

Consolidating School Bus Transportation in the State of Maine

Opportunities and Challenges

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**Initiated by
The Maine Association for Pupil Transportation**

*Kevin J. Mallory, CDPT
Portland Public Schools*

Table of Contents

❖ Charts and Tables	Page 4
❖ Acknowledgements	Page 5
❖ Participating in Change	Page 6
❖ Introduction	Page 7
❖ Core Purpose	Page 7
❖ The Process	Page 8

SECTION 1 Issues Facing School Bus Transportation in Maine

• Rising Cost of Operations and Capital	Pages 9 -10
• Inadequate Supply of Bus Drivers	Page 10
• Training	Page 11
• Recognition	Page 11
• Lack of Technology	Page 11
• Benefit Costs	Page 11
• Overcapacity	Page 12
• Declining Enrollments	Page 13

SECTION 2 Answering the Questions

• School Bus Transportation – National Averages	Page 14
• Spending Trends – Forty Year History	Page 15
• Can School Bus Transportation Be Consolidated by Region?	Page 16
• Why Should School Bus Consolidation be Considered?	Page 16
• Reducing Administrative Staff	Page 16
• Consolidating Maintenance Facilities	Page 17
• Coordinating Vocational Education Transportation	Page 17
• Coordinating “Cross District” Transportation	Page 17
• Coordination of “Out of District Specialized Transportation”	Page 17
• Coordination of “Out of District Extra-Curricular” Transportation	Page 18
• Re-examining Our Core Purpose	Page 18
• Other Benefits from Consolidating School Bus Transportation	Page 19
• Central Dispatch Facility	Page 20
• Community Coordinators	Page 20
• Maintenance Supervision	Page 20
• The Central Office Concept?	Page 20
• The Impact on School Bus Drivers and Assistants	Page 21
• The Impact on a Child’s Current Transportation	Page 21
• Facilities Needed	Page 21
• Special Education Transportation	Page 21
• Employees	Page 22
• Safety	Page 22
• District Calendar and Snow Days	Page 22
• Does One Size Fits All?	Page 23
• Important Questions to Consider	Page 23
• Geographic Differences	Page 24
• Fleet Size and Enrollments	Page 24
• EPS Cost per Pupil Model – Density Model	Page 25
• EPS Special Education Prevalence Adjustment	Page 25
• EPS Special Education Mileage Adjustment	Page 26
• EPS Vocational Education Adjustment	Page 26

SECTION 3	Gathering the Data	
	• Necessary Operating Data	Pages 27 - 28
	• Forming a Baseline – Transportation Budgets	Pages 29 - 30
SECTION 4	Applying the Data – Building the Model	
	• Current Positions	Page 31
	• Standardizing Salaries	Page 32
	• Primary Job Responsibilities	Pages 32 - 33
	• Proposed Staffing	Page 34
	• Region 23 Organizational Chart	Page 35
	• Administrative and Maintenance Savings	Page 36
	• Calculating Administrative Cost per Student	Page 36
	• Operational Savings	Page 37
	• Calculating Operational Savings	Page 37
	• Facility Savings	Page 37
	• Estimated First Year Savings	Page 38
	• 2005 - 2006 Transportation Summaries – Region 23	Page 38
SECTION 5	Additional Resources Necessary	
	• Scheduling and Routing Software	Page 39
	• Linking - Parents to Transportation Software	Page 39
	• Communication Equipment	Page 39
	• GPS	Page 40
	• Fleet Maintenance Software	Page 40
	• The “Goldilocks” Principal	Page 41
	• People - The Hidden Cost	Page 41
SECTION 6	Proposed New Spending	
	• Software	Page 42
	• GPS & Communications	Page 42
	• Facilities	Page 42
	• Labor Agreement	Page 42
	• Wage Equity	Page 43
SECTION 7	Proposed Net Savings	
	• Three - Year Savings	Page 44
	• Proposed Savings Under the LSRS Proposal	Page 45
	• Can 26 Regions Save \$24.4M?	Page 45
SECTION 8	Measuring Efficiency and Comparing Regions	
	▪ Cost Ratio	Page 46
	▪ Vehicle Capacity Utilization	Page 46
	▪ Cost per Student Transported	Page 46
	▪ Cost per Vehicle Mile	Page 46
SECTION 9	Recommendations	Pages 48 - 49
SECTION 10	Conclusion	Page 50
SECTION 12	Resources	Page 51 - 67

Charts and Tables

Tables

1	Total Maine Education and Transportation Costs 1999 – 2004	Page 9
2	Maine Transportation Expenses 1999 – 2004 ¹	Page 9
3	Benefits Costs – Educational Employees 2001 -2005	Page 11
4	October 1 st Enrollments 1995 -200	Page 13
5	National Education and Transportation Per Student Costs 1999 – 2003	Page 14
6	National Transportation Costs 1960 – 2000	Page 15
7	Regional Square Mile / Towns and Cities	Page 24
8	Regional Buses and Number of Students	Page 24
9	Region 23 - EPS Density Model	Page 25
10	Region 23 - EPS Special Education Prevalence Adjustment	Page 25
11	Region 23 - EPS Special Education Mileage Adjustment	Page 26
12	Region 23 - EPS Vocational Education Adjustment	Page 26
13	Portland Transportation Budget 2004 – 2005	Page 29
14	Region 23 - Current Administrative & Maintenance Positions	Page 31
15	Standardized Salaries	Page 32
16	Region 23 - Proposed Staffing Levels	Page 34
17	Region 23 - Current Administrative & Maintenance Savings	Page 36
18	Region 23 - Cost per Pupil Reductions	Page 36
19	Region 23 - Transportation Statistics	Page 38
20	Region 23 - Proposed New Spending	Page 42
21	Region 23 - Current Hourly Driver Rates	Page 43
22	Region 23 - Adjustment Percentage Need to Achieve Parity	Page 43
23	Region 23 - Total Wages 2005 – 2006	Page 43
24	Region 23 - Parity in Wages - Total Expense	Page 43
25	Region 23 - Total Net Savings Over Three Years	Page 44
26	Governor's Proposed 26 Region Savings Plan	Page 45

Charts

A	Transportation Spending 1999 – 2004	Page 10
B	Total Buses 1999 – 2004	Page 12
C	Students Conveyed 1999 – 2004	Page 12
D	Students per Bus 1999 – 2005	Page 12
E	October 1 st Enrollments 1995 – 2005	Page 13
F	Portland Transportation Budget 2005 – 2005	Page 30
G	State Education Budget 2005 - 2006	Page 30
H	Region 23 Organizational Chart	Page 34

¹ Includes capital and extra-curriculum expenses

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Tim Gallant, President, Transportation Director, MSAD 43

Lenny Goff, Transportation Director, MSAD 47

Peggy Bowden, Secretary, Assistant Transportation Director, Westbrook Schools

Kevin Mallory, CDPT, Treasurer, Transportation Director, Portland Public Schools

Ron Deegan, CDPT, Transportation Director, South Portland Schools

David Leavitt, Transportation Director, MSAD 9

Joanne Woodworth, Transportation Director, Monmouth School Department

Peter Saucier, Transportation Director, MSAD 27

Sandy Eldridge, Bus Driver/Driver Trainer, MSAD 61

Ken Albee, Transportation Director, MSAD 77

Jenny Chase, Contractor, Rowell's Garage, MSAD 68

Dave Sowers, Transportation Director, MSAD 1

Jamie Dione, Ex-Officio, Maine State Police

Harvey Boatman, Ex-Officio, Maine Department of Education

About the Author

Kevin J. Mallory, CDPT

Mr. Mallory is currently the Director of Transportation for the Portland Public Schools and has held that position for the past eleven years of his thirty-four year career in transportation management. Mr. Mallory is a Certified Director of Pupil Transportation, having been certified by the National Association for Pupil Transportation. He is a former President and Vice-president of the Southern Chapter of the Maine Association for Pupil Transportation, former State President of the Association, and current State Treasurer of the Maine Association for Pupil Transportation.

Participating in Change

Transportation administrators throughout Maine fully understand the dynamics of reducing spending and the need to provide the taxpayers of Maine relief. We applaud the notion that we can be more efficient in the delivery of services and that as a service provider we understand that every dollar saved will bolster the K-12 education system in the state.

As parents, legislators, students, and public education staff begin to take stock of the reality of consolidation, it is essential that a thoughtful discussion take place. It is even more essential that this discussion take place without the rancor that currently prevents real data from taking center stage.

Regional consolidation is probably the most important structural change our education system will see in over fifty-years. It cannot be pushed forward with *“shoot from the hip”* estimates and flawed data. It deserves an examination that is equal to the importance we place on education itself.

Choices that will sometimes be painful to make are nonetheless choices that will have to be made. The transportation community will not back away from its responsibility in this process and will not attempt to shield itself under the guise of protecting positions. Our primary concern is that transportation consolidation be treated in a fair and thoughtful manner whose outcomes are data driven.

In a recent letter to Education Commissioner Gendron, the Maine State Board of Education, and the legislative leadership of the Education Committee, The Maine Association for Pupil Transportation (MAPT) requested that transportation directors from around the state be allowed to fully participate in any proposed transportation consolidation plan. While the debate goes on regarding regional consolidation, we feel that the transportation community is aligned in a manner that allows us to offer reasonable solutions with predictable long-range outcomes. Satisfying taxpayers, improving school bus transportation in Maine, and maintaining student safety on Maine school buses are the ultimate goals we hope to achieve with this proposal.

Introduction

This report is a general framework meant to help the planning and design processes. It is not a proposal to consolidate school bus transportation in all regions of the State of Maine. This report provides state officials, superintendents, transportation directors, and others a means by which each region in the state can be examined to determine how feasible and cost effective transportation consolidation might be. The report is a snapshot in time of the proposed Region 23, and the possibilities that may exist for transportation consolidation. It is data, concept, and school bus management experience used in a manner that examines all aspects of school bus transportation in Maine. It is a tool for practical application of a model that may or may not work in all regions of the state. Region 23 was chosen for this study due to the familiarity of this region by the author.

Core Purpose

The diagram below offers a look at what components are involved in fashioning a template for school bus consolidation. Each particular component demands thorough examination in terms of its relevancy to achieving the “*Core Purpose*.” All are tied together, each dependent on the other to move the process forward.



The Process

This report is formatted in a series of questions designed to explore some of the most pressing issues relevant to school bus transportation consolidation. The report will provide answers to the following overriding concerns by transportation directors related to consolidation and fashion a proposal based on relevant Department of Education data.

- Can school bus transportation be consolidated?
- Why would we choose to consolidate transportation?
- What would a newly consolidated transportation system look like?
- How would it impact students, employees, and parents?
- Is school bus consolidation appropriate for all regions in the state?
- What data is needed to make informed decisions about consolidation?

The Maine Association for Pupil Transportation (MAPT) has initiated this report in response to Governor's Baldacci's proposed district consolidation plan, and ensuing transportation consolidation within one proposed region, that being Region 23. In the examination of this one region, the framework for an expansive look at all regions has been built. At the core of the response is data.² The data provides a basis from which to:

- Examine the region's current resources, and calculate current costs
- Calculate new spending as a result of any proposed consolidation
- Compare costs under the current structure and as a consolidation region
- Fashion the components and structure necessary for appropriate consolidation
- Bolster the industry by offering recommendations

It goes without saying, that for any consolidation proposal to be successful, the people who will have to make it work after the decision has been made must support and contribute to the concept. This conceptual proposal has that element. The concept of transportation consolidation offered in this report is neither new nor novel, yet is revolutionary in terms of how school bus services have been offered in the past to Maine school children. As such, it will impact many transportation professionals. We should remain mindful of this as we scrutinize this report.

To consider the possibility of consolidation, we must first examine the school bus industry to understand some of the issues currently facing it. The issues are real and impact operators daily across the state. Section 1 of this report will explore some of those issues.

² On occasion estimates were used in this report. They do not have a significant bearing on outcomes.

SECTION 1 – Current Issues Facing School Bus Transportation in Maine

Rising Costs

Table 1 below displays total education spending in Maine from 1999 to 2005. Transportation spending for all categories including bus purchase and extra-curriculum transportation is also shown. As the chart indicates, transportation spending has mirrored all spending throughout this period.

Year	All Spending	Less Trans.	Change	Transportation	Change
99-00	\$1,410,412,372	\$1,334,453,978		\$75,958,394	
00-01	\$1,493,453,983	\$1,413,185,279	5.90%	\$80,268,704	5.67%
01-02	\$1,583,304,629	\$1,497,805,329	5.99%	\$85,499,300	6.52%
02-03	\$1,661,903,164	\$1,572,932,461	5.02%	\$88,970,703	4.06%
03-04	\$1,714,773,383	\$1,621,532,419	3.09%	\$93,240,964	4.80%
04-05	\$1,781,822,693	\$1,685,589,096	3.95%	\$96,233,597	3.21%
		Change	26.31%		26.69%
		Yearly	5.26%		5.34%

Table 1

Table 2 below displays transportation spending. The table breaks out “to and from” school transportation and bus purchase / extra-curriculum expenses separately. While “to and from” school transportation has actually produced less yearly spending than all education spending (at a 4.11% average increase per year versus 5.26% for all expenses), bus purchases and extra-curricular transportation expenses have seen larger per year increases at an average of 14.61% per year.

Year	TTL Transportation Expense	To / From School	Change	Bus Purchase / Extra Curriculum	Change
99-00	\$75,958,394	\$67,066,802		\$8,891,592	
00-01	\$80,268,704	\$71,661,277	6.85%	\$8,607,427	-3.20%
01-02	\$85,499,300	\$75,620,890	5.53%	\$9,878,410	14.77%
02-03	\$88,970,703	\$75,255,406	-0.48%	\$13,715,297	38.84%
03-04	\$93,240,964	\$78,491,436	4.30%	\$14,749,528	7.54%
04-05	\$96,233,597	\$80,847,634	3.00%	\$15,385,963	4.31%
		Change	20.55%		73.04%
		Yearly	4.11%		14.61%

Table 2

The increase in this area can be attributed to a combination of many factors:

- DOE has provided adequate resources for bus replacements and districts are upgrading their fleets as a result.
- School bus prices have increased through the period due to new technology and more stringent emission controls.
- Fuel costs have gone up dramatically and as a result extra-curricular trips have seen an increase in costs.
- The total number of buses through the period has increased.

The chart below illustrates transportation spending as described on the previous page.

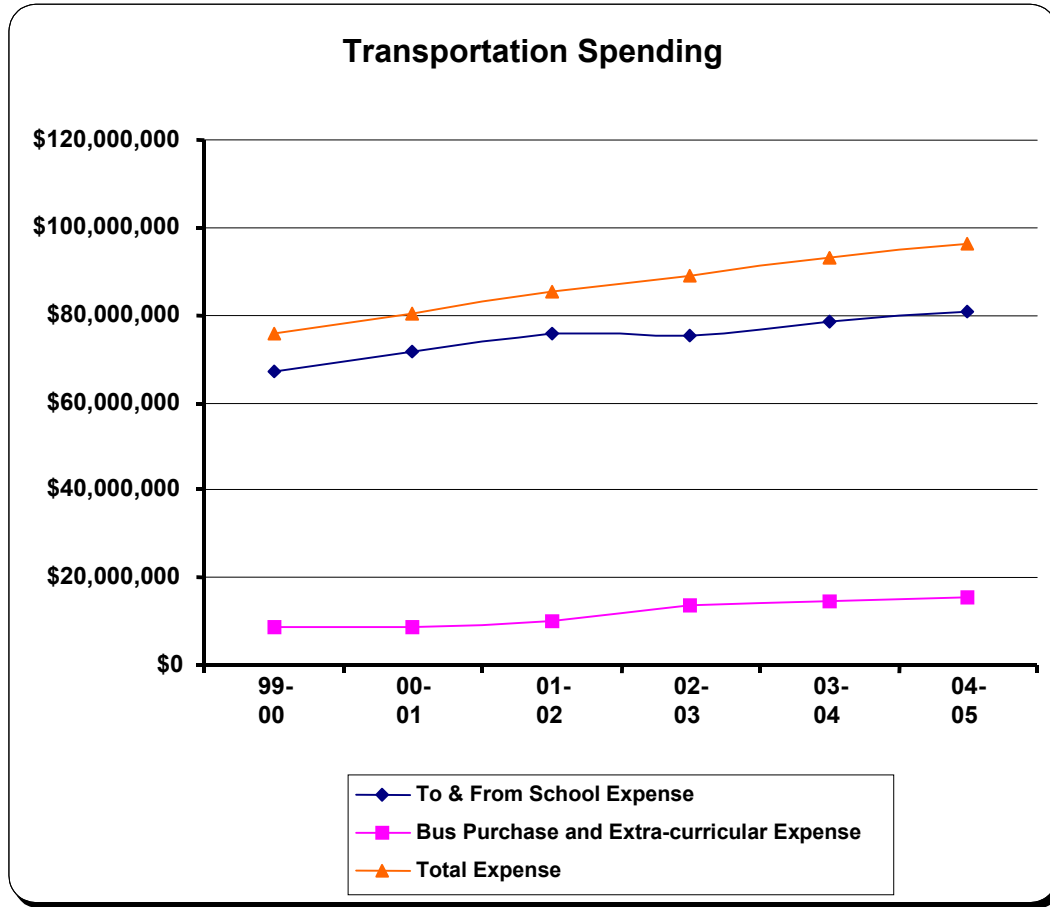


Chart A

Inadequate Supply of Bus Drivers

Finding enough certified school bus drivers has always been an issue in Maine. This is due in part to:

- Low hourly pay rates, some as low as \$8.50 per hour.
- Most bus driving jobs are part time and school year only. Coupled with low hourly rates the job does not provide a career opportunity for family wage earners. This leaves a very small pool of people from which to recruit from. Retirees stay at home moms/dads, and people working two jobs best describe the school bus driver work force in Maine.
- Stringent hiring requirements (which protect our children with highly qualified drivers) such as a commercial drivers license, yearly physicals, background checks and fingerprinting, and drug and alcohol testing all limit the pool from which hiring is possible.
- Student disciplinary issues make for a sometimes-stressful occupation. Many drivers site this as a reason for leaving the industry after just a few years.

Training

Many districts simply do not provide adequate resources for driver or administrative training. Outside organizations such as MAPT have stepped in to fill the void for some training issues. Many districts however restrict the number of people who may attend training events.

Transportation directors are not afforded the opportunity to attend national training conferences because of lack of district resources. While teachers and other administrators considered to be in the professional ranks are allowed sabbaticals and other learning opportunities by the district, this is generally not the case for school bus management personnel. This often results in limited growth opportunities, poorly trained managers, and an inability to attain credentials such as national certification.

Recognition

The transportation staff has an enormous amount of student responsibility. However, in many cases the transportation department is not represented at the highest levels of the central office component. Historically compensation has not been adequate to the responsibilities of the job description. Transportation is often a forgotten element in the planning of new programs, and participating in the team process is sometimes limited. This needs to change.

Lack of Technology

In far too many districts technology is not being used that will improve productivity and efficiencies. As will be highlighted later in this report, consolidation is highly dependent on getting the right tools in place to allow managers to perform their duties properly. The primary cause of this in districts (that could currently utilize new technology) is a lack of resources.

Benefit Costs

Since 2001 - 2002 transportation benefits, primarily healthcare, have gone up 41%. Paralleling what all areas in education have seen in that period, there appears to be no end in sight. All other areas of spending during this period have seen an approximate growth of 5% annually.

Function	01-02	02-03	03-04	04-05	05-06	Change
General Administration	\$7,407,916	\$8,601,281	\$9,298,614	\$9,774,827	\$10,632,207	\$3,224,291
School Administration	\$10,732,411	\$11,763,922	\$13,011,366	\$13,943,284	\$15,669,792	\$4,937,381
Instruction	\$136,895,191	\$155,790,301	\$168,278,893	\$180,654,085	\$196,982,953	\$60,087,762
Operations	\$14,332,817	\$16,214,308	\$17,770,096	\$19,577,005	\$21,594,169	\$7,261,352
Transportation	\$10,004,773	\$11,103,510	\$12,189,490	\$12,868,921	\$14,083,546	\$4,078,773
					Total Increase	\$79,589,559
					Transportation	40.76%
TTL Benefits	\$179,373,108	\$203,473,322	\$220,548,459	\$236,818,122	\$258,962,667	
% Increase		13.44%	8.39%	7.38%	9.35%	44.37%
All Spending	\$1,607,128,738	\$1,683,999,133	\$1,744,322,563	\$1,811,378,305	\$1,901,349,869	
Less Benefits	\$1,427,755,630	\$1,480,525,811	\$1,523,774,104	\$1,574,560,183	\$1,642,387,202	
		3.70%	2.92%	3.33%	4.31%	15.03%

Table 3

Overcapacity – Maine school bus operations have too much capacity. With total enrollment and total number of students conveyed each year dropping, and the total number of school buses increasing, it appears that Maine has too many school buses on the road. This could be deceiving however, and the following should be examined by region to understand why over capacity exists:

- Rural school bus operators must still use the same number of school buses to transport students. Because routes are a product of time and distance, the lose of students riding does not alter the fact that a bus must still be assigned and travel the same route as when more students existed. However, rural operators should make every effort to examine eliminating routes as student enrollments decline. Urban school bus operators should make sure they examine route structures periodically to determine if fewer routes are possible.
- Out of district transportation, which in many cases has as few as one student being transported, requires one vehicle to be dedicated to that student. While typically that may be a van, in many cases a bus must be used. This situation lowers capacity utilization.
- Dedicated special education vehicles have smaller capacities in most instances. While not impacting capacity, this group will impact the number of vehicles necessary to perform this particular service.

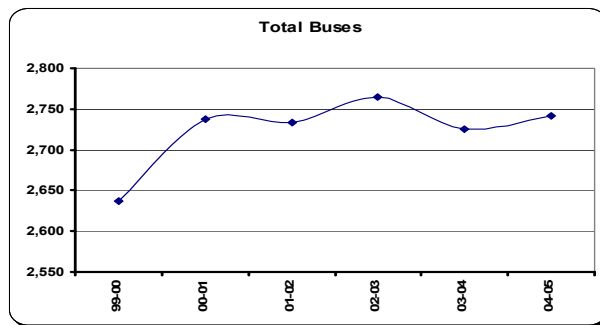


Chart B

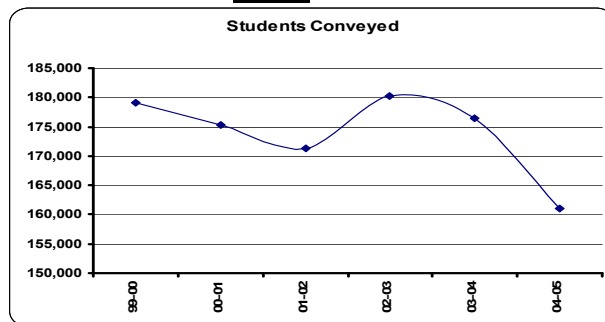


Chart C

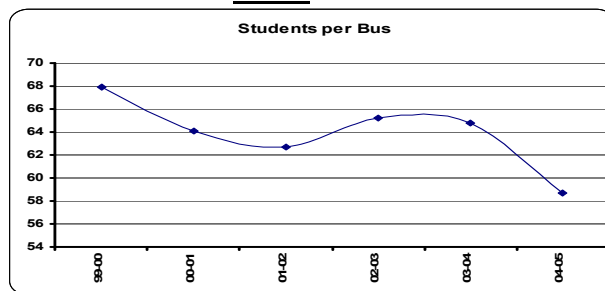


Chart D

Declining Enrollments and the Need to Stay Vigilant

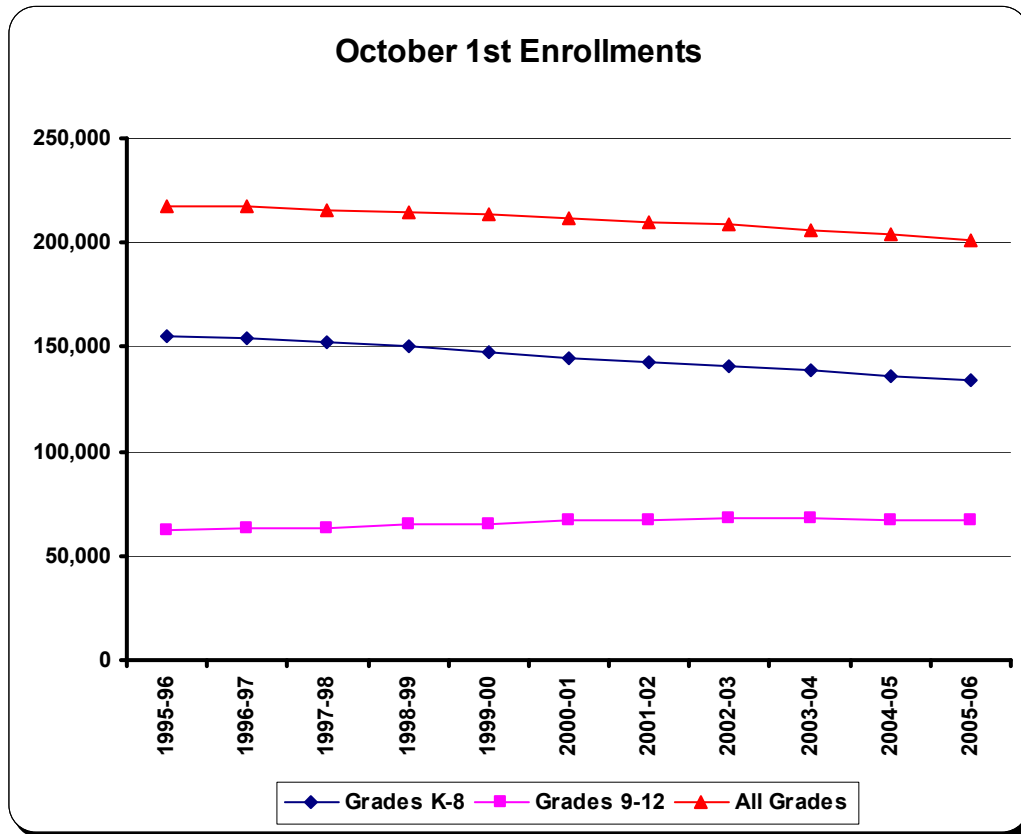


Chart E

Year	Grades K-5	Grades 9-12	All Grades	Change
1995-96	155,309	61,926	217,235	
1996-97	154,361	62,880	217,241	6
1997-98	152,525	62,748	215,273	-1,968
1998-99	150,004	64,838	214,842	-431
1999-00	147,803	65,609	213,412	-1,430
2000-01	144,922	66,870	211,792	-1,620
2001-02	142,812	67,133	209,945	-1,847
2002-03	140,852	67,757	208,609	-1,336
2003-04	138,657	67,714	206,371	-2,238
2004-05	136,183	67,471	203,654	-2,717
2005-06	133,909	66,942	200,851	-2,803
10 Year Change	-21,400	5,016	-16,384	
Percentage	-13.78%	8.10%	-8.16%	

Table 4

The chart above shows clearly how declining enrollments at the elementary level are now impacting the secondary level. After climbing through the end of the baby boom, the number of secondary students is starting to decline. With this decline transportation directors should expect fewer students on their secondary tier buses, or if only using one tier, a general decline overall. Don't take things for granted. Do head counts religiously to manage routes better.

SECTION 2 – Answering the Questions

How do school bus transportation costs in Maine compare to the national average? How do they compare to overall education spending?

The chart below offers an opportunity to examine each aspect of that question. Research was limited on transportation costs and did not extend beyond the 02-03 school year in any national publication. DOE did have figures up until the 05-06 school year, but not prior to 99-00. For comparisons of like school years this was the only data available.

School Year	National ³ Cost per Student Total Education	Increase	Maine ⁴ Cost per Student Total Education	Increase	Difference
1999-00	\$7,827	3.23%	\$6,561	n/a	
2000-01	\$8,080	3.23%	\$7,013	6.90%	
2001-02	\$8,313	2.88%	\$7,501	6.96%	
2002-03	\$8,468	1.86%	\$7,923	5.63%	
Increase Average	\$8,172	8.19%	\$7,250	20.77%	12.58% -\$922

School Year	National Cost per Student Transportation	Increase	Maine Cost per Student Transportation	Increase	Difference
1999-00	\$590	3.15%	\$374		
2000-01	\$629	6.61%	\$409	9.36%	
2001-02	\$648	3.02%	\$441	7.82%	
2002-03	\$654	0.93%	\$418	-5.22%	
Increase Average	\$630	10.85%	\$411	11.76%	0.92% -\$220

Table 5

Total education cost per student in Maine has risen during this time period at a rate 12.58% higher than the national average. The actual cost per student remains below the national average by \$922 per student during the same time frame.

Transportation costs per student in Maine have risen only slightly higher than the national average at .92%. Cost per student is below the national average by \$220 per student. Maine actually saw one year when transportation spending dropped by over 5%.

³ Digest of Education Statistics

⁴ MDOE website

What about national trends in spending for school bus transportation? Have trends developed that will show us anything in terms of what we can expect in the future?

Table 6 examines school bus transportation costs in the United States over the past forty years.

Year	Total U.S. Cost ⁵	Increase	Yearly Average
1960	\$486,000,000		
1970	\$1,219,000,000	150.82%	15.08%
1980	\$3,833,000,000	214.44%	21.44%
1990	\$8,031,000,000	109.52%	10.95%
2000	\$12,104,000,000	50.72%	5.07%
	Average	131.37%	13.14%

Table 6

It appears that transportation costs have risen dramatically in that time. Why so?

- Migration to the suburbs during this period has increased the need for more transportation.
- Technology has improved and become more costly.
- More staff has become necessary to manage increasingly complex systems.
- Special education laws have increased the need for more transportation.
- The population has increased significantly, and along with it student enrollments.
- Inflation

So what can we expect in our future for school bus transportation costs?

The following indicators point to school bus transportation costs remaining relatively stable:

- Technologies have improved to help organizations become more efficient.
- Inflation is stable
- Enrollments are dropping in most areas.
- Although sprawl is still a major concern migration to the suburbs has slowed.
- Transportation costs from 1990 to 2000 slowed to a 5% rate of growth. This was down from a 21% growth rate in the 1970's.

⁵ Digest of Education Statistics

Can school bus transportation be effectively and efficiently consolidated by region in the State of Maine?

Yes – Each region is different and will allow for more or less school bus transportation consolidation. School bus transportation can be consolidated in many regions. School bus transportation can be done effectively and efficiently, both to the benefit of each community served, students being transported, and the taxpayer.

Why should consolidating school bus transportation be considered?

In recent years transportation directors throughout the state have worked diligently to find efficiencies in such things as combining with their municipalities and others to promote enhanced buying power, working with adjoining districts on “out of district” transportation, and utilizing organizations such as the Maine Association for Pupil Transportation to train drivers and supervisors at regional and state events where the cost is reduced by training together in large groups. The collaborative nature that already exists, as well as the following reasons are examples of why consolidation should be given consideration:

- Experienced transportation people in the state can make it work.
- Proven technologies are now available that will allow it to work.
- Service providers in school districts draw resources away from the classroom. Money can be saved, and put back into the classroom, or for tax reductions.
- Consolidated transportation services, most notably county school districts in other regions of the country, have had success with large consolidated districts. Maine can and will draw from that experience. Research is currently being done.
- Consolidating transportation services will not have a negative impact on students. To the contrary, it will improve safety and enhance services.

How will less spending be achieved with consolidated school bus transportation?

Transportation services evolved through the 20th Century from the local entrepreneur whose horse and wagon transported children to school, to a sophisticated, technology dependent system that serves many facets of the education community. With that in mind, this report examines six primary areas where efficiencies can be achieved.

1) Reducing the total number of administrative staff

Often times transportation directors wear many different hats. Planning and developing routes, meeting with Central Office staff, answering the phone, meeting with parents, performing secretarial duties, driving a bus, and even being a mechanic are just a few of the duties transportation directors are expected to perform. While skilled in all these areas, they do not allow the director to focus on his/her primary mission. That being, to create and monitor a safe and efficient transportation system, that effectively utilizes all resources and technologies available, “sets conditions for student success,” and is answerable to public scrutiny.

2) Consolidating maintenance facilities

Many times regions contain several districts with maintenance facilities, some within close proximity. Consideration needs to be given to consolidation of these facilities if time and distance so dictate. In many rural areas that may not always be possible. However, because all districts schedule buses to and from regional vocational schools, it would be possible to eliminate some maintenance facilities by using the regional vocational school as a “swap point” for buses needing maintenance. Urban areas where towns offer better opportunities for consolidation due to proximity could produce larger savings. The following list highlights some predictable outcomes associated with maintenance consolidation:

- Regional buying power in the form of fleet discounts for parts, fuel, and maintenance services
- Standardization of mechanics and reduction in the total number of technicians
- Elimination of outside contracting where vendors charge costly hourly rates and may not have the best interest of the taxpayer at heart
- Standardization of vehicle maintenance data tracking through the use of fleet maintenance software will result in a reduction of costs through better fleet data analysis.
- Better utilization of mechanic hours and less vehicle down time
- Fewer unexpected breakdowns
- Fewer spare vehicles will be required

3) Coordinating vocational education transportation

Vocational educational transportation should be examined on a region wide basis. Often times a bus must travel through a neighboring district to get to a vocational center. In this case, routes should be combined.

4) Coordinating “cross-district” transportation

Consolidating transportation districts would eliminate boundaries and allow schedulers to utilize the geography to it’s’ advantage, rather than a disadvantage. Often times, buses will crossover district lines for special education transportation, vocational education transportation or other reasons. Rather than sending these vehicles back to their home district, vehicles should stay in the receiving district and perform work there, until such time returning to a sending district results in carrying students, rather than returning empty.

5) Coordination of “out of district specialized” transportation

With districts becoming more and more involved with students traveling out of their home district for schooling, expenses have soared to accommodate these needs. In some cases districts work collectively to combine students traveling to these out of district schools. Not all districts participate however. By combining all districts, better opportunities exist to save valuable resources.

6) Coordination of “out of district extra-curricular” transportation

With districts becoming more and more involved with students traveling out of their home district for activities, expenses have soared to accommodate these needs. In some cases districts work collectively to combine students traveling to these out of district schools and activities. Not all districts participate however. By combining districts, better opportunities exist to save valuable resources. I.e. golf teams, debate team, music festivals, ski team, math team etc.

Do objectives in these six areas enhance our core purpose?

Yes – They all reflect a belief in our continuous improvement statement.

Primary objective 1:

Reducing administrative staff should be geared toward single point contact (central dispatch). Total staff will be reduced, duties realigned, and transportation directors will focus fully on their primary duties.

Primary objective 2:

Examine all opportunities for maintenance consolidation. Heavy emphasis placed on urban areas.

Primary objective 3:

Reduction in vehicle miles associated with vocational education transportation.

Primary objective 4:

Reduction in vehicle miles associated with “cross-district” transportation.

Primary objective 5:

Reduction in vehicle miles associated with “out of district specialized” transportation.

Primary objective 6:

Reduction in vehicle miles associated with “out of district extra-curricular” transportation.

Core Purpose



Continuous Improvement



Continuous improvement will result in pupil safety, cost - efficiency, and service - effectiveness using consolidation as the means to get there

Other than reduced spending, are there any other benefits that can be achieved from consolidating school bus transportation?

Yes - There are several other benefits that will result from a thoughtful, well-planned realignment of school bus resources. Here are just a few:

- Students will benefit from well-designed routes that are more efficient and effective. Using state of the art technology, students should experience shorter ride times, less crowding, and better communications regarding the flow of information from the transportation office.
- Parents will benefit with real time information regarding the bus route, accessed from any web-based device.
- Notification of changes and opening day information will be streamlined and more effective throughout the region.
- Through the greater use of scheduling and routing software, as well as other technologies, managers will be far more effective in route planning.
- The State of Maine will have a web-based transportation software package that will be standardized throughout the state.
- Transportation personnel salaries can be standardized throughout the state based on a set of operating qualifiers. This will improve recruiting and retention.
- Reporting accuracy will improve over the sub-standard and inaccurate methods currently being used.
- Declining or increasing enrollments can be recognized and improved utilization of school buses will result.
- Teachers and administrators will benefit from accessing school bus information directly from any computer.
- As routes become more efficient, miles will be reduced. As miles are reduced, fewer and fewer carbon-based emissions will be put into the atmosphere.
- There will be little if any loss of local control over a districts school bus system.
- Reasonable efficiency goals can be established by the state and region-by-region reporting of the goals outcomes can be monitored.
- Better maintenance management will improve inspection programs for buses, standardize reporting, and allow for continuing quality improvements in school bus safety.
- School bus transportation will be positioned for future challenges with the necessary technology and qualified personnel to respond.

How is it possible to reduce administrative staff with the same number of students and initially the same number of employees and buses being supervised? Won't the workload for staff be overwhelming?

Utilizing a central dispatch facility can reduce the number of employees

No - Consolidation of student transportation can be accomplished in much the same fashion Enhanced 911 has been able to eliminate emergency dispatch staff in many communities. The concept of one (central) dispatch facility, (rather than many) staffed by a director and coordinators for each community, will limit the number of staff necessary to provide the service. The realignment of duties will also spread out the workload.

Combining communities under one coordinator

Transportation directors, assistants, and secretaries can be reduced in favor of a single transportation director, and a limited number of coordinators who in most cases can focus on multiple communities instead of just one.

Maintenance supervision from the central dispatch facility

Lead mechanics will supervise all satellite maintenance facilities. Lead mechanics will report directly to the Assistant Director or Community Coordinator for their area. With the central dispatch facility controlling the entire region, outcomes should include:

- Improved control and utilization of all regional equipment

Example: Having the central dispatch facility schedule required service for vehicles and monitor the number of units out of service.

- More flexibility by supervisors to move technicians when the need arises

Example: Using a float technician to work at whichever facility has the most pressing needs.

- The combined region can share all of its resources.

Example: When one fleet has a significant number of vehicles out of service, spare buses from another fleet can then be utilized. This can significantly reduce the number of spare buses necessary.

The Central Dispatch idea sounds like the Central Office concept. Doesn't this just add another layer of administrative expense?

No - There are some administrative functions such as transportation services that can reduce costs through "centralization." As you read through this report you will see that not only can the total number of administrative staff be reduced, but by looking at the total district without boundaries to hinder operations, planners can take full advantage of the fact they will be working side-by-side sharing ideas and focusing on the big picture, rather than just a small segment of the region. This will lessen the overall number of total staff necessary to provide services.

Would bus drivers and bus assistants be impacted by consolidating school bus transportation?

Not initially - Because no one knows the extent of the exact amount of route changes that can be accomplished prior to full consolidation being achieved, no driving positions will be lost during initial stages of the consolidation. However, a primary reason to consolidate is to become more efficient. With increased efficiencies it is inevitable that the total number of driving positions will be reduced. However, master labor agreements will produce more flexibility to exercise seniority and it is unlikely anyone other than the most junior level employee in the region will see a reduction in force.

How will my child's transportation be impacted by this consolidation?

- It won't be - Children will feel no negative impact in any of the consolidated communities. For the most part, the same buses will travel on the same routes, picking up the same children as in prior years. All local policies will be adhered to in terms of eligibility standards, exception areas, space available policies, disciplinary procedures, door-to-door service, etc.
- Parents will still be talking to an individual assigned to their community and drivers will be assigned to routes they have previously done or are familiar with.
- Individual schools will still have direct access to a community coordinator (as well as other staff) for individual issues such as student safety training, communicating field trip needs, handling disciplinary matters, etc.
- Reducing vehicle miles is a major goal of consolidation. However, a reduction in miles will not normally (initially) come from "to and from" school routes, provided policies regarding who is eligible for transportation services don't change. Route efficiencies will be developed as the consolidation moves forward, keeping overall changes at a controlled, logical pace and with parents well, if not better, informed.

What kind of facilities will be needed for the central dispatch operation? How much will the facility cost to my district?

The Portland Public Schools Transportation Facility has the capacity to hold all the needed staff relevant to the center, is a relatively new structure, and is centrally located within the region. Minor remodeling is all that is necessary.

What about special education students? Will transportation for these students change?

No - Special education students will be provided the same quality transportation in each community as that which currently exists, is relevant to what the students IEP calls for, and State and Federal law dictates. Coordinators will work closely with individual student service specialists at schools and central office to ensure necessary transportation is available. Consolidating will in fact enhance the ability to provide more efficient and safe transportation for this group of students, as the resources of the entire region will now be available.

Who will employees actually work for?

Staff will work for whatever regional structure has been developed and the dictates of the governing body.

Will school bus safety be compromised as a result of consolidation?

No - The overriding principal and a mainstay of any mission statement for the regional transportation program will be that student safety comes first. On this there is no compromise.

What about district calendars and snow days?

While it would most certainly be more efficient to administer transportation for a region whose school calendars are aligned, it is not necessary. Adjustments would be made where intersecting transportation; dependent on another segment of the region's vehicles is necessary.

Because of the geographic size of this region, (and other regions which are much bigger still) there will be days when inclement weather may force closures in one portion, and not in another. Closing any portion of the region will have no impact on any other portion that cannot be handled operationally. The Transportation Director should be included in any decision to close the region or a segment thereof.

What about other regions in the state? Can this proposal work for those regions as well?

School bus transportation is not a generic “one size fits all” service. As was recognized when the EPS transportation formula was developed, no two transportation programs are the same, and each has unique needs. Specific to those needs are the “cost drivers” which as the term implies, drives a transportation department’s cost. There are many differences. Here are just a few:

- School district transportation ranges from as small as a one-bus district, to as many as sixty-two school buses.
- In some districts there is little or no administrative cost, in others, especially the larger districts with more students, the cost is understandably higher.
- Transportation directors do not even exist in some districts. Often times, those duties are handled by a driver, a mechanic, a principal, and in some cases by the superintendent.
- Maintenance departments range from none, to state of the art. Sometimes drivers will even perform vehicle maintenance work at their own home.
- The range of square miles covered is very disparate. In the new alignment of 26 regions, there are regions larger than Rhode Island, and smaller than 200 square miles.
- Cost drivers, such as the amount of special education students, ferry transportation, etc. all play a role in defining district differences.
- Types of vehicles used, miles driven, topography, local decisions, and even such things as how the bills are paid make each system a unique entity.

Other than differences, what else do we need to consider? What are some important questions?

Time and distance play the greatest role in determining whether consolidating systems is something that should be considered. The above differences are meant to highlight just a few things that should be considered when defining consolidation possibilities for a particular region. Many additional questions need to be asked on a region-by-region basis. Here are some significant questions not addressed in this report for regions to consider:

- Is the region too large for effective consolidation? Should less consolidation be considered?
- Will the transportation director be in a position to see his staff on a regular basis, or be restricted by distances that will keep him/her out of the office for long periods of time when needing to communicate directly with staff?
- Are maintenance facilities close enough to consider maintenance consolidation?
- Will the proposal outlined for Region 23 actually cost more if used for a consolidation model for other regions? For instance, adding staff where none currently exists?
- What will be the impact on districts that employ contractors?
- Will consolidating transportation services actually bring about desirable outcomes for parents and students? Will it bring resources back into the classroom, or reduce taxes? Or will it simply be consolidation for the sake of consolidation?
- With some regions there are close to two-hundred transportation employees. How will the training needs be met for this many people?
- Will my transportation system suffer under the weight of the larger districts needs, or will we still be able to service our community’s unique needs as we have done in the past?
- Will the EPS transportation formula be revised region by region, or not at all?

Are there major differences in the geographic size of designated regions and the number of communities assigned to each region?

Yes – There is a wide range of geographical differences in regions. Geographical differences could have an impact on consolidation efforts.

Table 7

<u>Region</u>		<u>Square Miles</u>	<u>Towns / Cities</u>	<u>Avg. Sq. Mile per Community</u>
State of Maine		30,861		
Region 10	Dexter	1,378	34	40.5
Region 9	Lincoln	1,121	31	36.2
Region 7	Ellsworth	1,091	35	31.2
Region 6	Machias	1,084	22	49.3
Region 13	Showhegan	1,065	27	39.4
Region 19	Farmington	1,049	25	42.0
State of Rhode Island		1,044		
Region 8	Bangor	1,024	31	33.0
Region 4	Houlton	1,013	27	37.5
Region 15	Augusta	729	23	31.7
Region 20	Rumford	717	16	44.8
Region 1	Madawaska	674	15	44.9
Region 3	Presque Isle	672	15	44.8
Region 22	Bridgton	652	16	40.1
Region 26	Sanford	648	18	36.0
Region 5	Calais	644	19	33.9
Region 11	Belfast	561	20	28.1
Region 12	Rockland	493	21	23.4
Region 2	Caribou	490	11	44.5
Region 18	Lewiston	441	12	36.8
Region 21	Oxford	424	11	38.5
Region 24	Westbrook	397	10	39.7
Region 16	Bath	396	20	19.8
Region 14	Waterville	379	10	37.9
Region 17	Brunswick	304	8	38.0
Region 23	Portland	226	11	20.5
Region 25	Biddeford	192	7	27.4

The total number of students and buses will also have an impact on operating efficiencies. Urban areas are more adaptable to consolidation; large rural tracks may be more difficult.

Table 8

<u>Region</u>		<u>Buses</u>	<u>Students</u>	<u>Students per Bus</u>
Region 23	Portland	149	19,996	134
Region 26	Sanford	207	17,728	87
Region 18	Lewiston	176	16,429	93
Region 24	Westbrook	190	15,269	80
Region 8	Bangor	201	15,138	75
Region 15	Augusta	181	12,052	67
Region 25	Biddeford	104	9,907	95
Region 7	Ellsworth	130	7,729	59
Region 10	Dexter	129	7,595	59
Region 17	Brunswick	88	7,303	83
Region 14	Waterville	91	7,143	78
Region 12	Rockland	98	6,692	68
Region 16	Bath	89	6,463	72
Region 13	Showhegan	94	6,147	65
Region 22	Bridgton	88	5,498	62
Region 19	Farmington	95	5,331	56
Region 21	Oxford	59	4,228	72
Region 9	Lincoln	61	3,403	56
Region 11	Belfast	60	4,197	70
Region 20	Rumford	66	3,486	58
Region 2	Caribou	52	3,156	61
Region 3	Presque Isle	65	3,076	47
Region 4	Houlton	61	2,785	46
Region 1	Madawaska	47	2,546	54
Region 6	Machias	50	2,204	44
Region 5	Calais	49	1,824	37

What happens with the EPS transportation formula? Will combining districts distort the formula? Will equity inside a region be achieved?

One of the most significant questions we need to ask is, "what will happen with the EPS formula?" Table 9 below shows the model for predicting per pupil costs. The costs are in 03 - 04 dollars. The impact of three districts with low densities throws the model off if a combined predicted per pupil cost is used for the entire region.

Transportation Base per Pupil Cost Model Density Model					
District	03-04 Students	Miles of Road	Pupil Density	Pupil Sparsity	Predicted per Pupil Cost
Cape Elizabeth	1,807	81.08	22.29	0.045	\$257
Falmouth	2,184	123.51	17.68	0.057	\$281
MSAD 15	2,204	223.79	9.04	0.111	\$333
MSAD 51	2,336	144.32	16.19	0.062	\$289
Portland	7,552	296.50	25.47	0.039	\$241
South Portland	3,125	145.48	21.48	0.047	\$261
Yarmouth	2,172	170.38	12.75	0.078	\$309
Region Total	21,380	1,185	18.04	0.055	\$320

Table 9

Formula for Predicting Pupil Cost Using EPS Coefficients
 $\$349.53 + \$230.592 / 18.04 = \$2.305 \times 18.04 = \320 per Pupil

Table 10 below shows the special education prevalence rate and adjustment for the total number of special education students in a district that exceeds 15%. Under a combined region, the total number of students does not exceed 15% and the adjustment made for South Portland would be eliminated. This amounts to an additional \$194,000 to the region with all students paid at the full rate.

Special Education Prevalence Adjustment							
District	Total Students	Disabled (Excludes SAC)	Prevalence Rate	Excess Students Above 15%	EPS Base Rate	EPS Rate for Adjustment	Adjustment
Cape Elizabeth	1,826	215	11.77%	0	\$6,309	\$0	\$0
Falmouth	2,152	246	11.43%	0	\$6,301	\$0	\$0
MSAD 15	2,028	340	16.77%	0	\$6,266	\$0	\$0
MSAD 51	2,339	161	6.88%	0	\$6,349	\$0	\$0
Portland	7,325	1,073	14.65%	0	\$6,202	\$0	\$0
South Portland	3,048	584	19.16%	127	\$6,366	\$2,419	\$307,223
Yarmouth	1,404	143	10.19%	0	\$6,467	\$0	\$0
Revised Region	20,122	2,762	13.73%	127	\$6,323	\$0	\$0

Table 10

Table 11 Shows the EPS adjustment for special education miles. Two districts have no special education adjustments for miles, yet they would share the total resources under a regional revision.

Special Education Mileage Adjustment						
District	Gross Miles	Gross Expense	Net Expense	Miles Allowed	EPS Cost	EPS Mileage Rate
Cape Elizabeth	7,832	\$16,409	\$16,409	7,832	\$9,085	\$1.16
Falmouth	42,977	\$80,273	\$80,273	42,977	\$49,853	\$1.16
MSAD 15	48,924	\$59,198	\$59,198	48,924	\$56,752	\$1.16
MSAD 51	0	\$0	\$0	0	\$0	
Portland	27,650	\$71,054	\$71,054	27,650	\$32,074	\$1.16
South Portland	12,723	\$30,370	\$25,521	10,713	\$12,427	\$1.16
Yarmouth	0	\$0	\$0	0	\$0	
Revised Region	140,106	\$257,304	\$252,455	138,096	\$160,191	\$1.16

Table 11

Table 12 shows the EPS adjustment for vocational transportation. Three districts are not reimbursed for the total miles traveled, yet they would share the total resources under a regional revision.

Vocational Transportation					
District	Miles	Miles Allowed	Adjustment	Rate	Actual Cost
Cape Elizabeth	14,000	7,000	\$17,710	\$2.53	\$3.16
Falmouth	7,832	7,832	\$19,815	\$2.53	\$3.38
MSAD 15	5,775	5,775	\$14,611	\$2.53	\$2.54
MSAD 51	8,448	8,448	\$21,373	\$2.53	\$3.30
Portland	5,250	5,250	\$13,283	\$2.53	\$4.12
South Portland	4,550	4,200	\$10,626	\$2.53	\$4.30
Yarmouth	19,250	7,700	\$19,481	\$2.53	\$3.91
Totals	65,105	46,205	\$116,899	\$1.80	\$3.47

Table 12

Conclusion

- The density model and special ed. prevalence model will need adjustments.
- The special ed. and vocational adjustment models should stand until such time new efficiencies are achieved within the region. They should be reexamined at that point.
- The adjustment for ferry costs and homeless students should not change

SECTION 3 – Gathering the Data

OK, I know what has to be done. Where do I start? What data do I need to fabricate a model for my region? Remember I wear a lot of hats and this looks time consuming.

Operating Data

As will be reinforced several times throughout this report, consolidation should only be considered when data supports the conclusion. Large districts where positions are well defined are easier to examine. Smaller districts where staff are often times split between departments need closer examination to determine the impact of losing these partial positions may have on a district. Much of the data, formulas, methods of comparison, etc. is included in this document. Additional information is located in the resource section of this document. The MDOE website is also a great resource for any data questions you may have. However, much data needs to be gathered. Assistants, bus drivers with down time, and Central Office staff can help you gather this data.

Data needed includes:

- **Transportation Director**
 - Salary assigned to transportation?
 - FTE assigned to transportation?
 - Normal amount of hours worked for transportation in a typical week?
 - Is this person assigned other duties, such as a portion of their time devoted to buildings and grounds management? If so what are those duties?
 - What is the salary for those other duties?
 - Is the transportation director required to drive a school bus?
 - Is the transportation director required to do mechanical work on buses?

- **Assistant Director**
 - Do you have an assistant director?
 - Salary assigned to transportation?
 - FTE assigned to transportation?
 - This position would be considered supervisory and responsible for operations in the absence of the transportation director. (Do not include anyone such as drivers, or mechanics who from time to time may answer the phone, etc.)
 - Is this person assigned other duties, such as a portion of their time driving a bus? If so what are those duties?

- **Transportation Secretaries**
 - How many clerical workers are in the transportation department?
 - Salary assigned to transportation?
 - FTE assigned to transportation?
 - Is this person assigned other duties, such as a portion of their time being a secretary for another department? If so what are those duties?

- **Vehicle Technicians**
 - How many mechanics do you have on staff?
 - Salary assigned to vehicle maintenance?
 - FTE assigned to vehicle maintenance?
 - Is this person assigned other duties, such as a portion of their time devoted to driving? If so what are those duties?

- **Bus Drivers**
 - How many driving positions do you have?
 - Salary assigned to transportation?
 - FTE assigned to transportation?
 - Is this person assigned other duties, such as a portion of their time being used as a custodian? If so what are those duties?

- Bus Assistants
 - How many bus assistant positions do you have?
 - Salary assigned to transportation?
 - FTE assigned to transportation?
 - Is this person assigned other duties, such as a portion of their time being employed at a school as an ed tech? If so what are those duties?

- Van Drivers
 - How many van drivers do you have?
 - Salary assigned to transportation?
 - FTE assigned to transportation?
 - Do they exclusively drive vans or are they licensed to also drive buses?
 - Is this person assigned other duties? If so what are those duties?

- Maintenance Facilities
 - Do you have a maintenance facility?
 - How many bays does it have?
 - What percentage of a 24 hour period is your maintenance facility idle?
 - Do you contract with an outside vendor for vehicle maintenance?
 - Distance in miles from the bus terminal to the maintenance vendor?
 - Distance in miles to the nearest school district that has a maintenance facility?

- Other Staff
 - Are there any other staff such as custodians or maintenance secretaries that are assigned to the transportation department?
 - Salary assigned to transportation?
 - FTE assigned to transportation?

- Do you contract for transportation services?

- Do you use scheduling and routing software? If so, what kind?

- Do you have two way radios for your buses?

- Who has responsibility for developing the transportation budget?

- Do you have agreements in place with any other transportation districts to share transportation for special education students, etc.?

- What are the estimated number of phone calls into the transportation department during normal school hours?

- Is the regional vocational school located in your district?

- How far away from your bus compound is the regional vocational school?

- Do you have a transportation office separate from other school facilities, and if so what are its yearly operating expenses? Examples to tabulate would include such things as: heat, lights, phones, rent, etc.

Budgets

To determine any proposed savings from consolidation, it is first essential to establish a baseline of current costs. No two transportation departments are the same. However they all have essential elements, common to each transportation provider. The budget below represents year end spending for Portland in the 2004-2005 school year. It may or may not be a "typical" transportation budget. Gathering budget information by specific line item is difficult and not necessary in the early stages of research. Annual operating costs are available on the MDOE website.

Table 13

<u>Expense Item</u>	<u>Expense</u>	<u>Pct / Expense</u>
<u>Personnel</u>		
Administration	\$113,838	
Administrative Secretaries	\$0	
Sub – total	\$113,838	8.3%
Bus Assistants – Regular	\$92,742	
Bus Driver – Regular	\$594,726	
Bus Assistant – Temporary	\$8,260	
Bus Driver – Temporary	\$115,341	
Overtime	\$109,225	
Sub - total	\$920,294	67.1%
Total – Personnel	\$1,034,132	75.4%
<u>Vehicles</u>		
Vehicle Service & Repair	\$177,267	
Equipment Service & Repair	\$514	
Vehicle Lease	\$3,787	
Motor Fuels	\$70,666	
Total - Vehicles	\$252,234	18.4%
<u>Other Transportation</u>		
Purchased Transportation	\$19,451	
Transportation (Common Carrier)	\$0	
Transportation (Ferry)	\$52,965	
Staff Travel	\$3,270	
Total – Other Transportation	\$75,686	5.5%
<u>Services</u>		
Administrative Contract Service	\$3,000	
Professional Contract Service	\$0	
Physicals (district physician)	\$608	
Physicals (personal physician)	\$145	
Telephone	\$235	
Advertising	\$0	
Printing & Binding	\$555	
Total – Services	\$4,543	.33%
<u>Supplies</u>		
Office and Vehicle Supplies	\$4,624	
Computer Supplies	\$0	
Total – Supplies	\$4,624	.34%
Total Operating Expense	\$1,371,219	
<u>Equipment - Capital</u>		
Equipment (over \$1,000)	\$0	
Vehicles – Pupil Transportation	\$100,000	
Total – Equipment	\$100,000	
Total Transportation Expense	\$1,471,219⁶	

⁶ This figure does not include all transportation expense. Some expenses such as benefits are assigned to Human Resources.

The majority of all education related budgets are comprised of **PEOPLE** costs.

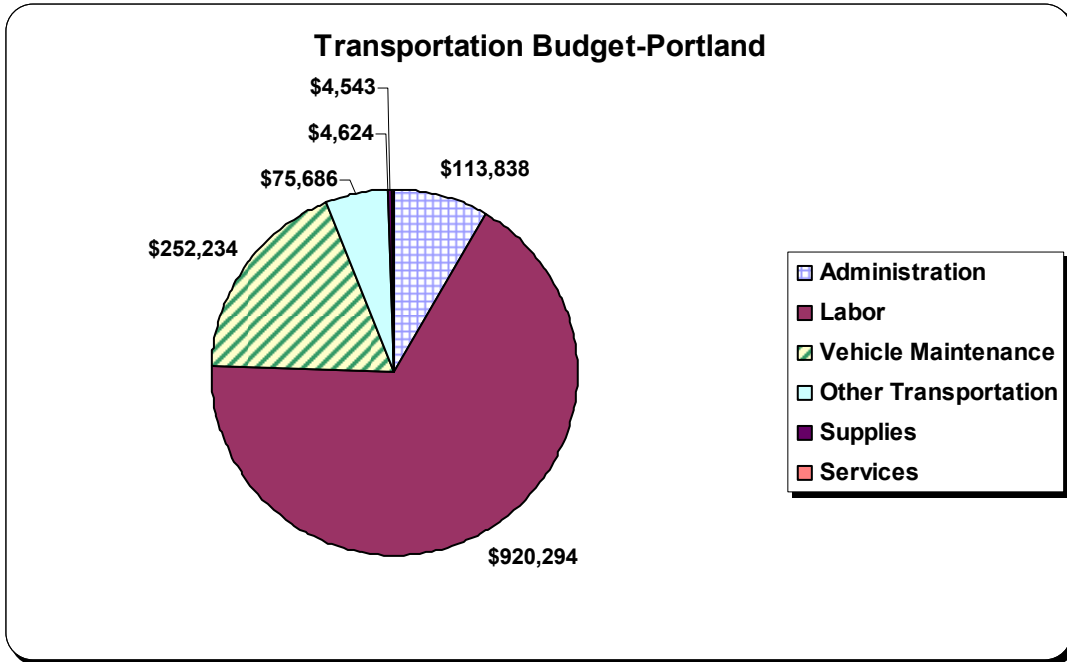


Chart F

PEOPLE – Bus drivers, custodians, bus assistants, teachers, therapists, psychologists, food service workers, principals, superintendents, accountants, secretaries, electricians, carpenters, computer technicians, directors, coaches, trainers, ed techs, plumbers, etc, etc, etc, etc.....

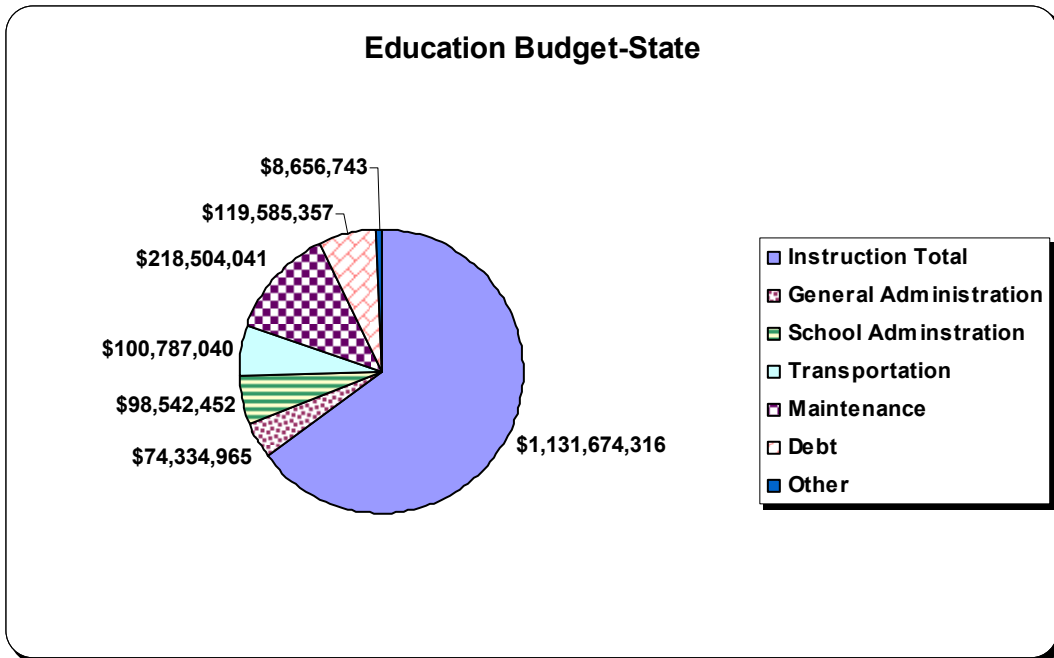


Chart G

SECTION 4 Applying the Data – Building the Model

Are there estimations on the proposed number of administrative and maintenance positions in the new region, versus the current number of positions in this region?

Detailed below is a chart of Region 23 displaying the administrative and maintenance personnel currently employed by all districts in the region as of September 2006.

Table 14

<u>Position</u>	<u>Town/City/District</u>	<u>Salary</u>	<u>FTE</u>
Director	Cape Elizabeth	\$22,257	.5
Director	Falmouth	\$69,733	1
Director	Portland	\$81,799	1
Director	South Portland	\$49,199	1
Director	MSAD 15	\$50,000	1
Director	Yarmouth	\$45,177	1
Director	MSAD 51	\$25,492	.5
Assistant Director	Portland	\$64,349	1
Assistant	South Portland	\$38,000	1
Assistant	Falmouth	\$30,000	1
Assistant	Yarmouth	\$30,000	1
Secretary	MSAD 15	\$25,000	1
Secretary	MSAD 51	\$25,000	1
Sub-total Operations		\$556,390	13⁷
Mechanic	Cape Elizabeth	\$17,500	.5
Mechanic	Falmouth	\$35,000	1
Mechanic	Falmouth	\$17,500	.5
Mechanic	Portland	\$35,000	1
Mechanic	Portland	\$35,000	1
Mechanic	South Portland	\$28,288	1
Mechanic	South Portland	\$39,104	1
Mechanic	MSAD 15	\$34,798	1
Mechanic	MSAD 15	\$29,141	1
Mechanic	MSAD 51	\$13,585	.5
Mechanic	MSAD 51	\$25,492	.5
Mechanic	Yarmouth	\$37,688	1
Sub-total Maintenance		\$348,096	10⁸
Total		\$904,486	23

⁷ Assistants and secretary data are estimates. The state provides no coding to recognize these specific positions.

⁸ Portland and Falmouth use contractors for vehicle maintenance. The national standard of 18 buses per mechanic was applied here to establish the number of employees necessary if staff mechanics existed.

How will staff salaries be determined in consolidated regions?

In an effort to recruit and retain highly qualified and effective staff needed to manage systems that in some cases will be five to six times larger than present systems; staff should be compensated in line with their responsibilities. Standardized salaries should be considered in any effort to consolidate transportation. Qualifiers listed below will determine the number of staff necessary and corresponding salaries for each region:

Table 15

<u>Position</u>	<u>Qualifier</u>	<u>Base EPS Salary⁹</u>
▪ Director	>19,000 students or >100 staff	\$85,000
	15,000 – 19,000 students or 80 - 99 staff	\$75,000
	10,000 – 14,999 students or 50 - 79 staff	\$65,000
	Minimum Salary	\$55,000
▪ Community Coordinator	Minimum 3,000 students (each)	\$40,000
	Minimum 2 per region	
	Maximum 4 per region ¹⁰	
▪ Assistant Director	>100 Staff	\$60,000
	80 - 99 Staff	\$45,000
	< 80 Staff	No Position
▪ Lead Technician	>100 Buses	\$50,000
	50 – 99 Buses	\$45,000
	0 – 49 Buses	\$40,000
▪ Technician	18 Buses per mechanic	\$35,000
▪ Technician Helper		\$30,000

Primary Job Responsibilities

Director – Provides primary management leadership in the following areas: policy, planning, budget, training, personnel, labor relations, student and staff discipline adjudication, technology, PET liaison, equipment needs, safety, and media spokesperson.

Assistant Director – Manages the day-to-day operations and oversees the community coordinators and maintenance staff. The position will be responsible for all field and athletic trip coordination, vehicle maintenance requirements, staffing needs, and student data upkeep. This front line supervisor is the first point of conduct for student and staff disciplinary issues, and acts as director in his/her absence.

Community Coordinator – Coordinates all route planning and scheduling within an assigned area of the region. Responds to specific parent and administrator requests in a timely manner, coordinates special needs, vocational education, out of district, and cross district transportation with community coordinators assigned to other segments of the region.

⁹ The EPS base (minimum) salary would be reimbursable. Districts would be free to negotiate based on experience, qualifications, and education. Additional salary beyond the base would be a regional expense.

¹⁰ Transportation directors, in conjunction with the superintendents' approval may increase the maximum number needed based on workload and customer service demands.

Lead Technician – Manages and assigns vehicle maintenance tasks at an assigned facility. Coordinates movement of vehicles and communicates needs with Central Dispatch. Performs vehicle maintenance, routine service, manages parts inventory, and is responsible for vehicle inspection as a Certified Maine School Bus Technician.

Technician – Performs vehicle maintenance and routine service as assigned by the lead mechanic. Performs vehicle inspections as a Certified Maine School Bus Technician.

Technician Helper – Performs vehicle servicing as assigned by the lead mechanic.

Proposed Staffing Levels

Based on standardized salaries and the qualifiers from the previous page, how would the newly consolidated region be staffed?

Table 16

<u>Position</u> (Communities Served)	<u>Qualifier</u>	<u>EPS Base Salary</u>	<u>FTE</u>
Transportation Director	20,363 Students	\$85,000	1
Assistant Transportation Director	157 Staff	\$60,000	1
Community Coordinator (1)	7,308 Students	\$40,000	1
Community Coordinator (2)	4,834 Students	\$40,000	1
Community Coordinator (2)	4,461 Students	\$40,000	1
Community Coordinator (2)	3,558 Students	\$40,000	1
Sub-total Operations		\$305,000	6
<hr/>			
▪ <u>Maintenance Facility 1 – South Portland</u>			
Lead Technician - 64 buses (21.3 Buses / Technician)		\$45,000	1
Technician		\$35,000	1
Technician		\$35,000	1
▪ <u>Maintenance Facility 2 - Cumberland</u>			
Lead Technician - 46 buses (15.3 Buses / Technician)		\$40,000	1
Technician		\$35,000	1
Technician		\$35,000	1
▪ <u>Maintenance Facility 3 - Gray</u>			
Lead Technician - 39 buses (19.5 Buses / Technician)		\$40,000	1
Technician		\$35,000	1
Float Technician (assigned as needed)		\$35,000	1
Sub-total Maintenance		\$335,000	9
<hr/>			
Total		\$640,000¹¹	15
<hr/>			

In addition to the information above, this region is currently comprised of:

- 20,337 students
- 132 driving positions and 10 assistants
- 149 school buses
- 4 maintenance facilities, 2 maintenance contractors, 1 municipal garage
- 46 schools and 1 regional vocational center

¹¹ Does not include employee benefits.

Organizational Chart – Region 23 Consolidated

Regional Superintendent



Transportation Director

20,363 Students



Assistant Transportation Director

159 Staff



Community Coordinator #1 - Portland
7,308 Students
26 Drivers

Community Coordinator #2 - South Portland / Cape Elizabeth
4,834 Students
27 Drivers

Community Coordinator #3 - Gray - New Gloucester / Cumberland – North Yarmouth
4,461 Students
42 Drivers

Community Coordinator #4 - Falmouth / Yarmouth
3,558 Students
37 Drivers



Facility 1

Lead Technician

21.3 Buses per Technician

**Technician
Technician**

Facility 2

Lead Technician

15.3 Buses per Technician

**Technician
Technician**

Facility 3

Lead Technician

19.5 Buses per Technician

Technician



Float Technician

Chart H

So what are the actual savings estimated from the reduced number of administrative and vehicle maintenance staff in this region?

With any change as large as this, it is impossible to narrow down exact savings until the operation is up and running and all aspects of the consolidation are examined. Operational opportunities (mentioned in the next section) will become apparent as the consolidation has time to take hold. However, administrative salaries, and maintenance expense are more predictable in terms of what can be expected.

Table 17

<u>Region Without Consolidation</u>		
▪ Administrative salaries		\$556,390
▪ Maintenance salaries		\$348,096
	Total	\$904,486
<hr/>		
<u>Consolidated Region</u>		
▪ Administrative salaries		\$305,000
▪ Maintenance salaries		\$335,000
	Total	\$640,000
<hr/>		
<u>Projected Savings</u>		
▪ Administrative salaries		\$251,390
▪ Maintenance salaries		\$13,096
	Total	\$264,486

Does this proposal do anything to reduce the per pupil cost for administration?

Yes – The chart below shows the reduction in administrative cost per student. Overall administrative costs per student are reduced by 42% per student.

Table 18

<u>Before Consolidation</u>			
<u>District</u>	<u>Administrative Cost</u>	<u>Students</u>	<u>Cost / Student</u>
Cape Elizabeth	\$22,257	1,854	\$12.00
Falmouth	\$99,733	2,151	\$46.36
Portland	\$146,148	7,308	\$19.99
South Portland	\$87,199	3,080	\$28.31
MSAD 15	\$75,000	2,314	\$32.41
MSAD 51	\$50,492	2,084	\$24.22
Yarmouth	\$45,177	1,549	\$29.16
Total	\$556,390	20,337	\$27.35
<hr/>			
<u>After Consolidation</u>			
Region	\$305,000	20,337	\$14.99

Other than staff savings, can you project any significant operational savings?

Yes - Transportation budgets are generally calculated by first examining the amount of service needed to meet the program demands of the district. When transportation budgets are exceeded, one likely cause may be the adding of programs or the changing of policy within a district. For instance, changing eligibility standards that would result in more eligible students will likely result in more transportation be provided, more miles being added, and more cost.

The key to reducing operational transportation expenses lies in reducing miles. It is reasonable to expect that a reduction in the number of vehicle miles can be attained in the first year of consolidation through the previously mentioned:

- Better coordination of “out of district specialized” transportation
- Better coordination of “out of district extra-curriculum” transportation
- Better coordination of vocational education transportation
- Local opportunities for “cross-district” transportation

How will operational savings be calculated?

Based on 2005 - 2006 transportation statistics ¹² the average cost per vehicle mile in the region is \$3.47.

Decreasing vehicle miles by 5% would result in an estimated savings of \$312,168. This figure could ultimately be higher because the majority of “best” opportunities for mileage reductions (listed above) entail long distances.

Formula:

1,799,250 total district miles x 5% = 89,962 miles x \$3.47 average district cost per mile = **\$312,168** ¹³

What about facilities? Are there any savings achieved from consolidation?

Yes - There will be savings from facilities being closed. However, it is impossible to accurately project those savings without specific information pertaining to such expenses as utilities, heat, supplies, rent, etc. Six transportation offices and one maintenance facility will be consolidated. Satellite locations for bus storage and driver’s rooms will remain. A conservative estimate of \$3,000 per location is being used until such time further research can be done. Total savings from closed locations would be **\$21,000**.

¹² See Table 19 next page

¹³ All data in this report was acquired from the DOE website, or from individuals at the DOE, unless otherwise specified.

Total Estimated First Year Gross Savings

▪ Maintenance	\$13,096	Personnel
▪ Administration	\$251,390	Personnel
▪ Operations	\$312,188	Mileage
▪ Facilities:	\$21,000	Plant
	\$597,674	Total

2005 - 2006 Transportation Summaries by District

<u>Town/City</u>	<u>Miles</u>	<u>Expense</u>
Cape Elizabeth	141,629	\$448,122
Falmouth	262,277	\$886,035
Portland	338,200	\$1,393,712
South Portland	212,193	\$912,790
MSAD 15	378,640	\$961,061
MSAD 51	305,577	\$1,007,176
Yarmouth	160,734	\$628,759
Total	1,799,250	\$6,237,655¹⁴

<u>Town/City</u>	<u>Cost/Mile</u>	<u>Cost/Student Transported</u>
Cape Elizabeth	\$3.16	\$414.93
Falmouth	\$3.38	\$411.92
Portland	\$4.12	\$534.81
South Portland	\$4.30	\$481.68
MSAD 15	\$2.54	\$451.84
MSAD 51	\$3.30	\$431.52
Yarmouth	\$3.91	\$446.88
Average	\$3.47	\$458.65

<u>Town/City</u>	<u>Transported</u>	<u>All Students</u>	<u>% Transported</u>
Cape Elizabeth	1,080	1,854	58.25%
Falmouth	2,151	2,148	100.14%
Portland	2,606	7,308	35.66%
South Portland	1,895	3,080	61.53%
MSAD 15	2,127	2,314	91.92%
MSAD 51	2,334	2,084	112.00%
Yarmouth	1,407	1,549	90.83%
Total	13,600	20,337	66.87%

Table 19

¹⁴ Does not include new bus purchases

SECTION 5 – Additional Resources Necessary

What else is needed to make consolidated school bus transportation a reality?

Scheduling and Routing Software – The single most important piece of the consolidation puzzle is the purchasing of scheduling and routing software. This software would include GPS tracking, fleet management software, and digitized maps tying all districts together in one database. Community coordinators and other staff will utilize this database for primarily the following purposes:

- Setting up and maintaining bus routes
- Student data, including medical and emergency information
- Vital statistics and certification dates for all employees
- Vital statistics for all routes and buses
- Report writer for customized queries and reports
- Customer inquires
- Vehicle capacity, driver planning, and utilization effectiveness
- Mileage and time management
- Accurate reporting of data to DOE
- Optimized site location information for new school decisions

Linking – Parents to Transportation Software – Regional transportation facilities must be efficient. Web-based software to allow parents access to all school bus information on their child is one way to achieve efficiencies. By including this software in regional transportation facilities, the number of phone calls will decrease and customer service will improve. As such, the possibility of fewer community coordinators to handle the workload will exist as well. Parents can have access to all transportation information as well as the security of knowing where their child is at any given moment while riding the school bus.

Communications Equipment – A resolve would have to be made to tie the entire system into one communication network. There are numerous way to achieve this, such as:

- Two-way radios - Although all districts currently have this capacity, none use the same frequency, and all are limited in range.
- On board computers – Text messaging technology is available for most applications.
- Cell phones or walkie-talkie – In conjunction with GPS

GPS – Making Routes More Efficient and Secure With Technology - GPS technology is no longer a luxury as much as it is a necessity. From security to fuel savings, the initial investment is offset quickly with the use of this technology.

- As security becomes a concern for all school functions; one of the most disconcerting “*at risk*” areas of “*soft targeting*” is the school bus. GPS real time tracking will allow coordinators to track all vehicles and know exactly where all school buses are at all times. This is paramount in an emergency situation.
- GPS will allow the coordinator to know anytime a bus is not following an authorized route, being used for personal business, has been commandeered, or for any other unauthorized reason.
- GPS will allow the coordinator the ability to track (in real time) individual vehicles to optimize all routes for greater efficiencies.
- GPS can also be used in conjunction with communication equipment.
- A reduction in school bus vehicle miles in the state of just 1%, generated through the use of GPS equipment and other technologies listed here, an annual savings of \$807,869 to taxpayers would result. 5% would equal \$4,056,691.

Formula:		
2004 - 2005 total transportation miles	=	34,672,583
2004 - 2005 total transportation expense	=	\$80,847,634
Multiply total miles x 1%	=	346,672 miles
Divide total expense by total miles	=	\$2.34 avg. cost/mile
Multiply 346,672 x \$2.34	=	\$807,869 total savings

Fleet Maintenance Software – Maintaining a school bus fleet is an enormous task. Properly maintaining a school fleet is even more involved. To understand why problems develop with school buses, and how to prevent them from happening, data is the essential element. Today’s complex technologies don’t have to be complex in terms of tracking the data necessary to make vital decisions and save money. Fleet maintenance software allows the manager the ability to:

- Tract trends
- Control inventories (tires, parts, lubes, etc.)
- Manage warranty issues
- Examine individual systems on the vehicle (electrical, cooling, fuel, etc.)
- Track labor and parts expense
- Improve life cycle costing
- Chart accident cost and vehicle abuse
- Provide data for future vehicle specifications
- Provide necessary back up data for vehicle inspectors

The Goldilocks Principal – Writing in the February 2007 edition of School and University Magazine authors Tim Ammon and Scott Little describe the Goldilocks Principal. The principal holds that it is not beneficial to use so many measures that managers are overwhelmed by detail, or so few measures that significant details are missed, but just the right number of measures so that all important aspects of the operation are receiving appropriate levels of attention. This balance typically is found through a trial-and-error approach that customizes the volume and type of measures to a specific operation.

The systems described on the previous pages will allow transportation departments fewer trail-and-error scenarios and provide the tools necessary to make sure that all levels of the operation are receiving appropriate attention as described by Ammon and Little.

PEOPLE - The Hidden Cost – All the technology in the world would be useless without capable, motivated people to operate it. Transportation directors throughout Maine have displayed time and again their willingness to improve school bus transportation with such things as technology, utilizing current training, focusing on student health through emission technologies, and staying abreast of “best practices.” It is this professional workforce, utilizing the Maine work ethic, which has developed and maintained transportation systems culminating in the safe transportation of thousands of Maine school children annually.

Transportation consolidation is an opportunity for some in the industry to improve their professional growth while developing systems that can turn resources back into the classroom. It is also a time when many individuals will be swallowed up and displaced by consolidation; with many of those who remain embarking on what will be a steep learning curve, especially in the use of technology required to do the job effectively. The notion that we can plug in a computer and immediately things will improve and money will be saved is unrealistic and shortsighted. Throughout the consolidation process the focus on people must be paramount. Looking at such things as:

- What are the standards and qualifications that will be used to hire people?
- Can directors expect Superintendents to offer an unbiased hiring procedure and offer all applicants an equal opportunity?
- How much training will be necessary and how long will it take to get up to speed for community coordinators to effectively manage the new system?
- Will the region and the state offer an adequate timeline for efficiencies created by newly installed people to take hold?
- Will there be hidden costs such as overtime when developing a system from “scratch?”
- What about the people displaced? Will they be retrained? What will the state offer in this regard?
- How will we maintain the current performance while shifting to the new operating platform so that the students still get to school safely and on time while we change the system?
- Will the state financially support professional development programs for transportation staff in order to meet the challenges of new transportation systems?

SECTION 6 – Proposed New Spending

While savings are anticipated in the areas of maintenance, personnel, and facilities, what additional spending will be necessary to make consolidation work?

Table 20

<ul style="list-style-type: none"> ■ Software <ul style="list-style-type: none"> ▪ Routing and Planning ▪ Athletic Trip Planner and Scheduler ▪ Fleet Maintenance ▪ Parent Linking ▪ On Screen Vehicle Tracking ▪ SIF Agent (Data downloading program) ▪ All Licensing and Training 	\$146,797¹⁵
<hr/>	
<ul style="list-style-type: none"> ■ GPS and Communication Equipment <ul style="list-style-type: none"> ▪ Unit cost of \$1,500 per vehicle x 149 vehicles 	\$223,500¹⁶
<hr/>	
<ul style="list-style-type: none"> ■ Annual communication access fees 	
<ul style="list-style-type: none"> Formula: \$30 month per vehicle x 149 vehicles = \$4,470 month x 12 months 	\$53,640¹⁷
<hr/>	
<ul style="list-style-type: none"> ■ Central Dispatch Facility <ul style="list-style-type: none"> ▪ 5 additional phone lines installation ▪ 5 additional phones ▪ Remodeling labor, 20 hours x \$30 per hour ▪ Remodeling materials ▪ 5 Computers and monitors @ \$1,200 each ▪ High speed printer/fax/scanner ▪ Tech labor / computers / rewire, 10 hours X \$40 per hour ▪ Furniture ▪ Misc. 	\$1,000 \$1,000 \$600 \$1,500 \$6,000 \$1,000 \$400 \$1,000 \$500 Total \$13,000
<hr/>	
<ul style="list-style-type: none"> ■ Negotiations for Master Labor Agreement <ul style="list-style-type: none"> ▪ 100 Hours Director x \$50.00 per hour ▪ 25 Hours Secretary x \$20.00 per hour ▪ Printing 	\$5,000 \$500 \$600 Total \$6,100

¹⁵ Does not include any bulk purchasing power derived from a state RFP for all regions and is simply a demonstration estimate at this time based on the data from one region.

¹⁶ Does not include any bulk purchasing power derived from a state RFP for all regions and is simply a demonstration estimate at this time based on the data from one region.

¹⁷ Does not include any rate reductions for multiple units and is simply an estimate at this time.

Labor Rate Adjustment for Master Labor Agreement

To achieve parity of driver salaries within a region, a master labor agreement would be necessary. The following is an estimation of what expenses would be incurred to bring all drivers up to the maximum pay rates within a region. For purposes of this estimation it is assumed that one-third of all districts drivers each fall in the starting, mid-point, and top wage brackets and that total wages would parallel that assumption.

► **Table 21 - Current Hourly Rates**

<u>District</u>	<u>Start</u>	<u>Mid-Point</u>	<u>Top</u>
Cape Elizabeth	\$14.28	\$15.08	\$16.06
Falmouth	\$14.54	\$15.67	\$16.81
MSAD 15	\$11.00	\$12.86	\$14.73
MSAD 51	\$14.91	\$15.24	\$16.25
Portland	\$14.04	\$15.71	\$17.38
South Portland	\$13.47	\$13.90	\$14.20
Yarmouth	\$15.65	\$15.91	\$16.18
Top Rates	\$15.65	\$15.91	\$17.38

► **Table 22 - Percentage Adjustment Necessary to Achieve Parity at Top Rate**

Cape Elizabeth	9.5%	5.5%	8.2%
Falmouth	9.7%	1.5%	3.3%
MSAD 15	42.2%	23.7%	17.9%
MSAD 51	4.9%	4.4%	6.9%
Portland	11.4%	1.2%	0%
South Portland	16.1%	14.4%	22.3%
Yarmouth	0%	0%	7.4%

► **Table 23 - 2005 - 2006 Total Wages**

<u>District</u>	<u>Wages</u> ¹⁸	<u>Drivers</u>	<u>Per Driver</u>
Cape Elizabeth	\$233,530	10	\$23,350
Falmouth	\$451,921	24	\$18,830
MSAD 15	\$402,346	25	\$16,093
MSAD 51	\$371,766	17	\$21,868
Portland	\$735,389	26	\$28,284
South Portland	\$297,983	17	\$17,528
Yarmouth	\$226,174	13	\$17,298
Total	\$2,719,109	132	\$20,599

► **Table 24 - Total Expense Necessary to Achieve Parity in Wages**

Formula:

Total wages (Table 22) / 3

Multiply the % increase for each group (Table 21)

Add all groups = total

<u>District</u>	<u>Start</u>	<u>Mid-Point</u>	<u>Top</u>	<u>Total</u>
Cape Elizabeth	\$7,395	\$4,281	\$6,383	\$18,059
Falmouth	\$14,612	\$2,259	\$4,971	\$21,842
MSAD 15	\$56,596	\$31,785	\$24,006	\$112,387
MSAD 51	\$6,072	\$5,452	\$8,550	\$20,074
Portland	\$27,944	\$2,941	\$0	\$30,885
South Portland	\$15,991	\$14,303	\$22,149	\$55,443
Yarmouth	\$0	\$0	\$5,578	\$5,578
Total				\$264,268

¹⁸ Does not include overtime, assistants, or temporary drivers.

SECTION 7 – Net Savings

So what's the bottom line on savings? Under the Governor's plan, the expectation is a 10% savings over 3 years. Is that realistic?

As has previously been acknowledged, the notion that anyone can predict exact savings for a consolidation of this size is an unreasonable expectation. What can be done is to use available data, and if necessary make educated assumptions where data is unavailable. As the full weight of consolidation guides what the community coordinators will do operationally, and more exacting data comes to light, it is expected that operational savings will decrease. Using the 2005 - 2006 total expense figure of \$6,237,655 for Region 23, the following would achieve a **6.5%** savings.¹⁹

Table 25

<u>Year One</u> <u>2008 - 2009</u>			
Total Estimated Savings:			
▪ Maintenance			\$13,096
▪ Administration			\$251,390
▪ Operations 5% of 1,799,250 miles = 89,962 miles x \$3.47 per mile =			\$312,188²⁰
▪ Facilities:			\$21,000
	Savings		\$597,672
Total New Spending			
▪ Facility Upgrade			\$13,000
▪ Contract Negotiation			\$6,100
▪ Wage Equity			\$264,268
▪ Communication Fees			\$53,640
▪ GPS and Communication Equipment			\$223,500
▪ Software			\$146,797
	New Spending		\$705,305
Year 1	Net Savings		+\$107,633 or +1.7%
<u>Year Two</u> <u>2009 - 2010</u>			
Total Estimated Savings:			
▪ Maintenance			\$13,096
▪ Administration			\$251,390
▪ Operations 5% of 1,709,288 miles = 85,464 miles x \$3.47 per mile =			\$296,560²¹
▪ Facilities:			\$21,000
	Savings		\$582,046
Total New Spending			
▪ Wage Equity			\$264,268
▪ Communication Fees			\$53,640
	New Spending		\$317,908
Year 2	Net Savings		-\$264,138 or -4.2%
<u>Year Three</u> <u>2010 - 2011</u>			
Total Estimated Savings:			
▪ Maintenance			\$13,096
▪ Administration			\$251,390
▪ Operations 5% of 1,623,824 miles = 81,191 x \$3.47 per mile =			\$281,732²²
▪ Facilities:			\$21,000
	Savings		\$567,218
Total New Spending			
▪ Wage Equity			\$264,268
▪ Communication Fees			\$53,640
	New Spending		\$317,908
Year 3	Net Savings		-\$249,310 or -4.0%²³
Total Savings (Add years 1,2, &3)			-\$405,815 or -6.5%

¹⁹ Figures are not adjusted for the rate of inflation as with the Governor's proposal.

²⁰ A reduction in miles of 1% is equivalent to a \$62,432 cost reduction in year 1.

²¹ A reduction in miles of 1% is equivalent to a \$59,309 cost reduction in year 2.

²² A reduction in miles of 1% is equivalent to a \$56,345 cost reduction in year 3.

²³ Assumes operational savings through a decrease in vehicle miles of 256,617 over 3 years

Savings Proposed Under the LSRS Proposal²⁴

	<u>FY 08-09</u> \$5.5M	<u>FY 09-10</u> \$8.2M	<u>FY 10-11</u> \$10.7M	<u>TOTAL</u> \$24.4M
State	\$3M	\$4.5M	\$5.9M	\$13.4M
Local	\$2.5M	\$3.7M	\$4.8M	\$11.0M

State and local savings of **\$24.4** million are projected through more efficient management of transportation systems in the new Regional Learning

Communities - a regional approach to maintenance/bus garage, routing, fleet management, and common calendars, etc

Assumptions:

Reduce most recent (FY'06) reported expenditures, inflated to FY'09, for transportation by 5% in FY'09 and an additional 2.5% in each of FY'10 and FY'11

Will consolidating to 26 regions save \$24.4 million in transportation costs?

No - Using the above formula to calculate savings, here is the outcome:

Table 26

<u>Starting point 05-06 for calculation</u>		\$101,282,224	
06-07 (assumes 2.5% growth)		\$103,814,280	
07-08 (assumes 2.2% growth)		\$106,098,194	
08-09 (assumes 2.2% growth)		\$108,432,354	<u>First year for savings</u>
08-09 reduction	5% of	\$108,432,354	= \$5,421,618
09-10 reduction (additional 2.5%) or	7.5% of	\$103,010,736	= \$7,725,805
10-11 reduction (additional 2.5%) or	10% of	\$95,284,931	= \$9,528,493
		Total Proposed Savings	= \$22,675,916
		Minus Region 23	= \$405,815
		Remaining 25 Regions	= \$2,227,010
		Each Region to Save	= \$890,080

Assertion #1 – The governor’s plan calls for a \$24.4M reduction. Using the 05-06 reported expenditures as a starting point, along with projections of inflation provided by the Maine State Planning Office, the best projection with the Governor’s formula would be \$22.6M and not the \$24.4M as projected. Inflation figures used in the governor’s proposal were 4.82%, almost double for what the MSPO called for in 07-08.

Assertion #2 – As previously calculated in the Region 23 scenario, the possibility exists to save \$405,815 over three years. That figure represents all operational goals being met, and the system up and running in time to meet the state’s expectations.

Assertion #3 - Region 23 is one of the most urban regions in the state and is therefore more capable of achieving marked reductions. With \$22.2M (based on the above calculation of only \$22.6M) left to achieve in savings after factoring out the Region 23 total, the remaining twenty-five regions would have to save \$890,080 apiece. It seems highly unlikely that many regions (some with expenses as low as \$4M over three years) would be able to better the results predicted for Region 23.

²⁴ From the LSRS Administrative Restructure narrative provided by MDOE

Section 8 – Measuring Efficiency Gains and Loses and Comparing Districts

Transportation budgets, along with special education budgets, are the most likely to prove unreliable in terms of forecasting. Added programming, erratic fuel costs, bad weather, and unpredictable vehicle system failures are just a few things that happen during the course of the school year that will balloon a transportation budget put together months earlier. Consequently transportation directors must take every advantage to save money through other efficiencies such as hub and spoke scheduling, route combinations, and vehicle capacity utilization. Target goals should be set by regions on a yearly basis.

What are some efficiency goals that can be set for a region?

Cost Ratio: A transportation department for a region has a budget of \$1,000,000 for all operational expenses for the next fiscal year. Costs the department can not control such as benefits are not included in this budget. If at the end of the year the transportation department came in on target at \$1,000,000 spent, that would be considered efficient. If on the other hand the department spent \$1,100,000, a 10% overrun, that would signal inefficient operations. In this case transportation had a cost ratio of 110. Similarly, had the department only spend \$900,000 of the total budgeted they would have been under spent by 10% and produced a cost ratio of 90. As an efficiency measurement that all regions would report, the state would then have hard data to support conclusions regarding transportation cost. Added expenses that the department had no control over such as radical swings in fuel cost and new programs requiring transportation would be subtracted from the total expense. Both figures would be reported to the state.

Formula

Actual Expense – allowable exceptions / budget = cost ratio

**\$978,234 (expense) - \$27,280 (exceptions) = \$950,954 (net expense) / \$1,000,000 (budget)
= 95.1 cost ratio**

In this scenario, the region spends just \$.951 of each \$1.00 budgeted. It's considered efficient.

Vehicle Capacity Utilization: Regions should be required four times annually to do physical head counts on to and from school bus routes. The following formula would produce a vehicle capacity utilization number:

Formula:

56 actual riders / 72 available seats = 78% vehicle capacity utilization

This number is another measurement of efficiency and should be viewed as essential for:

- Reducing the number of routes needed to move students to and from school. The more seats utilized on a bus, the fewer number of buses and routes are needed.
- The measurement would be invaluable to the state when districts request funding for transit buses that are more expensive than conventional buses, and should not be ordered if excess capacity already exists.
- A density model could be used in which to set goals for each region to allow for sparsely populated areas with long bus runs that would not produce high utilization rates.

Cost per Student Transported: As an efficiency measurement this figure represents the total cost to transport one student through one budget cycle. As student enrollment declines, this number will increase if steps aren't taken to reduce costs in relationship to the current number of students. The following example illustrates cost per student:

- A region has a total ridership of 5,000 students and an expense of \$2,000,000. By simply dividing the number of students by the expense, the cost per student is \$400 annually. In the next school year ridership declines to 4,500 students and the budget rises to \$2,100,000. The cost per student then rises to \$466 per student. This is the red flag the director needs to start examining routes to see where cuts can be made. If the expense dropped to \$1,900,000 after eliminating excess capacity, the cost for the same 4,500 students would have been \$422.
- Again, urban areas would have a much better chance of responding in this matter than rural areas where time and distance create less opportunity for the elimination of routes.

Cost per Vehicle Mile: Cost per vehicle mile is measurement of service provided. Assuming for the moment a region generates 480,000 miles per year and has expenses of \$1,400,000. By dividing miles into the expense the cost per vehicle mile equals \$2.91. Miles are decreased the following year to 440,000 because a program was eliminated. The new cost per mile figure is now \$3.18. As miles are reduced, the cost per mile goes up. **UNLESS** expenses (mainly labor) go down in response to the elimination of miles.

It's important also to understand what individual components make up the cost per mile figure so more definitive cost analysis can take place. For instance:

- Dividing vehicle maintenance cost by vehicle miles will create a maintenance cost per vehicle mile. If maintenance costs are too high this will be reflected in this number when compared to other like districts.
- Dividing administrative cost by vehicle miles will create an administrative cost per vehicle mile. If there are too many administrators in a region this cost will reflect that when compared to other like districts.
- Dividing fuel costs by vehicle miles will create a fuel cost per vehicle mile. If fuel costs are too high this will be reflected in this number when comparing any other district.

Understanding and charting the components that make up this measurement are vital to understanding where transportation dollars are spent and how districts compare.

Section 9 - Recommendations

Many thousands of students utilize public transportation in the form of the yellow school bus in Maine. To many, it is their lifeline to accessing the education process. The unique rural landscape that Maine presents, while inviting as a destination for many who will take advantage of what Maine has to offer, poses a multitude of issues for school transportation providers. It is not without precedent that hour-long bus rides exist in some parts of the state. Nor it is unique for one student accessing a special program to cost more in tuition and transportation than that of the average pay of an administrator in the state. As we ponder the questions that need data driven answers regarding how best to approach school bus transportation consolidation, it is only logical to examine the strengths and weaknesses of the current industry. The following seven recommendations are made in an effort to solidify and enhance the structure of any final school bus consolidation recommendation:

DOE Support: Within the Maine Department of Education exists one of the most well informed Pupil Transportation Departments in the country. Vital information regarding laws, procedures, and best practice are accessed from this department on a daily basis by school bus professionals throughout the state. It goes without saying that this department is vital to a vibrant well-informed school bus industry in Maine. Maine school bus professionals commend the MDOE for the leading role this department plays in this regard and insist that it be exempt from any future attempt to reduce that role.

School Bus Purchasing: The school bus purchasing program in the State of Maine has been a resounding success. The program offers technical expertise on school bus specifications, helps manage new national standards, and provides bulk-buying power that assists many communities in their efforts to keep their fleets upgraded at a reasonable cost. Resources for this program should be enhanced as this program has proven to save the taxpayer money. It is also vital to improving the fleet age of school buses in Maine.

Attracting and Retaining Professionals: Maine school bus professionals have an enormous amount of direct student responsibility and are answerable to many situations on a daily basis that may impact the student's educational process or their safety. Far too often transportation professionals are on the bottom rung of the administrative ladder and are not compensated for the responsibilities associated with their position. To attract and retain good leadership in the transportation industry, regions must be willing to acknowledge the value of the professional

transportation manager and respond appropriately with compensation based on job responsibilities.

Technology: There is no greater need in the school bus transportation industry than acquiring the necessary resources to access the technology tools needed to establish regional transportation and to create and maintain efficiencies. While a leader in such things as the lap top initiative, Maine school bus professionals must make due with string maps, desk top calendars, the Maine Gazetteer and a wide range of other archaic methods to produce productive and efficient school bus routes. Appropriate technology must be made available to the school bus industry to improve efficiencies, with or without consolidation.

Training and Support: Training for school bus professional within the state is essential to maintaining the high quality standards the school bus industry has been able to achieve. Often times, resources are not allocated within a district's budget sufficient to the amount of yearly training necessary to maintain those standards. As a leader, and one of whose primary mission beliefs is the training of school bus staff, the Maine Association for Pupil Transportation has recently partnered with the Maine Department of Education to acquire necessary funding to provide quality training throughout the state. This relationship has led to an improved series of professional growth and training programs in which directors, drivers, and vehicle technicians from all over the state will have an opportunity to access in the coming year. It is essential that this partnership be maintained.

Emissions and Health: The school bus industry in the State of Maine has taken its responsibility of reducing diesel emissions seriously. In recent years the industry was one of the first in the nation to acquire funding under the Federal "Clean School Bus Program" for retrofit of diesel exhaust systems. The industry, partnering with the Maine DEP led the way with one of nation's first school bus anti-idling campaigns. School bus systems have acquired alternative fuel vehicles where infrastructure has allowed, and many are working with bio-diesel in an effort to further reduce emissions. In most school districts throughout the state you will see signs posted informing citizens that this area is a "clean air zone." We believe that all of these efforts, fostered by the school bus industry in Maine, and supported by the Maine DEP have led to a healthier environment for Maine school children and the general public. Efforts should continue in this regard and be promoted as a part of any regional health plan contemplated by school health officials after any proposed consolidation.

Eligibility Policies: Regions need clear and well defined eligibility policies, whether for the entire region, or individual areas. These standards must be adhered to by every level of the organization and not be subject to favoritism, school committee or superintendent interference, or parent groups. Policies should be reviewed on a regular basis to determine eligibility standards are practical, safe, and meet the

current needs of parents and students. Establish eligibility standards and adhere to them.

IEP's: The IEP should be administered by all parties, including a transportation representative should the need for special transportation be included. More often than not the transportation director is left out of this process. The results can sometime lead to excessive transportation arrangements when more practical and less expensive solutions could have been offered by transportation personnel. Refer to transportation personnel before agreeing to special transportation requests.

Inclusive Teams: As a department that focuses on student safety, has responsibility for large amounts of resources, and one that plays an important and necessary role in the lives of many students throughout a region, the transportation department should be included at the highest levels of the "Central Office Team" structure. All too often administrators will overlook the importance of the transportation element when planning new programs, building new schools, or mapping a districts "future vision." The result, many times is a somewhat disjointed and uncoordinated effort where hidden costs, such as transportation, bloat a districts' budget. While education is the true focus, all aspects of a district must pull together to achieve the end product.

Section 10 - Conclusion

1) “Consolidating school bus transportation on a regional basis can be done in many areas.” While it seems unlikely that all regions in the state will have the ability to regionalize to the extent the Region 23 model showed, it is likely that a “*new way of doing school bus transportation*” can be accomplished in many parts of the state.

2) “Consolidating school bus transportation can not be accomplished with a “one size fits all” model.” While transportation consolidation may work fine for one part of the state, contributing factors such as time and distance may limit what can be accomplished in other regions. Each region must be examined individually to determine what, if any, consolidation can be effectively accomplished.

3) “School bus consolidation should be viewed as an opportunity to improve the school bus industry in Maine.” School bus transportation, a resource that provides access to education for thousands of Maine students, remains challenged by a lack of efficiency based technology, a general disconnect from top district leadership, and less than adequate resources needed to fulfill its’ mission. Consolidation of school bus transportation should be viewed as an opportunity to correct these shortfalls, while at the same time producing savings to help alleviate the burden on Maine taxpayers.

4) “There is the potential for substantial savings.” In 2005 – 2006 the total cost for school bus transportation in the State of Maine was \$80,847,634. This did not include school bus purchases or extra curricular transportation charges. While representing one of the smallest portions of the total outlay of educational spending in the State, transportation does not have to be inefficient, and consolidation in some regions can still save millions of dollars with little impact on children or local control.

Let’s assume for a moment that school bus operators throughout the state can achieve even modest savings of 5% annually through consolidation. With an annual savings of **\$4,042,381** it is still an admirable goal. What do they savings equate to?

- The \$30,000 salary of 134 first year teachers or,
- 57 new school buses at \$70,000 per bus or,
- 2, 021,190 gallons of diesel fuel at \$2.00 per gallon. Enough fuel to fuel half of the school buses in Maine for an entire year or,
- Enough to pay the \$40,000 salary of 100 transportation community coordinators for an entire year

5) “A major investment in technology will have to occur to make school bus consolidation possible.” While consolidation can be an exciting prospect, it is not without a need for major investment to make it work. The biggest investment necessary is efficiency-based technology that can make consolidation a reality. Because of this, a large outlay will be necessary in the first year of any proposed consolidation, and the outlook for first year savings is vastly diminished. We must make this investment.

6) “Safety will not be compromised in an effort to save money.” And finally, while saving resources will surely be viewed by most as the paramount goal of school bus consolidation, transportation directors are insistent that any consolidation not sacrifice student safety. There are no savings equal to the cost of just one life when we consider school bus consolidation. We can, and will, take the same approach to school bus transportation as we always have. It is the safest form of transportation in the country, and its’ integrity should not be compromised.

RESOURCES

District	Regular Instruction	Sped Instruction	CTE Instruction	Other Instruction	Total Instruction
Cape Elizabeth	\$4,305	\$1,020	\$26	\$299	\$5,650
Falmouth	\$4,615	\$1,606	\$53	\$343	\$6,617
MSAD 15	\$3,484	\$1,251	\$116	\$150	\$5,001
MSAD 51	\$4,843	\$1,171	\$30	\$214	\$6,258
Portland	\$4,400	\$1,157	\$55	\$221	\$5,833
South Portland	\$5,089	\$2,087	\$93	\$361	\$7,630
Yarmouth	\$4,783	\$1,487	\$2	\$141	\$6,413
Average	\$4,503	\$1,397	\$54	\$247	\$6,200

District	Student & Staff Support	System Administration	School Administration	Transportation & Buses	Facilities
Cape Elizabeth	\$969	\$291	\$449	\$280	\$857
Falmouth	\$791	\$422	\$602	\$538	\$980
MSAD 15	\$774	\$271	\$556	\$676	\$1,032
MSAD 51	\$450	\$591	\$480	\$477	\$1,229
Portland	\$724	\$569	\$583	\$241	\$1,228
South Portland	\$361	\$428	\$556	\$394	\$1,609
Yarmouth	\$1,182	\$393	\$566	\$370	\$1,100
Average	\$750	\$424	\$542	\$425	\$1,148

District	Debt Service	All Others	Total Cost per Student
Cape Elizabeth	\$900	\$0	\$9,396
Falmouth	\$323	\$29	\$10,456
MSAD 15	\$335	\$0	\$8,595
MSAD 51	\$895	\$0	\$10,379
Portland	\$690	\$99	\$13,928
South Portland	\$824	\$106	\$11,605
Yarmouth	\$1,149	\$17	\$10,755
Average	\$731	\$36	\$10,731

January 2007 Cost per Student by Function

