website referenced above.

The approach used for the 2018 review of a school district's transportation program involves four sections:

1. Review of the district's STARS relative efficiency rating;
2. Review of the district's Key Performance Indicators (KPI);
3. Review of the school district's operational details, including identifying constraints and changes from prior years (if any); and
4. Comments on the material provided by the regional coordinator and school district staff.

Using this process, the district's transportation program is evaluated for the efficient use of state fiscal resources. The goal of this process is to attempt to identify best practices that districts can apply to minimize the costs of operating their transportation service.

Section One: STARS Relative Efficiency Rating

For Longview School District, the March 2018 relative efficiency score (based on data from the 2016-17 school year) was 100%. The Efficiency Detail Report including the cohort districts and predicted resource requirements can be found on the OSPI Student Transportation Website using the following hotlink and searching under "Efficiency Ratings" - http://www.k12.wa.us/transportation/STARS/default.aspx.

> In the 2016-17 school year, Longview School District reported operating 36.00 buses to transport a ridership count (combined AM plus PM) of 2834.00 students with expenditures of $2,417,581.19. The efficiency rating calculation identified target expenditures of $2,417,581.19 while operating 36.00 buses.

Longview School District's March 2016 relative efficiency rating (based on data from the 2014-15 school year) was 88.03% and the March 2017 relative efficiency rating (based on data from the 2015-16 school year) was 89.27%.

Regional Transportation Coordinator Analysis:

Transportation operations and a school district's efficiency score is often influenced by operational changes made by other efficiency cohort school districts.

Longview School District efficiency cohort school districts and their weighted influence for report periods March 2016 and March 2017 are detailed below. Between the 2015-16 and 2016-17 reporting periods, many of the school districts in the Longview School District cohort group improved efficiencies in several of the weighted efficiency measurements.

It is important to note that the number of a district's student delivery destinations may carry an inequitable weight and may have a tendency to negatively impact school districts that have limited student attendance options, compared to cohort school districts that have a greater number of attendance options (refer to table).

District & 2016-17 Efficiency Cohorts	District & 2017-18 Efficiency Cohorts	FY17/FY18 District Scores & Cohort Weights	FY17 P/Y Expenses	FY18 P/Y Expenses	FY17/FY18 Buses	FY17 Riders Basic/Sp. Prgm.	FY18 Riders Basic/Sp. Prgm.	FY17/FY18 Avg. Distance	FY17/FY18 Destinations	FY17/FY18 Stds per Rd-Mi
Longview	Longview	89.28%/100.0%	$2,242,731	$2,417,581	37/***36***	3,466/458	3,379/454	4.11/4.06	15/***16***	9.48/9.26
Burlington-Edison		25.5%/NA	$1,636,099	$1,823,592	31/32	3,076/173	3,038/165	4.47/***4.49***	17/17	9.53/9.40
Central Valley		9.9%/NA	$4,051,475	$4,604,500	63/68	7,464/690	***8,176***/618	3.03/***3.26***	37/***43***	16.15/***17.42***
Eastmont		2.9%/NA	$1,227,859	$1,350,031	31/31	3,369/199	***3,559***/170	3.20/3.11	10/10	11.33/***11.84***
Sedro-Woolley		14.5%/	$2,320,255	$2,471,797	30/33	3,165/261	3,161/***283***	4.74/***4.80***	19/***20***	7.50/***7.54***
Shelton		38.8%/	$1,878,914	$2,260427	29/31	2,916/754	***3,580***/234	4.96/***5.03***	7/7	6.32/***6.57***
Stellacoom Hist.		8.3%/	$974,964	$1,039190	23/25	3,031/108	***3,063***/97	4.60/4.49	14/11	18.92/***19.05***

bold type indicates efficiency improvement between reporting year 2017 and reporting year 2018

In the case of Longview School District, the greatest impact on its efficiency score appears to have been the reduction in number of route buses and the increase in Destinations. There was also a reduction in comparative efficiencies by all but one of Longview School District's cohort school districts, reporting an increase in number of route buses used in their operation. It should also be noted that one of Longview School District's cohorts reported a reduction in destinations (refer to table).

Section Two: Key Performance Indicators

This section of the efficiency review process uses three Key Performance Indicators (KPI): the average number of basic program riders per basic program bus; the average number of special education riders per special education bus; and the average cost per

rider. These three KPI are helpful in translating efficiency into “ground level” concepts. In addition to each district’s KPI, a KPI cohort is developed. The KPI cohort is comprised of the 20 most similar districts based on total ridership.

Basic Rider KPI

Basic Program Riders per Basic Program Bus KPI by School Year			
2014-15	2015-16	2016-17	Change 2015-16 to 2016-17
77.89	78.79	76.80	- 2.51%

This KPI attempts to measure the efficiency of the district’s basic program transportation by calculating the average number of students carried on basic program school buses.

General comment: independent of other factors, an **increase** in the number of basic riders per basic school bus from year to year reflects an **increase** in efficiency.

Regional Transportation Coordinator Analysis:

In the 2015-16 school year, Longview School District transported an average of 78.79 basic program students per basic program bus. In the 2016-17 school year, this changed to an average of 76.80 basic program students per bus. This was a decrease of 2.51%.

The district ranks 10th in the Basic Riders KPI within their 21 district KPI cohort.

Special Education Rider KPI

Special Education Riders per Special Education Bus KPI by School Yea			
2014-15	2015-16	2016-17	Change 2015-16 to 2016-17
10.40	9.92	11.04	11.34%

Regional Transportation Coordinator Analysis:

This KPI attempts to measure the efficiency of the district's special education transportation by calculating the average number of students carried on special education school buses. It is important to note that special education students may require specialized transportation that limits a district's ability to maximize bus utilization. In special education transportation, student needs preempt efficiency concerns.

General comment: independent of other factors, an **increase** in the number of special education riders per basic school bus from year to year reflects an **increase** in efficiency.

In the 2015-16 school year, Longview School District transported an average of 9.92 special education students per special education bus. In the 2016-17 school year, the district transported an average of 11.04 special education students per bus. This was an increase of 11.34% .

The district ranks 7th in the Special Education Riders KPI within their 21 district cohort.

For school districts with few or no students requiring special education transportation services, this KPI is of minimal value except for confirming year to year service requirements.

Cost per Rider KPI

Cost per Student KPI by School Year			
2014-15	2015-16	2016-17	Change 2015-16 to 2016-17
$ 1,126.48	$ 1,142.79	$ 1,261.12	10.36%

Regional Transportation Coordinator Analysis:

This KPI attempts to measure the overall efficiency of the district's transportation operation by calculating the average cost of transporting a student.

General comment: independent of other factors, a **decrease** in the average cost of transporting a student from year to year reflects an **increase** in efficiency.

In the 2015-16 school year, Longview School District's average cost per rider was $1,142.79. In the 2016-17 school year, the district's average cost per rider was $1,261.12. This was an increase of 10.36%.

The district ranks 16th in the Cost per Rider within their 21 district KPI cohort.

For districts able to break out the average cost per student between the basic program and the special education program, the year to year change in these values can assist the district in evaluating their transportation operations. However, the workload to break out these costs by program can be substantial.

Section Three: Review of District Transportation Operations

The review of district transportation operations is grouped in three areas:

- Policies and Procedures
- Transportation Operations
- Geographic and Other Constraints

The goal of the district review process is to identify changes that the district has made that impact the cost of providing transportation service. The identification of constraints the district faces can help in identifying solutions so that these solutions can be shared with other districts.

Policies and Procedures

Policies are the desired high-level outcomes as articulated by the school district board of directors. The school district administration and transportation staff develop procedures to accomplish the policy objectives. Examples may include providing transportation for out-of-district 'choice' students or establishing a 2-mile walk area for high school students.

Transportation Operations

Transportation operations include all the organizational processes used to manage and run the transportation program on a daily basis from routing to payroll. The age of the fleet impacts maintenance costs, as does a good preventative maintenance program. Any district changes in operations that could significantly impact the efficiency or cost of operations should be noted. Examples include combining routes to reduce the number of buses or increasing buses to reduce student ride times.

Regional Transportation Coordinator Observations:

Transportation Expenditures (STARS Prior Year Expenditures) by School Year		
2014-15	2015-16	2016-17
$2,137,711.14	$2,242,731.37	$2,417,581.19

The Longview School District's transportation expenditures increased 4.91% between 2014-15 and 2015-16, and increased 7.80% between 2015-16 and 2016-17.

Geographic and Other Constraints

Geographic constraints can impact the ability of a school district to maximize efficiency. Identifying methods to minimize the impacts of constraints can assist other districts facing similar challenges. Examples of constraints include geographic constraints such as large bodies of water, minimal student density or urban traffic congestion.

Regional Transportation Coordinator Observations:

No additional comment.

Section Four: Comments

Comments Regarding the STARS Efficiency Rating

Regional Transportation Coordinator Comments:

Providing school districts an easy to understand validation of the STARS efficiency rating system is problematic because of the complexity of the mathematical process and the multitude of unique district student transportation operational factors not included in the STARS calculation. Consequently, this can skew the district's relative efficiency score.

Student transportation dynamics unique to school districts that STARS cannot or does not equitably consider minimizes the accuracy of this complicated efficiency rating system. A school district may be extremely limited in its ability to control unique site characteristics that may be contributing to an unfair cohort selection and peer comparison. Unique geography, negotiated salaries and benefits, a one-time expense targeting improved student safety, maintaining an operational standard, geo-economic differences, or something as simple as a lower than average fleet age are examples of

differing variables between school districts that the efficiency rating system cannot equitably compare.

Using both the STARS Efficiency Review process and the KPI process can present the district with an opportunity to evaluate two measuring methodologies in concert, which can provide a more accurate approach for appraising overall efficiency and operational performance.

There is a significant offset between the time of an efficiency review and the time when changes to transportation operations can be implemented. Many changes in transportation operations can only be made at the beginning of a school year. Because changing bell times or other operational changes have a significant impact on parents, students and district staff, changes must be undertaken in a manner that provides an opportunity for involvement for all stakeholders. In some cases, changes are also subject to bargaining agreement constraints.

School District Comments

No comment provided.

Comments Regarding the KPI

Regional Transportation Coordinator Comments:

Using both the STARS Efficiency Review process and the KPI process can present the district with an opportunity to evaluate two measuring methodologies in concert, which can be a more accurate approach for appraising overall efficiency and operational performance.

School District Comments

No comment provided.

Comments Regarding the District Transportation Operations Review

Regional Transportation Coordinator Comments:

Longview School District is commended on their ongoing efforts to improve efficiencies and reduce the number of route buses used in their operations.

School District Comments

No comment provided.

District Comments Regarding the RTC Efficiency Review Process

No comment provided.