



Washington Office of Superintendent of
PUBLIC INSTRUCTION

**Transportation Efficiency Review of
2018–19 School Year Transportation Operations
for PIONEER SCHOOL DISTRICT**

6/01/2020

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- Appendix I Efficiency Detail Report
- Appendix II Key Performance Indicators

Executive Summary

PIONEER SCHOOL DISTRICT had a full-time equivalent enrollment for the 2018-19 school year of 740.07 students. Of those enrolled, PIONEER provided home-to-school transportation service for an average of 849.50 basic program riders and 64.5 special program riders per day (combined AM and PM student counts). The district operated 12 school buses to provide this service, at a cost of \$644,358.22.

The efficiency system target for PIONEER SCHOOL DISTRICT would be to operate 9.71 school buses at a cost of \$527,777.72. The district's relative efficiency rating based on data from the 2018–19 school year is 81.91%.

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:

- XXXX
- XXXX

Suggested areas to evaluate for improvement in efficiency are:

- XXXXX
- XXXXX

Overall Summary:

- XXXXXX
- XXXXXX

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 2020 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 PIONEER SCHOOL DISTRICT, the March 2020 relative efficiency score (based on data from the 2018–19 school year) was 81.91%. The Efficiency Detail Report including the cohort districts and predicted resource requirements is provided in Appendix I.

In the 2018–19 school year, PIONEER SCHOOL DISTRICT reported operating 12.00 buses to transport a ridership count (combined AM plus PM) of 914 students with expenditures of \$644,358.22. The efficiency rating calculation identified target expenditures of \$527,777.72 while operating 9.71 buses.

PIONEER's March 2018 relative efficiency rating (based on data from the 2016–17 school year) was 74.03% and the March 2019 relative efficiency rating (based on data from the 2017–18 school year) was 76.78%.

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.

Template efficiency cohort school districts and their weighted influence for report periods March 2018 and March 2019 are detailed below. Between the 2017-18 and 2018-19 reporting periods, many of the school districts in the Template 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 & 2018- 19 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
Template	Template	79.9%/78.2%	\$2,834,918	\$2,959,563	59/59	5,484/175	5,841/247	3.11/3.16	12/13	21.85/23.51

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

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

2016–17	2017–18	2018–19	Change 2017–18 to 2018–19
54.98	55.15	47.19	- 14.43%

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 2017–18 school year, PIONEER transported an average of 55.15 basic program students per basic program bus. In the 2018–19 school year, this changed to an average of 47.19 basic program students per bus. This was a decrease of - 14.43%.

The district ranks **xxth** 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 Year

2016–17	2017–18	2018–19	Change 2017–18 to 2018–19
8.08	9.27	10.38	11.97%

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 2017–18 school year, PIONEER transported an average of 9.27 special education students per special education bus. In the 2018–19 school year, the district transported an average of 10.38 special education students per bus. This was an increase of 11.97% .

The district ranks **xxth** 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

2016–17	2017–18	2018–19	Change 2017–18 to 2018–19
\$ 1,154.35	\$ 1,291.75	\$ 1,409.97	9.15%

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 2017–18 school year, PIONEER's average cost per rider was \$ 1,291.75. In the 2018–19 school year, the district's average cost per rider was \$ 1,409.97. This was an increase of 9.15%.

The district ranks **xxth** 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 two-mile walk area for high school students.

Regional Transportation Coordinator Observations:

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

2016–17	2017–18	2018–19
\$537,637.94	\$613,257.12	\$644,358.22

[RTC description of expenditure pattern, as appropriate]

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:

Section Four: Comments

Comments Regarding the STARS Efficiency Rating

Regional Transportation Coordinator Comments:

School District Comments

Comments Regarding the KPI

Regional Transportation Coordinator Comments:

School District Comments

Comments Regarding the District Transportation Operations Review

Regional Transportation Coordinator Comments:

School District Comments

District Comments Regarding the RTC Efficiency Review Process

Superintendent of Public Instruction

School Year 2019-2020 - SD Desc

Efficiency Detail Report

PIONEER

PIONEER					Workload		Site Characteristics (>)				Site Characteristics (<)	
Cohort	District	Weight	Prior Year Expenditures	Buses	Basic Riders	Special Riders	Avg Distance	Number of Dest.	Land Area	K Rte	Road Miles per Sq Mile	Students Per Road Mile
	Pioneer		\$644,358.22	12	849	64	5.27	2	67.2	0	3.22	4.21
Cohort	Cle Elum-Roslyn	27.9%	\$471,111.93	11	764	23	4.42	3	209.2	0	1.87	2.01
Cohort	Quillayute Valley	68.9%	\$533,546.13	9	861	83	5.49	3	411.6	0	2.13	1.08
Cohort	Royal	2.7%	\$916,302.98	14	1,306	14	8.63	1	386.9	0	1.11	3.07
Cohort	Vashon Island	0.5%	\$766,990.52	13	1,507	45	3.66	3	36.9	0	6.09	6.90
Target	Pioneer Target	100%	\$527,777.72	9								

Relative Efficiency Rating

81.91%

Site Characteristics (>) are those characteristics where a larger number is more challenging

Site Characteristics (<) are those characteristics where a smaller number is more challenging

Table 1

Table 1 shows the KPI cohort group. This table shows the districts that will be used for comparison in the following tables. It may be worthwhile noting the range in student ridership within the cohort, as larger student ridership provides more opportunities for routing efficiently. These are referred to as 'efficiencies of scale' and are common in all efficiency evaluations.

District	Total Riders 2018-19
NACHES VALLEY	542.1
KIONA-BENTON CITY	534.3
HOQUIAM	523.8
TENINO	522.1
LAKE CHELAN	514.1
COLLEGE PLACE	502.1
QUILLAYUTE VALLEY	472.2
OCEAN BEACH	471.9
FINLEY	471.7
MOUNT ADAMS	467.2
PIONEER	457.0
MONTESANO	452.1
FREEMAN	443.4
VALLEY	405.4
CASCADE	404.5
CLE ELUM-ROSLYN	393.9
WHITE SALMON VALLEY	390.2
CASHMERE	384.3
WINLOCK	381.8
NORTH BEACH	380.6
STEVENSON-CARSON	380.4

Table 2

This table shows the districts sorted in descending order by the value of their Basic Rider per bus KPI.

Change in rank	District	Total Riders 2018-19	Basic Riders Per Basic Bus 2018-19
+10	NORTH BEACH	380.6	62.5
+9	HOQUIAM	523.8	61.5
+8	COLLEGE PLACE	502.1	60.4
+7	MOUNT ADAMS	467.2	59.4
+6	MONTESANO	452.1	59.2
+5	STEVENSON-CARSON	380.4	58.2
+4	LAKE CHELAN	514.1	54.6
+3	QUILLAYUTE VALLEY	472.2	53.8
+2	WINLOCK	381.8	52.2
+1	KIONA-BENTON CITY	534.3	51.9
	NACHES VALLEY	542.1	49.0
-1	PIONEER	457.0	47.2
-2	CASHMERE	384.3	46.6
-3	CLE ELUM-ROSLYN	393.9	42.5
-4	WHITE SALMON VALLEY	390.2	42.3
-5	VALLEY	405.4	40.4
-6	OCEAN BEACH	471.9	39.9
-7	CASCADE	404.5	35.1
-8	TENINO	522.1	34.4
-9	FREEMAN	443.4	33.3
-10	FINLEY	471.7	32.9

Table 3

This table shows the districts sorted in descending order by the value of their Special Education riders per Special Education bus KPI.

Change in rank	District	Total Riders 2018-19	SpEd Riders Per SpEd Bus 2018-19
+10	FINLEY	471.7	53.5
+9	HOQUIAM	523.8	18.1
+8	MONTESANO	452.1	16.2
+7	STEVENSON-CARSON	380.4	12.3
+6	PIONEER	457.0	10.4
+5	COLLEGE PLACE	502.1	9.5
+4	TENINO	522.1	8.7
+3	CLE ELUM-ROSLYN	393.9	8.1
+2	WHITE SALMON VALLEY	390.2	7.5
+1	CASCADE	404.5	7.1
	WINLOCK	381.8	6.5
-1	MOUNT ADAMS	467.2	6.4
-2	OCEAN BEACH	471.9	6.0
-3	QUILLAYUTE VALLEY	472.2	5.9
-4	NACHES VALLEY	542.1	5.7
-5	FREEMAN	443.4	5.5
-6	LAKE CHELAN	514.1	5.2
-7	CASHMERE	384.3	5.1
-8	KIONA-BENTON CITY	534.3	5.0
-9	NORTH BEACH	380.6	3.4
-10	VALLEY	405.4	0.8

For districts without Special Education students requiring specialized transportation, the table is only useful while reviewing potential reasons for differences in the next table, Average Cost per Rider.

Table 4

This table shows the districts sorted in ascending order by the value of their Cost per Rider KPI. This sorts reflects that efficiency in this KPI is reflected by a lower cost per student, rather than higher numbers of riders per bus.

Change in rank	District	Total Riders 2018-19	Cost Per Rider 2018-19
+10	COLLEGE PLACE	502.1	\$ 835.91
+9	QUILLAYUTE VALLEY	472.2	\$ 1,129.95
+8	WINLOCK	381.8	\$ 1,131.00
+7	CASHMERE	384.3	\$ 1,147.96
+6	FINLEY	471.7	\$ 1,174.83
+5	CLE ELUM-ROSLYN	393.9	\$ 1,196.10
+4	MONTESANO	452.1	\$ 1,231.99
+3	KIONA-BENTON CITY	534.3	\$ 1,253.66
+2	LAKE CHELAN	514.1	\$ 1,386.63
+1	PIONEER	457.0	\$ 1,409.97
	NORTH BEACH	380.6	\$ 1,468.91
-1	MOUNT ADAMS	467.2	\$ 1,482.60
-2	FREEMAN	443.4	\$ 1,545.89
-3	NACHES VALLEY	542.1	\$ 1,601.92
-4	STEVENSON-CARSON	380.4	\$ 1,660.21
-5	TENINO	522.1	\$ 1,734.11
-6	OCEAN BEACH	471.9	\$ 1,751.03
-7	WHITE SALMON VALLEY	390.2	\$ 1,857.33
-8	HOQUIAM	523.8	\$ 1,990.76
-9	CASCADE	404.5	\$ 2,309.65
-10	VALLEY	405.4	\$ 2,343.89