Office of Superintendent of Public Instruction

Student Transportation

Transportation Efficiency Review of 2015-16 School Year Transportation Operations

for North River School District

10/5/2017

Table of Contents

Executive Summary 3

Report Process and Review Methodology 4

Section One: STARS Relative Efficiency Rating 4

Section Two: Key Performance Indicators 5

A. Basic KPI Riders 6

B. Special Education Rider KPI 6

C. Cost per Rider KPI 7

Section Three: Review of District Transportation Operations 7

A. Policies and Procedures 8

B. Transportation Operations 8

C. Geographic and Other Constraints 8

Section Four: Comments 9

A. Comments Regarding the STARS Efficiency Rating 9

B. Comments Regarding the KPI 9

C. Comments Regarding the District Transportation Operations Review 10

D. District Comments Regarding the RTC Efficiency Review Process 10

Executive Summary

North River School District had a full time equivalent enrollment for the 2015–16 school year of 60 students. Of those enrolled, North River provided home-to-school transportation service for an average of 91 basic program riders and no special program riders per day (combined AM and PM student counts). The district operated 2 school buses to provide this service, at a cost of $120,966.08.

The efficiency system target for North River School District would be to operate 1 school bus at a cost of $73,160.67. The district's relative efficiency rating based on data from the 2015–16 school year is 75.90%.

A review by the Regional Transportation Coordinator (RTC) is required for school districts with a relative efficiency rating less than 90%. RTCs also conduct follow-up reviews for districts moving above 90%. The RTC review was conducted by Rodney McKnight from Educational Service District 112.

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

- Lower than average ridership per bus ratios
- Unique site characteristics such as, rural geography, sparsity of students, lack of road connectivity, and length of bus rides
- Unique site characteristics, such as socioeconomic factors requiring increased transportation services
- Out-of-district student transportation

Overall Summary:

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.

Limited road connectivity, sparsity of students and other unique site characteristics will continue to negatively affect North River School District's annual efficiency score.

Report Process and Review Methodology

A detailed description of the STARS efficiency rating process is available upon request. The detailed rating process description provides detailed guidance 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, which is available upon request.

The approach used for the 2017 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 school transportation operations, including identifying constraints and changes from prior years (if any); and
4. Comments on the material provided by the regional transportation 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 North River School District, the March 2017 relative efficiency score (based on data from the 2015–16 school year) was 75.90%. North River School District's relative efficiency rating and comparative district cohort data is detailed below in table format**.**

> In the 2015–16 school year, North River School District reported operating 2 buses to transport a ridership count (combined AM plus PM) of 91 students with expenditures of $120,966.08. The efficiency rating calculation identified target expenditures of $73,160.67 while operating one bus.

North River's March 2015 relative efficiency rating (based on data from the 2013–14 school year) was 66.40% and the March 2016 relative efficiency rating (based on data from the 2014–15 school year) was 60.99%.

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.

North River 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 North River 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).

Two North River cohort school districts (Benge and Taholah) may have had a significant one-time expense in the 2015-16 school year, which skewed the efficiency scoring process between the 2014-15 and 2016-17 reporting periods.

District & 2015-16 Efficiency Cohorts	District & 2016-17 Efficiency Cohorts	FY16/FY17 District Scores & Cohort Weights	FY16 Expenses	FY17 Expenses	FY16/FY17 Buses	FY16 Riders Basic/Sp. Prgm.	FY17 Riders Basic/Sp. Prgm.	FY16/FY17 Avg. Distance	FY16/FY17 Destinations	FY16/FY17 Stds per Rd-Mi
North River	North River	60.99%/75.90%	$117,061	$120,966	2/2	75/0	***91***/0	8.38/***8.45***	1/1	0.36/***0.44***
	Benge	NA/13.5%	$74,557	***$41,224***	2/***1***	34/0	22/0	23.60/17.35	4/1	1.00/0.65
Cosmopolis		3.5%/NA	$33,130	***$28,334***	1/1	25/0	21/0	5.38/***6.68***	1/1	0.15/0.13
Queets-Clearwater		28.1%/NA	$38,309	$38,390	1/1	24/0	19/0	6.11/5.81	1/1	0.10/0.08
Roosevelt	Roosevelt	11.2%/7.6%	$68,765	$76,994	1/1	51/0	***58***/0	33.76/***33.89***	3/3	0.37/***0.42***
Skamania	Skamania	22.0%/18.5%	$65,732	***$64,155***	2/2	159/0	147/0	5.38/***5.54***	2/2	1.03/0.98
Taholah	Taholah	34.8%/45.2%	$107,182	***$79,120***	1/1	76/0	69/0	4.30/***4.31***	1/1	0.15/0.14
	Touchet	NA/15.2%	$104,246	***$92,832***	3/3	215/0	169/0	3.80/3.66	1/1	0.69/0.54
Wishram		0.4%/NA	$12,525	$43,361	1/1	50/0	45/0	1.82/1.49	1/1	1.70/1.52

bold type indicates efficiency improvement between reporting year 2016 and reporting year 2017

Section Two: Key Performance Indicators

Key Performance Indicators (KPIs) are useful in comparing and evaluating specific operational outcomes. 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 comparative measurements embody a quantitative process where the outcome is readily visible and easily understood. The comparative results provide a quick analytical assessment based on a ranking order. 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 (ten above and ten below) to North River School District based on total ridership.

A. Basic KPI Riders

Basic Program Riders per Basic Program Bus KPI by School Year

2012-13	2013-14	2014-15	2015-16	Change 2014-15 to 2015-16
14.27	18.75	18.81	23.00	22.28%

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 2014–15 school year, North River transported an average of 18.81 basic program students per basic program bus. In the 2015–16 school year, this changed to an average of 23.00 basic program students per bus. This was an increase of 22.28%.

The district ranks 9th in the Basic Riders KPI within their 21 district KPI cohort. The average basic students per basic bus among all 1st quartile districts statewide is 20.48.

B. Special Education Rider KPI

Special Education Riders per Special Education Bus KPI by School Year

2012-13	2013-14	2014-15	2015-16	Change 2014-15 to 2015-16
0.0	0.0	0.0	0.0	N/A

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 special program school bus from year to year reflects an **increase** in efficiency.

***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.**

C. Cost per Rider KPI

Cost per Student KPI by School Year

2012-13	2013-14	2014-15	2015-16	Change 2014-15 to 2015-16
$ 2,480.50	$ 3,432.97	$ 3,111.27	$ 2,633.28	-15.36%

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 2014–15 school year, North River's average cost per rider was $3,111.27. In the 2015–16 school year, the district's average cost per rider was $2,633.28. This was a decrease of 15.36%.

The district ranks 12th in the Cost per Rider within their 21 district KPI cohort. The average cost per rider among all 1st quartile districts statewide is $2,671.74.

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.

A. 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.

Regional Transportation Coordinator Observations:

No additional comment.

B. 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

2012-13	2013-14	2014-15	2015-16
$ 106,196.45	$ 131,954.60	$ 117,061.45	$ 120,966.08

North River School District's transportation expenditures increased 24.26% between 2012-13 and 2013-14, decreased 11.29% between 2013-14 and 2014-15, and increased 3.34% between 2014-15 and 2015-16.

C. 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

A. 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 of all stakeholders. In some cases, changes are also subject to bargaining agreement constraints.

School District Comments:

B. 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:

C. Comments Regarding the District Transportation Operations Review

Regional Transportation Coordinator Comments:

No additional comment.

School District Comments:

D. District Comments Regarding the RTC Efficiency Review Process