The Impact of the Rising Cost of Diesel Fuel on School Transportation in Washington State

Discussion Draft

Dr. Terry Bergeson
State Superintendent of
Public Instruction

June 2008

Office of Superintendent of Public Instruction
Old Capitol Building
P.O. Box 47200
Olympia, WA 98504-7200

For more information about the contents
of this document, please contact:
Allan J. Jones, OSPI
E-mail: Allan.Jones@k12.wa.us
Phone: 360-725-6120

To order more copies of this document,
please call 1-888-59-LEARN (I-888-595-3276)
or visit our Web site at http://www.k12.wa.us/publications

Please refer to the document number below for quicker service:
08-0021

This document is available online at:
http://www.k12.wa.us/

The Impact of the Rising Cost of Diesel Fuel on School Transportation in Washington State

Discussion Draft

Prepared by
Allan J. Jones, Director

Pupil Transportation
Office of Superintendent of Public Instruction

Dr. Terry Bergeson
Superintendent of Public Instruction

Catherine Davidson, Ed.D.
Chief of Staff

Martin T. Mueller
Assistant Superintendent, Student Support

June 2008

Table of Contents

Executive Summary

The current rapid escalation in the price of diesel fuel is exacerbating the underfunding of pupil transportation and is creating additional stress on school districts' budgets. The result is a drain on school districts' budgets and ending fund balances at a time when the K–12 funding system is already underfunded across the board.

A conservative estimate of the total underfunding of pupil transportation fuel costs experienced by school districts since the 2002–03 school year is $49.3 million. This underfunding is a result of the current legislative funding model that adjusts the Non-Employee Related Costs (NERCs) portion of the pupil transportation allocation rate using a general market basket inflation factor that does not reflect the recent dramatic increase in diesel prices. The Superintendent of Public Instruction (SPI) asks that the Legislature add $49.3 million in supplemental funding to school districts to compensate for fuel underfunding and ensure that higher fuel prices are addressed for the 2008–09 school year.

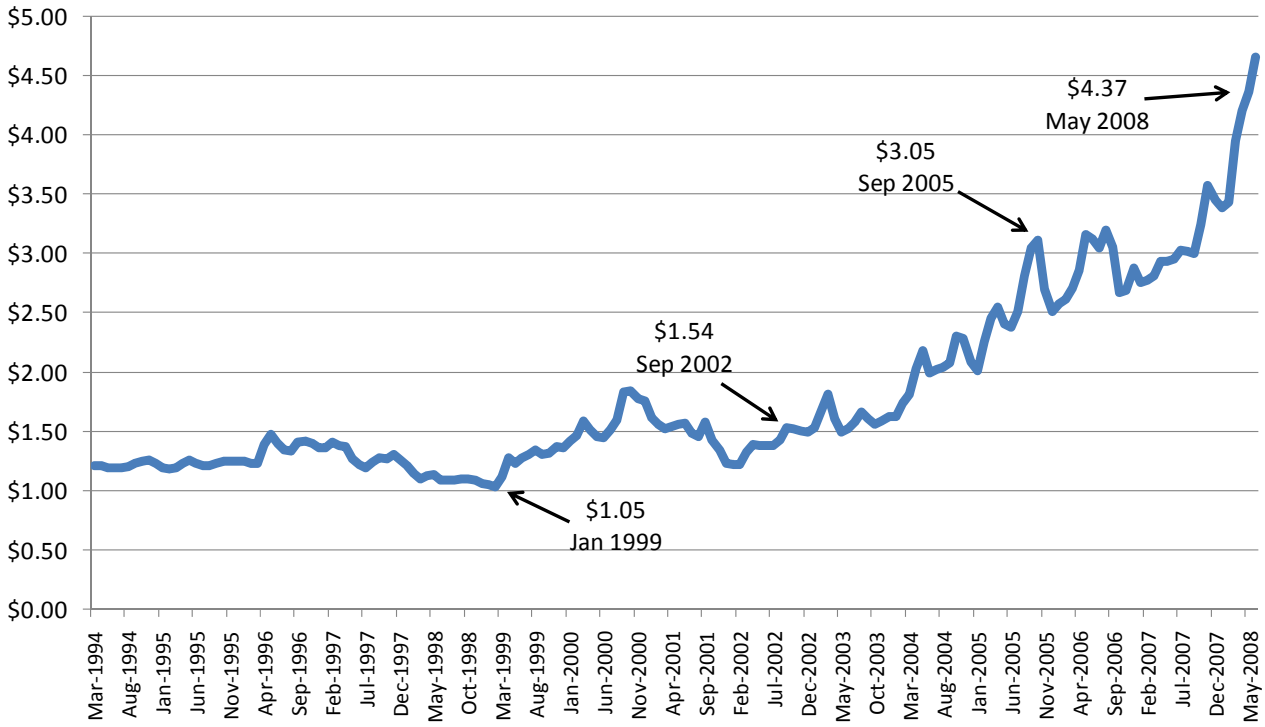
Two new transportation funding systems are being developed for Legislative consideration during the 2009 Legislative Session and implementation for the 2009–10 school year. While a new system is expected to resolve basic inadequacies of the current formula, no funding system (other than straight reimbursement) is able to adjust the allocation for pupil transportation quickly enough to provide appropriate funding for school district transportation fuel costs during times of rapid change in diesel fuel prices.

Therefore, the SPI proposes two alternative solutions for providing appropriate funding to cover the cost of fuel for student transportation. The first solution would isolate school transportation fuel costs from all other expenditures associated with to/from transportation and establish a reimbursement system for those fuel costs. The alternate solution would establish a contract through the Washington State Department of General Administration to provide for the direct billing of fuel costs to a legislatively established account.

Introduction

The Joint Legislative Audit and Review Committee's (JLARC) K–12 Pupil Transportation Funding Study (Report 06–10, November 29, 2006) indicated that the current pupil transportation funding formula resulted in approximately $100 million in underfunding statewide for the 2004–05 school year.[1] JLARC also found that the current formula cannot generate funding that accurately reflects each district's actual costs. In response, the 2007 Washington State Legislature provided for the development of two funding formula options designed to accurately reflect school district operating costs to be delivered to the Legislature December 1, 2008.

In the meantime, the current rapid escalation in the price of diesel fuel (see Chart 1) is exacerbating this underfunding and is placing great stress on school district budgets. The result is a drain on school districts' general funds (and reserves), at a time when the K–12 system is suffering from underfunding in all other formula components.



Source: US Energy Information Administration
Note: "West Coast" data excludes Californina

Chart 1: Price of diesel since March 1994 (Monthly West Coast Average Retail—in dollars per gallon)

(1) "On a statewide basis, JLARC estimates that there is a 95% probability that to/from pupil transportation expenditures exceeded state revenues by between $92,619,322 and $114,376,345 in the 2004–05 school year." JLARC Pupil Transportation Funding Study, Report 06-10, page 57.

The purpose of this report is to quantify the additional underfunding resulting from the debilitating escalation of fuel prices and propose immediate and long-term solutions.

Evaluation of Past Underfunding for Fuel

Since June 2002, school districts (and consumers in general) have experienced a dramatic increase in fuel prices. The rate of increase in diesel fuel has been higher than the rate of increase of gasoline. Since the 2004–05 school year, diesel prices have overtaken gasoline prices. Current diesel prices are up to a dollar per gallon higher than gasoline. The overwhelming majority of school buses are diesel powered.

Since the early 1980s, the funding for pupil transportation in Washington State has used the fall student ridership count to identify workload in weighted units.[2] The total number of weighted units generated by this process is multiplied by the legislatively determined allocation rate[3] to determine the total funding provided to a school district to operate their pupil transportation program for the school year. It is the annual legislative adjustment of the allocation rate that provides for increases in wages, benefits and other costs, including fuel.

The current legislative model adjusts the pupil transportation allocation rate using an approximation of a general market basket inflation factor (the U.S. Implicit Price Deflator or IPD). However, the rate of change in the IPD has not reflected the increase in the cost of fuel. Chart 2 compares the increase in the price of diesel fuel (using the standard U.S. Energy Information Agency's West Coast Average Retail Price) and the Implicit Price Deflator.

(2) The current formula uses the annual fall ridership report submitted by school districts to identify each student riding the bus and the distance in radius miles from the student's bus stop to the school of enrollment. The number of students at each radius mile on each route type is multiplied by distance weighting factors to determine weighted units. Load factors are used to adjust the weighted units for differences in school district demographics. The number of K–5 students within one radius mile of their school of enrollment is also converted to weighted units.

(3) The allocation rate for the 2007–08 school year is $46.14 per weighted unit

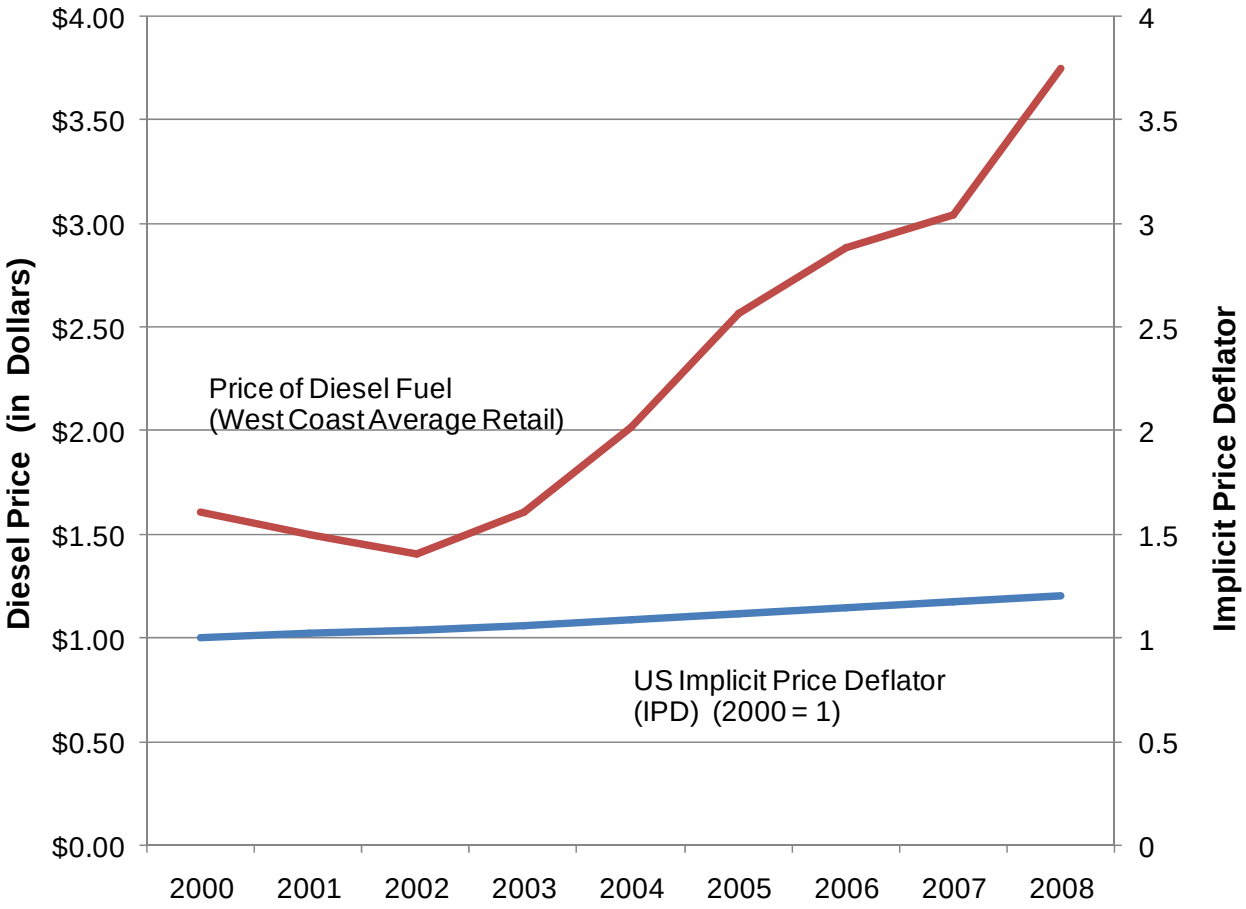


Chart 2. Comparison of the increase in diesel fuel price (West Coast Average Retail) and the IPD since 2000. The IPD is used to adjust the pupil transportation allocation rate. During this time period, the cost of diesel fuel has increased at a much higher rate than the IPD.

As a result of the differences in how school districts purchase fuel, the school district accounting system requires school districts to report fuel expenditures in different Non-Employee Related Cost (NERC) Objects. However, the majority of school districts report fuel expenditures in Pupil Transportation, Program 99, Object 5 (Supplies). This report will compare the Object 5 NERC expenditures reported by school districts statewide (from the F-196 Annual Financial Statement) with the allocation provided to fund NERCs.

Chart 3 demonstrates the close correlation between Pupil Transportation (Object 5) expenditures and the cost of diesel fuel. The chart clearly shows that the primary driver of school district transportation NERCs reported in Object 5 (Supplies) is the cost of fuel.

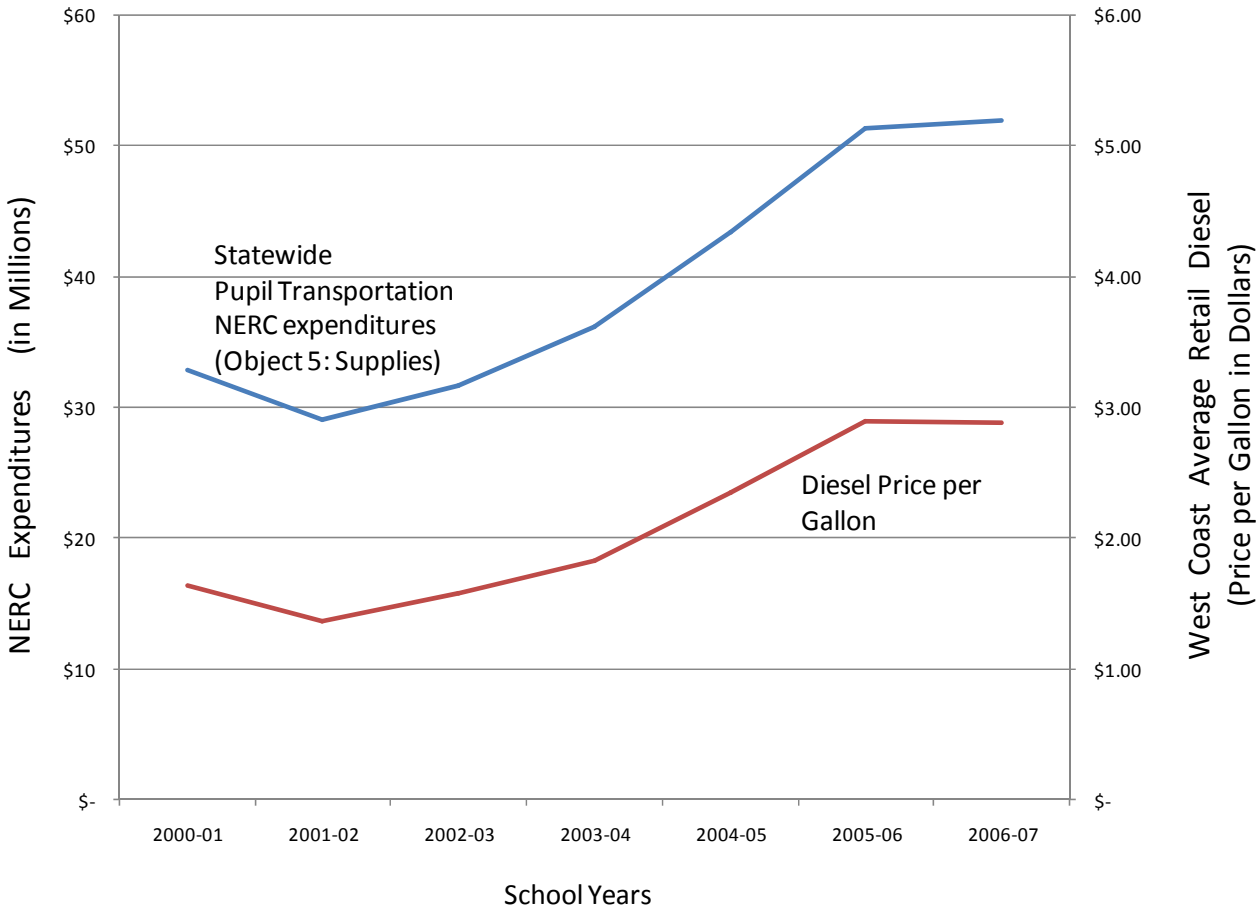


Chart 3. The statewide total of NERCs (Object 5 Supplies) in Pupil Transportation compared to the price of diesel fuel. This chart shows that school district NERC expenditures track the price of fuel.

For the purpose of this estimate, the Office of Superintendent of Public Instruction (OSPI) will set the 2002–03 school year as a baseline, with the assumption that the 2002–03 NERC portion of the pupil transportation allocation rate provided full funding for school district transportation NERC expenditures in all objects. In 2002–03, the NERC portion of the allocation rate was $11.97 per weighted unit. There were 4.71 million weighted units reported, resulting in $56.3 million for NERCs in student transportation. Fuel represents the largest component of this $56.3 million at $31.6 million (Pupil Transportation Object 5 for 2002–03).

Table 1 displays the relevant calculations to establish the estimated shortfall in funding for school transportation fuel since the 2002–03 school year.

	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
Fuel Expenditures	$ 31.6	$ 36.1	$ 43.4	$ 51.3	$ 51.9	**$ 59.7**
State Allocation	$ 31.6	$ 33.8	$ 35.6	$ 41.7	$ 42.8	$ 39.2
Shortfall in Fuel	$ -	$ (2.3)	$ (7.8)	$ (9.6)	$ (9.1)	$ (20.5)
Cumulative Shortfall		$ (2.3)	$ (10.1)	$ (19.7)	$ (28.8)	$ (49.3)

Table 1. Calculation of the total cumulative shortfall in NERC allocation since the 2002–03 school year for school transportation as a result of increasing fuel costs. (in millions of dollars)

- **Fuel Expenditures:** the statewide expenditures for Pupil Transportation Object 5 (Supplies) as reported by school districts' Annual Financial Statements (F–196). (The bolded 2007–08 value is an estimate based on the comparative rate of increase in the price of diesel and will be replaced with the reported value in December 2008.)
- **State Allocation:** the total estimated amount funded by the state for Pupil Transportation Object 5 (Supplies). (The 2005–06 and 2006–07 totals include the supplemental funding for diesel fuel provided as line items in the state operating budget.)
- **Shortfall in Fuel**: calculated by subtracting "State Allocation" from "Fuel Expenditures."
- **Cumulative shortfall**: running total of the "Shortfall in Fuel."

OSPI's estimate for the total amount of statewide underfunding in student transportation resulting from the increasing cost of fuel since the 2002–03 school year is $49.3 million.

Correcting Past Underfunding for Fuel

The 2007–09 Operating Budget (SHB 1148, Section 505 (5)) provided $25 million in supplemental funding to school district transportation operations that were identified as underfunded by the JLARC report. This amount was divided in half between the two corresponding school years ($12.5 million distributed in 2007–08 and in 2008–09). The method of distribution for the 2007–08 school year was based on the estimates of individual school district transportation underfunding identified in the JLARC report. For the 2008–09 school year, the $12.5 million will be distributed based on the underfunding identified by comparing the revenues and expenditures reported in each school district's 2007–08 school year Annual Financial Statement (the F-196).[4] In each year, those districts with identified underfunding in student transportation are provided a prorated share of the funds available. It should be noted that this $12.5 million in supplemental funding was targeted to address the approximately $100 million in underfunding in student transportation per school year identified in the JLARC report. The total underfunding is primarily a result of other costs besides fuel. (The majority of costs associated with student transportation operations are wages and benefits: 72 percent of expenditures in 2006–07).

Unfortunately, the rapid rise in the cost of diesel fuel overwhelmed the amount of supplemental funding provided. The estimate for **additional** underfunding (just as a result of higher fuel costs since 2002–03) for the 2007–08 school year is $20.5 million. Therefore, the Superintendent of Public Instruction proposes that the Legislature should reimburse school districts the $49.3 million in underfunding due to high fuel costs experienced by school districts since 2002. This amount should be added to the $12.5 million provided in supplemental funding for distribution in the 2008–09 school year.

This amount of additional funding will not fully address the systemic underfunding resulting from the current formula and funding method. However, since the 2002–03 school year the impact of rising fuel prices has resulted in school district transportation budget shortfalls being covered by local school district general budget funds and reserve accounts. School district general budgets are under extreme stress and providing the additional funding will result in some moderate relief from the impact of transportation underfunding.

(4) Legislatively mandated school district accounting system changes implemented for the 2007–08 school year require districts to isolate all transportation costs identified as a legislative responsibility (the costs for "other transportation" are required to be removed from expenditures associated with "to/from transportation").

Ensuring Future Adequate Funding of Fuel Costs

The 2007 Washington State Legislature required the development of two new funding formulas for legislative consideration during the 2009 Legislative Session. While a new formula is expected to resolve the basic inadequacies of the current formula, no funding system (other than a straight reimbursement model) is able to provide appropriate funding of student transportation fuel costs during times of rapid change in fuel prices. The factors used in different funding model types to determine allocation rates or estimate expected costs are always based on past data. This is not a significant issue during periods of relative fuel price stability (see Chart 1, years 1994–98), but in market conditions since 2002–03 the rapid rise in fuel prices can quickly place extreme stress on the operational costs of school district transportation services.

OSPI has identified two different approaches for providing the appropriate funding of school transportation fuel costs. Either system would isolate school district transportation budgets from unpredictable changes in fuel costs. Each would guarantee appropriate funding: neither shortfall nor surplus. Either system would provide the full funding that is required by both the State Constitution and State Statute RCW 28A.160.150.

In both of these approaches, the cost of whatever fuel identified as chargeable to school districts would be determined using the ratio of “non-to/from” miles to the total transportation miles (as reported in the school districts’ annual mileage report). This would allow charging districts for the cost of fuel associated with “non-to/from” transportation that the Legislature has not accepted as a state funding responsibility. For instance, if 85 percent of the total school district accumulated school bus miles are associated with to/from transportation, the school district would be responsible for the remaining 15 percent of the cost of supplied diesel fuel out of local funds.

The first approach would remove fuel expenditures from the base student transportation funding system and provide a reimbursement system for only those costs. Legislative concerns regarding any straight reimbursement model focus on the lack of fiscal restraints typically provided by such systems. These concerns are realistic, but can be fully addressed by other systematic means. The ability to provide restraints on expenditures when using a reimbursement system for fuel costs is enhanced by the small overall portion that fuel costs represent of a district’s pupil transportation budget (statewide total Object 5 expenditures represent 14.6 percent of total pupil transportation expenditures, while wages and benefits represent 72 percent of total expenditures). Any efficiency factor included in the new funding system would also be able to be applied independently to adjust each individual school district’s fuel reimbursement.

The second approach for isolating school districts from fuel cost variability is to provide fuel through a master contract with the Washington State Department of General Administration (GA). Fuel deliveries could be provided for those districts with on-site storage facilities (most districts). Other contracts could be provided to smaller districts

to access fuel through other locations. A reimbursement system (with similar constraints to those indicated above) would probably be required to address the fuel costs of some small districts (without on-site storage) in remote, rural locations. The cost of fuel provided under the contract would be charged by the GA to a separate, legislatively established account and tracked by individual school district. (Providing fuel for heating school buildings could be included in this system.)

Conclusion

This report estimates a total of $49.3 million in additional underfunding of school transportation due to the increase of fuel prices since the 2002–03 school year. The Superintendent of Public Instruction requests that this amount be added to the supplemental pupil transportation allocation of $12.5 million in the 2008–09 school year. School districts identified as underfunded in transportation for the 2007–08 school year will receive a prorated amount of all supplemental funds available.

Two alternative solutions are proposed to isolate school district transportation operations from future fluctuations in fuel costs: (a) a modified reimbursement method (strictly for the cost of fuel) or (b) direct billing to a fuel contract overseen by the Washington State Department of General Administration.