

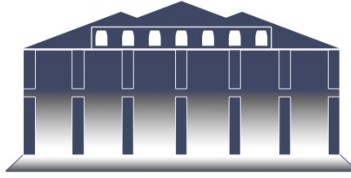
**Improved Administrative Program Monitoring by  
the Department of Public Instruction Can Save Over  
\$19 Million Annually**



**Final Report to the Joint Legislative  
Program Evaluation Oversight Committee**

**Report Number 2014-04**

**April 16, 2014**



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Director

April 16, 2014

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Representative Julia Howard, Co-Chair, Joint Legislative Program Evaluation Oversight Committee

North Carolina General Assembly  
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Honorable Co-Chairs:

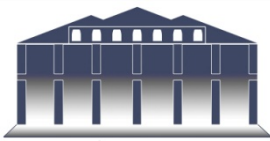
The 2013–15 Program Evaluation Division work plan directed the division to examine the efficiency and effectiveness of the Department of Public Instruction's (DPI's) management and operations. To meet this requirement, the Program Evaluation Division will produce a series of reports. This report evaluates the performance management systems of DPI's support functions, as administered by the Office of Business, Finance, and Technology Services (FBS). In addition, this report includes a detailed examination of five selected programs within FBS. These programs were identified from a risk assessment conducted through utilization of information provided by DPI.

I am pleased to report that the Department of Public Instruction cooperated with us fully and was at all times courteous to our evaluators during the evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Turcotte".

John W. Turcotte  
Director



# PROGRAM EVALUATION DIVISION

## NORTH CAROLINA GENERAL ASSEMBLY

April 2014

Report No. 2014-04

## Improved Administrative Program Monitoring by the Department of Public Instruction Can Save Over \$19 Million Annually

### Summary

**As directed by the North Carolina General Assembly's Joint Legislative Program Evaluation Oversight Committee, this evaluation examines the efficiency and effectiveness of the administrative services delivered by the Department of Public Instruction (DPI).** In Fiscal Year 2012–13, the State of North Carolina spent nearly \$12 billion to provide a system of free public education to eligible students. DPI is responsible for ensuring these funds are effectively used to achieve the mission and strategic goals established by the State Board of Education. To achieve this objective, DPI provides services that directly contribute to student outcomes as well as administrative services that indirectly support the achievement of student outcomes and ensure state funding is appropriately used by Local Education Agencies (LEAs).

**The cost to provide these administrative services could be reduced by \$19.5 million annually without adversely affecting North Carolina's public school students.** These cost savings could be realized by changing the formula to allocate funds for school bus operations and reducing textbook warehouse staffing to reflect current operational requirements. An additional \$6.1 million of non-recurring savings could also be realized by reducing the statewide fleet of spare school buses and the inventory of school bus replacement parts to the level necessary to meet operational requirements.

**DPI does not have a performance management system that ensures its administrative programs and activities are effectively contributing to the vision of the State's public school system.**

To address these findings, the General Assembly should:

- direct DPI to take specific actions to ensure improvements in the efficiency of its administrative services are effectively implemented and that the associated cost savings are realized; and
- require DPI to design and implement a performance management system that ensures administrative support programs effectively contribute to the vision of the North Carolina public school system, and includes processes for identifying and monitoring the achievement of program objectives, the efficiency of program activities, and the adequacy of associated procedures.

In addition, the State Board of Education should develop strategic goals that can be used to guide administrative support programs toward achievement of the State's vision for the public school system.

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## Purpose and Scope

The Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to examine the efficiency and effectiveness of the Department of Public Instruction's (DPI's) management and operations. To meet this requirement, the Program Evaluation Division will produce a series of reports. The first report evaluated the effectiveness of driver education programs as administered by DPI.

This report focuses on the efficiency and effectiveness of the performance management system of DPI's administrative services, as provided by the Office of Financial, Business and Technology Services (FBS). In addition, this report includes a detailed examination of five selected programs within FBS. These programs were identified from a risk assessment conducted through utilization of information provided by DPI. Subsequent reports by the Program Evaluation Division will include an evaluation of the programs and activities administered by DPI's Academic Services and Instructional Support and Organizational Support divisions.

Five central research questions guided the study:

- What are the programs and activities performed by FBS within DPI?
- What are the programs with the greatest risk of not achieving their objectives?
- How can the efficiency and effectiveness of the programs with the greatest risk of not achieving their objectives be improved?
- Does the Office's management system ensure the performance of its programs and activities can be measured, monitored, and improved?
- How does the Office contribute to the strategic objectives for DPI established by the State Board of Education (SBE)?

The Program Evaluation Division collected data from several sources, including

- review of laws and policies guiding the State's system of education;
- interviews and queries of DPI program managers;
- an administrative query completed by DPI;
- sources and uses of funding for each program; and
- performance measures (if available) for each FBS program.

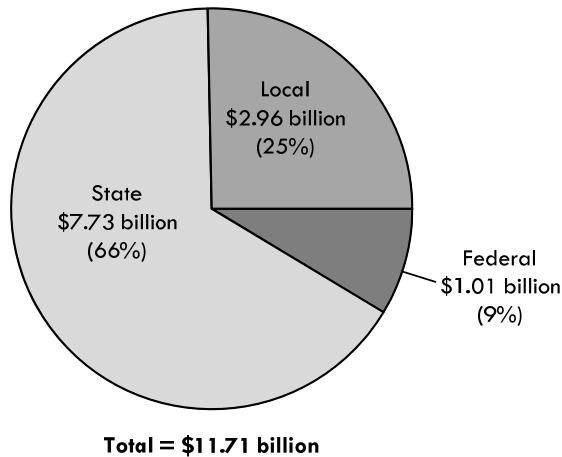
# Background

**The responsibility for providing a system of free public education is shared between the State Board of Education (SBE), the Department of Public Instruction (DPI), and Local Education Agencies (LEAs).** The requirement to provide a free public education is established in the State Constitution.<sup>1</sup> North Carolina law further specifies that this free public education be provided to all children of the State, and to every person of the State less than 21 years old, who has not completed a standard high school course of study.<sup>2</sup>

As shown in Exhibit 1, state funding accounted for \$7.7 billion of the \$11.7 billion (66%) expended in Fiscal Year 2012–13 on the public school system. Local governments contributed \$3 billion (25%) with the remaining \$1 billion (9%) provided by federal funds.

## Exhibit 1

State Funds Accounted for Nearly Two-Thirds of Expenditures for the State’s Public School System



Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI.

**The SBE is responsible for establishing the strategic objectives of North Carolina’s public school system.** The SBE consists of the Lieutenant Governor, the State Treasurer, and 11 members appointed by the Governor, subject to confirmation by the General Assembly in joint session.

The SBE is responsible for general supervision and administration of the public school system to include responsibility for establishment of its strategic priorities. Other duties and responsibilities include

- setting forth what subjects shall be taught at each grade level;
- developing a comprehensive plan to revise content standards and the standard course of study in the core academic areas;
- selecting and adopting textbooks that meet the standard course of study at each instructional level in elementary and secondary schools; and
- developing and implementing a uniform education reporting system to include standards and procedures for collecting fiscal and personnel information.

<sup>1</sup> As described in the provisions of Article IX of the Constitution of North Carolina.

<sup>2</sup> N.C. Gen. Stat. § 115C-1.

In Fiscal Year 2012–13, SBE was authorized eight full-time equivalent (FTE) employees and expended \$1.42 million to accomplish these objectives.<sup>3</sup>

**DPI is responsible for the effective implementation of strategic priorities established by SBE.**<sup>4</sup> The Superintendent of Public Instruction is independently elected by the citizens of North Carolina and is responsible for ensuring the achievement of DPI's objectives. As shown in Exhibit 2, in Fiscal Year 2012–13 the Superintendent of Public Instruction utilized nine authorized FTE and expended \$1.4 million for services that directly supported activities.

To help ensure achievement of DPI's objectives, the Superintendent of Public Instruction has established three divisions within DPI: Organizational Support, Academic Services and Institutional Support, and the Office of Financial, Business and Technology Services. The Organizational Support division provides services such as communication and information services, data research, and human resource management. In Fiscal Year 2012–13, DPI utilized 35 authorized FTE and spent \$3.5 million on these services.

In addition, administration of the State's *Race to the Top* grant is located in the Organizational Support division. This grant provides federal funding that is used to remodel the State's public education system to increase student achievement, close achievement gaps, and continue to increase the number of career- and college-ready graduates. In Fiscal Year 2012–13, DPI spent \$41.2 million, to include funding for 123.87 FTE, to administer the *Race to the Top* federal grant.

The operations of the Academic Services and Instructional Support division directly contribute to achievement of the strategic goals of the public education system. For example, this division provides course curriculum development services that help ensure LEAs can effectively meet the needs of North Carolina's public school students. In Fiscal Year 2012–13, DPI was authorized 824.3 FTE and spent \$84.7 million to administer Academic Services and Instructional Support-related programs and activities.<sup>5</sup>

Administrative services are administered within the Office of Financial, Business and Technology Services (FBS). These services cannot readily be associated with student outcomes, but provide necessary functions to ensure state funding for the public education system is appropriately used by LEAs, and as authorized by the General Assembly. Examples of administrative services include school construction planning, student bus transportation services, and workers' compensation insurance administration. In Fiscal Year 2012–13, FBS was authorized 284.1 FTE and spent \$28.5 million to provide these administrative services.<sup>6</sup>

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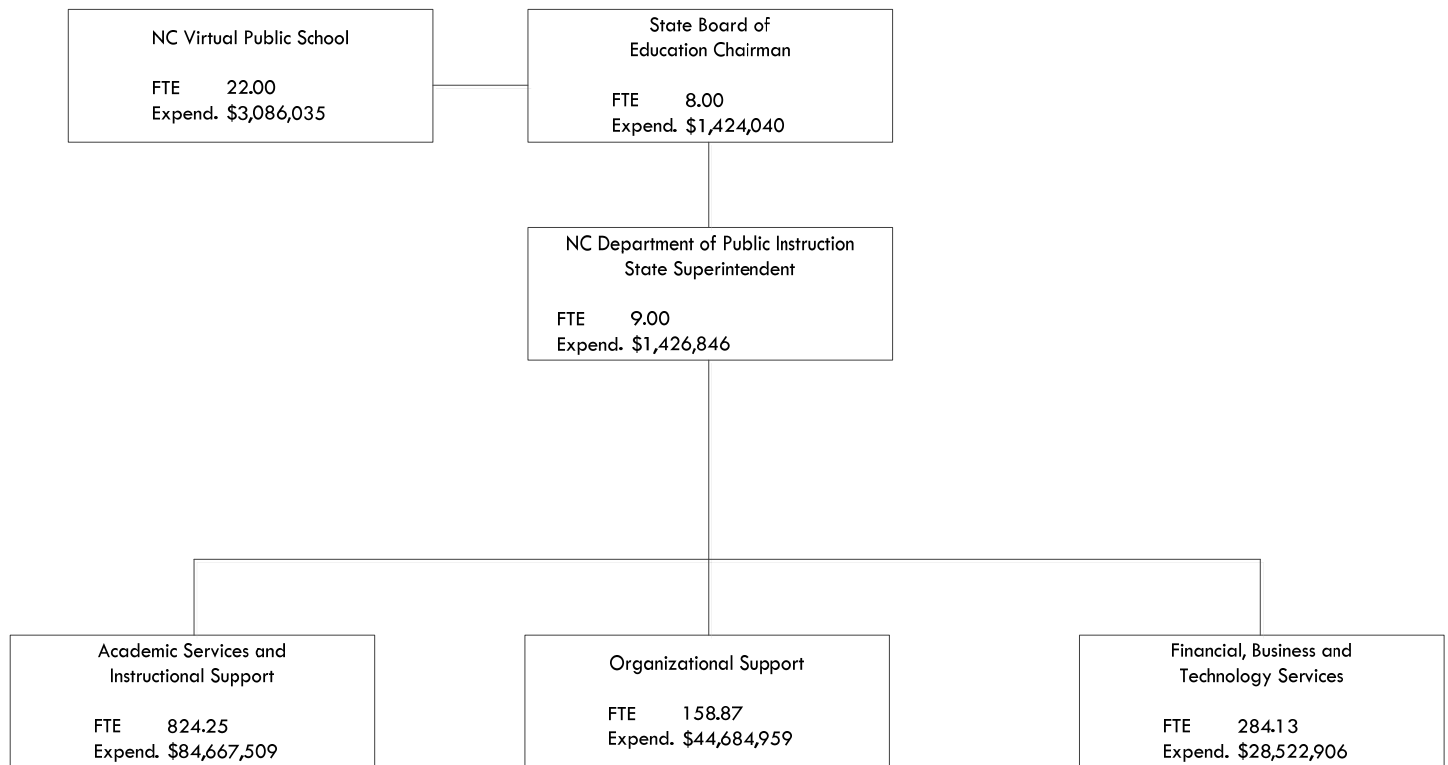
<sup>3</sup> The North Carolina Virtual School Program is also housed under the State Board of Education. In FY 2012–13, this program was authorized 22 FTE and expended \$3.1 million.

<sup>4</sup> N.C. Gen. Stat. §115C-21.

<sup>5</sup> Includes \$20,477,784 for the administration of the North Carolina School for the Deaf, the Eastern North Carolina School for the Deaf, and the Governor Morehead School for the Blind (collectively, the 'residential schools'), which was transferred from the North Carolina Department of Health and Human Services effective June 1, 2011.

<sup>6</sup> The expenditures and authorized FTE for FBS do not include the Safe and Healthy Schools Program, which was transferred to FBS on July 1, 2013.

## Exhibit 2: SBE and DPI Provide Services that Directly Support Student Outcomes and Provide Necessary Administrative Support



Note: Includes \$20,477,784 for the administration of residential schools—the North Carolina School for the Deaf, the Eastern North Carolina School for the Deaf, and the Governor Morehead School for the Blind—which was transferred from the North Carolina Department of Health and Human Services effective June 1, 2011.

Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI.

**Local Education Agencies (LEAs) have primary responsibility for the day-to-day operation of the public education system.**<sup>7</sup> There are 115 LEAs in North Carolina. In Fiscal Year 2012–13, these LEAs operated and maintained 2,418 schools to provide free public education to 1,443,990 students.<sup>8</sup> In addition, the State has authorized 107 charter schools and one regional school.<sup>9,10</sup> In FY 2012–13, these schools served an additional 48,795 students.

In Fiscal Year 2012–13, LEAs were authorized 177,149 positions to meet the objectives of the State’s public school system. As shown in Exhibit 3,

<sup>7</sup> As specified in N.C. Gen. Stat. § 115C-69, a school district is any convenient territorial division or subdivision of a county, created for the purpose of maintaining within its boundaries one or more public schools. It may include one or more incorporated towns or cities, or parts thereof, or one or more townships, or parts thereof, all of which territory is included in a common boundary.

<sup>8</sup> The identified number of students is based on Average Daily Membership (ADM), which is computed each school month and is based on the sum of the days in membership for all students in individual local school districts, divided by the number of days in the school month. To be included in ADM, a student must have a class schedule that comprises at least one-half of the school’s instructional day.

<sup>9</sup> As specified in N.C. Gen. Stat. § 115C-238.29(e), a charter school that is approved by the State shall be a public school within the local school administrative unit in which it is located. Charter schools are operated by private nonprofit corporations.

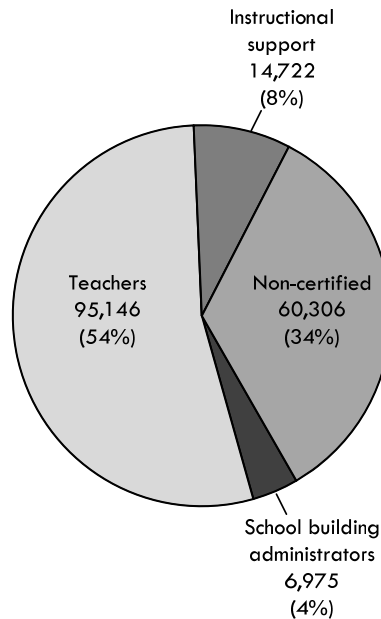
<sup>10</sup> 2011 N.C. Sess. Laws, 2011-241 authorizes two or more school districts to partner in establishing a regional school “to serve enrolled students in two or more local school districts.” In accordance with this law, the State Board of Education approved the establishment of Northeast Regional Early College High School of Biotechnology and Agriscience. Five school districts have partnered in the establishment and operation of this school. The five school districts are Beaufort, Martin, Pitt, Tyrell, and Washington.



certified teaching positions accounted for 95,146 (53.7%) of that total. Instructional support staff positions, which provide services such as guidance, media, and speech language pathology, accounted for 14,722 (8.3%) of the total number of authorized positions. In addition, 60,306 (34%) non-certified positions such as teacher assistants and school bus maintenance staff were authorized in Fiscal Year 2012–13. The remaining 6,975 (4%) positions were filled by school building administrators.

### Exhibit 3

#### More than Half of Authorized Positions at LEAs Were Certified Teachers



**Total: 177,149 positions**

Source: Program Evaluation Division based on data provided by DPI.

**This evaluation focuses on the efficiency and effectiveness of the administrative services performed by DPI.** The Office of Financial, Business and Technology Services (FBS) has 18 programs that provide administrative services to LEAs. As shown in Exhibit 4, each of these programs performs services to support the achievement of student outcome objectives and to ensure state funding is appropriately used by LEAs. For example, the Transportation Services program is responsible for ensuring over \$400 million in annual state funding is efficiently used by LEAs to safely and reliably transport eligible students. Meanwhile, the School Allotments program helps ensure state funding is used by LEAs as authorized by the General Assembly.

## Exhibit 4: FBS Utilizes 18 Programs to Provide Administrative Services for the State's Public Education System

Division	FBS Program	Program Description	2012–13 Expenditures	FTE
School Business	School Allotments	Calculates and distributes projected and actual state and Federal funding to the school districts, charter schools, and other education programs.	\$363,079	6.00
	Reporting	Manages school district and charter school financial reporting, certified personnel salary administration, and student accounting.	\$644,954	10.00
	Monitoring & Compliance	Ensures the federal education funds administered contribute to the goal of all children meeting or exceeding state standards.	\$258,494	4.00
	Information Analysis	Compiles, analyzes, and reports on school financial and personnel data to all stakeholders, both internal and external.	\$355,194	5.00
Financial Services	Purchasing & Contracts	Administers purchasing and contracting and provides central receiving of goods.	\$298,462	4.00
	Accounts Payable and Child Nutrition Claims	Processes payments and reports on Child Nutrition reimbursements to school systems.	\$251,365	7.00
	Budget Management	Plans, develops, and manages all budgets.	\$588,894	8.00
	Accounting Controls and Reporting	Prepares and certifies monthly accounting reports and annual financial statements.	\$268,352	5.00
	Cash Management	Manages processes associated with the receipt, deposit, and disbursement of moneys coming into DPI's control and custody.	\$229,890	5.00
Safe and Healthy School Support	Plant Operation	Works with school districts on developing ways to maintain and operate their facilities efficiently.	\$848,083	10.05
	School Planning	Assists school districts in the planning and design of school facilities.	\$825,195	8.00
	Insurance	Provides property insurance to school districts, administers state employee workers' compensation claims, and manages unemployment claims for state, local and federally funded employees.	\$707,453	10.05
	Textbook Services	Acquires textbooks adopted by the Board, administers a system of distribution, and provides for the free use of elementary and secondary basic textbooks.	\$549,251	11.00
	Transportation	Provides support services to school districts in all areas of pupil transportation.	\$1,133,695	8.00
	Child Nutrition	Provides strategic direction, leadership and oversight of the school nutrition programs.	\$4,377,218	32.00

## Exhibit 4 (Continued): FBS Utilizes 18 Programs to Provide Administrative Services for the State's Public Education System

Division	FBS Program	Program Description	2012–13 Expenditures	FTE
Charter Schools	Charter Schools	Responsible for staffing the Charter School Advisory Board for application reviews, training preliminarily approved charter applicants, and monitoring existing schools for performance.	\$567,131	6.00
Licensure	Licensure	Responsible for issuing licenses that qualify individuals to seek employment as teachers, administrators, and other special service personnel in public schools.	\$1,471,151	21.00
Systems Accounting	Systems Accounting	Provides services to FBS programs to include data management and business process improvement.	\$400,447	5.00
<b>Totals</b>			<b>\$14,138,308</b>	<b>165.10</b>

Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI.

**The Program Evaluation Division conducted a risk assessment of each of the 18 administrative programs in FBS.** The purpose of the risk assessment was to enable the Program Evaluation Division to direct its available resources to the administrative programs with the greatest opportunities to realize better utilization of state funding.

The risk assessment considered various factors that may contribute to the efficient and effective achievement of program objectives. Risk factors are conditions that can influence the frequency or magnitude of events that adversely impact achievement of intended objectives. The selection of risk factors was based on reviews of literature regarding business risk assessment and available quantifiable information received from DPI through information requests and interviews with operational managers. Identified program risk factors include:

**Program Expenditures.** This factor identifies the value of resources used to achieve intended objectives. Higher staffing and/or contracted service requirements increase the risk that activities will not be uniformly performed as designed. Scoring was based on Fiscal Year 2012–13 expenditures, with the program having the highest expenditures receiving a 10. Other program scores were based on the percentage of the program's expenditures relative to the program with the highest expenditures.

**Program Complexity.** This factor is based on the number of activities that directly contribute to the achievement of program objectives. Activities consist of processes that convert resources into an output. A large number of program activities may increase the risk that program objectives will not be achieved because of the potential increase in complexity due to required interfaces among activities. The program with the highest number of identified activities received a score of 10. Other program scores were based on the number of the program's associated activities relative to the program with the highest number of activities.

**Procedures.** This factor identifies the availability and completeness of procedures associated with program activities. Adequate procedures help ensure efficient and effective operations by documenting an approved process design for each activity. Scoring for this risk factor was based on an analysis of the procedures provided for each program. Programs without documented procedures received a risk score of 10. Programs with inadequately documented procedures received a score of five. Programs with adequate procedures received a risk score of zero.

**LEA expenditures.** This factor assesses the level of state funding to LEAs for which a program has monitoring responsibilities. High expenditures by LEAs increase the financial impact of not effectively and efficiently achieving program objectives. Programs with associated LEA expenditures exceeding \$100 million in Fiscal Year 2012–13 received a risk score of 10. Those programs with monitoring responsibility for LEA expenditures of less than \$100 million received a score of five. Programs without identified LEA expenditures received a score of zero.

**Prior evaluations.** This factor considers recently conducted performance audits and program evaluations. Reviews help ensure achievement of efficient and effective program objectives through external appraisal. Programs that were not identified as having been included in recent Program Evaluation Division evaluations received a score of ten. Programs that were included in a recent evaluation by the Program Evaluation Division received a risk score of zero.

**Operational Risk.** This factor includes areas of concern identified during reviews of information provided from administrative queries and from interviews with operational managers. Identified areas of concern indicated higher risk regarding efficient and effective achievement of program objectives. Programs with more than five identified areas of concern received a risk score of 10. Programs with one to five identified areas of concern received a risk score of five. Programs without any identified areas of concern received a score of zero.

As shown in Exhibit 5, a risk assessment identified the following five administrative programs as receiving the highest total scores, which PED then selected for in-depth evaluation:

1. Transportation Services;
2. Insurance;
3. Plant Operation;
4. School Planning; and
5. Textbook Services.

In summary, DPI is responsible for ensuring the achievement of the public school system's strategic objectives. To meet this requirement, DPI provides services that directly contribute to student outcomes and administrative services that indirectly support the achievement of student outcomes as well as ensure state funding is appropriately used by LEAs.

This evaluation focuses on the efficiency and effectiveness of the administrative services performed by DPI's Office of Financial, Business and Technology Services (FBS). FBS has 18 programs, which provide administrative services to LEAs. To help ensure the cost-effective use of

available resources, the Program Evaluation Division conducted a risk assessment to identify the administrative services programs with the greatest opportunity to realize better utilization of state funding.

### Exhibit 5: Based on a Risk Assessment, Five Administrative Programs Were Selected for a More In-Depth Evaluation

Program	Program Size Score	Complexity Score	Procedures Score	School District Expenditure Score	Prior Evaluation Score	Risk Area Score	Total Score
<b>Insurance</b>	10.00	4	5	5	10	10	44.00
<b>Transportation</b>	3.31	3	0	10	10	10	36.31
<b>Plant Operation</b>	2.09	3	10	0	10	10	35.09
<b>School Planning</b>	1.96	5	10	0	10	5	31.96
<b>Textbook Services</b>	1.52	5	5	5	5	10	31.52
Licensure	3.81	7	5	0	10	5	30.81
Information Analysis	0.75	5	10	0	10	0	25.75
Monitoring and Compliance	0.73	9	5	0	10	5	29.73
Office of Charter Schools	1.27	4	5	0	10	5	25.27
School Reporting	2.01	8	5	0	10	0	25.01
Accounting Controls and Reporting	1.02	8	5	0	10	0	24.02
Child Nutrition	8.86	10	0	5	0	0	23.86
Budget Management	1.70	2	10	0	10	0	23.70
Cash Management	1.32	5	5	0	10	0	21.32
Systems Accounting	1.78	3	5	0	10	0	19.78
Accounts Payable and Child Nutrition Claims	1.70	3	5	0	10	0	19.70
Allotments	1.12	2	0	0	10	5	18.12
Purchasing and Contracts	0.84	8	0	0	0	0	8.84

Source: Program Evaluation Division based on Fiscal Year 2011–12 data provided by DPI.

## Findings

**Finding 1. The Department of Public Instruction's failure to adjust the budget rating formula for school bus operations, limit the number of spare school buses, and monitor school bus replacement part inventories has resulted in the unnecessary expenditure of state funds.**

To service the transportation requirements of nearly 800,000 eligible pupils, LEAs collectively owned and operated 16,264 school buses at the end of Fiscal Year 2012–13.

The objectives of the Transportation Services program are to

- provide a sufficient, safe and reliable system of transportation for eligible pupils in North Carolina's public schools;
- ensure that a durable, safe, well-maintained fleet of school buses is available for this purpose;
- assure an equitable distribution of state funds among LEAs that will promote safety, quality and extent of service as required by state law and State Board policy;
- provide information systems and technical assistance to help LEAs provide transportation service as efficiently as possible without compromising the quality of service; and
- provide for LEA fiscal responsibility, decision-making authority, and accountability.

While the services provided by the school transportation program are administered by LEAs, these services are primarily funded from the State's general appropriations. In Fiscal Year 2012–13, state funding accounted for \$411.8 million (92%) of the \$447.4 million spent by state and local governments to provide school bus transportation services to eligible public school students.

The State also has primary responsibility for funding school bus acquisitions. Local governments are responsible for funding the initial purchase of a school bus; however, state funds are used to replace these buses after they have reached specified mileage or time criteria. DPI estimates that during the six-year period between July 1, 2013 and June 30, 2019, nearly \$405 million will be needed to purchase 4,336 buses to meet the transportation requirements of North Carolina's public school students.

While state funds finance replacement and maintenance of school buses, county boards of education provide facilities and equipment. North Carolina has 100 county boards of education overseeing a total of 115 LEAs.<sup>11</sup> In counties with more than one LEA, school bus maintenance facilities are shared.

**Adjusting the budget rating formula used to fund school bus operations can promote efficiency and produce an annual savings of over \$19 million.** DPI is responsible for allocating state funds to local governments for school transportation services. This allocation is provided via a block grant and helps to pay for drivers, fuel, personnel, parts, tires, contractual

<sup>11</sup> N.C. Gen. Stat. § 115C-249.

services, and other expenditures necessary to transport eligible students to and from school.

To promote efficient school bus operations, DPI has incorporated a budget rating system into the funding allocation formula. The budget rating system evaluates the operating efficiency of each LEA by utilizing two measures: transportation expenditures per student and number of buses per 100 students.

To help ensure the budget rating provides an accurate assessment of school bus transportation operational efficiency, the system adjusts these measures to account for site characteristics the LEA cannot control. These site characteristics include average distance to school, the number of students transported per mile of roadway, and the average elevation. The calculated budget rating is then used to help determine the allotment of state funds apportioned to LEAs for school transportation services.

Incorporating a budget rating system into the school bus transportation services allotment formula has incentivized LEAs to become more efficient. However, improvements in the system can produce greater efficiency in school bus transportation services.

In 2005, the General Assembly directed DPI to contract for a study to determine the effectiveness of the allotment formula for school transportation.<sup>12</sup> The requirements of the consultant were to

- identify key issues faced by local governments, particularly as they relate to inadequacies in the current funding formula;
- evaluate the extent to which the current incentives to minimize expenditures and to minimize the number of buses operated have been effective in achieving an efficient statewide transportation system; and
- recommend an equitable funding process for transportation operations that maintains the appropriate incentives for efficiency.

The results of the study provided several recommendations to better ensure the budget rating system promotes the efficient use of school bus transportation funding.

For example, the study recommended that the 10% buffer in the budget rating formula be reduced to 5%.<sup>13</sup> The buffer is intended to ensure LEAs are not penalized for other site characteristics that were either not identified or could not be quantified. The study determined the buffer should be reduced because the site characteristics used in the formula statistically account for over 95% of the expenditures and use of fleet resources by the LEAs. Consequently, reducing the buffer from 10% to 5% would help ensure that the budget rating more accurately reflects the operational efficiency of school bus transportation services.

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<sup>12</sup> 2005 N.C. Sess. Laws, 2005-276, Section 7.57.

<sup>13</sup> The study also recommended that the methodology used to calculate the budget rating be modified to address inequities in the existing formula whereby certain school districts could increase their expenditures (while holding buses and students transported constant) without hurting their efficiency rating or their budget rating, thereby passing along the bulk, if not all, of those added expenses to the State. DPI staff stated that the department chose not to implement this recommendation because “the revisions are very hard to understand—especially for the school districts—because those revisions (and the reasons for doing the revision) are mathematically complex.”

DPI staff stated that the department has not incorporated the recommendation to reduce the buffer because “there have been numerous challenges for transportation operations in the past decade—not the least of which is the rising cost of fuel.” However, fuel cost is not included as a site characteristic in the budget rating formula, and the overall appropriation for school bus transportation services each year reflects the estimated costs for fuel.

The Program Evaluation Division estimates total appropriations could be reduced by \$19.3 million by adjusting the school bus funding formula over the next five fiscal years to reflect a reduction in the budget rating buffer from 10% to 5% (Appendix A outlines the methodologies PED used for this and other analyses).<sup>14</sup> Implementation of the study recommendation to reduce the buffer from 10% to 5% would only affect the funding levels for LEAs with inefficient school bus transportation services.

In Fiscal Year 2012–13 four LEAs had an unadjusted budget rating of 95% or above. Funding for these LEAs with efficient operations would not be affected by a reduction in the buffer to 5%. Consequently, a reduction in the budget rating buffer would incentivize LEAs with inefficient school bus transportation services to improve performance. Appendix B provides a listing of the budget rating for each LEA in Fiscal Year 2012–13.

**The State can save \$3.1 million by reducing the number of spare buses to the minimum needed to effectively achieve operational objectives.** At the end of Fiscal Year 2012–13 there were 16,264 school buses in the statewide inventory. However, in Fiscal Year 2012–13 only 13,414 (82.5%) of school buses were used regularly. An additional 2,337 buses (17.4%) were considered part of the spare fleet inventory and only used when the normally scheduled buses were unavailable.<sup>15</sup> The remaining 513 buses were reported as inactive and not available for use.<sup>16</sup>

While the number of school buses cannot be strictly limited to those in regular use because of unavoidable events such as breakdowns and accidents, the number of additional buses maintained in the inventory could be reduced to the minimum required to ensure students are safely and reliably transported to and from school. For example, instead of using spares to cover buses taken off route for scheduled maintenance during normal route hours, scheduled maintenance could be performed during times that will not interfere with operating schedules, reducing the number of spare buses that will need to be maintained in the inventory.

DPI has established a target ratio of spare buses to regular buses of 10%. However, many counties exceed this target ratio. As shown in Exhibit 6, the percentage of spares to regularly used school buses exceeded 20% for 8 counties. While factors such as manufacturer’s warranty requirements may require some counties to exceed the target spare bus inventory level, the overall statewide inventory of school buses should be reduced.

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<sup>14</sup> The estimated savings is based on the FY 12–13 State funding for school bus transportation expenditures.

<sup>15</sup> Spare buses include 479 ‘parked’ buses, which are buses authorized for regular use, but not being utilized on a daily basis, and 1,858 buses that have been replaced by the State with a new bus and are authorized as a spare bus when a regular route bus is not available.

<sup>16</sup> Examples of school buses classified as inactive include: wrecked/cannibalized vehicles and vehicles for sale or sold.



## Exhibit 6

The Ratio of Spare Buses to Regularly Used Buses Was More Than 20% for 8 Counties

LEA	Percent Spares
Currituck	41%
Warren	34%
Tyrrell	30%
Mitchell	28%
Pamlico	25%
Johnston	24%
Guilford	21%
Wilkes	21%

Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI.

Reducing the number of spare buses to no more than 10% of the total number of regularly used buses would generate additional revenue from the sale of excess buses and help to reduce school bus transportation expenses. Based on the statewide target ratio of spare buses to regularly used buses (10%), reduction of the necessary statewide inventory would allow for the sale of 996 buses. The estimated revenue generated from these sales is \$3.1 million. The funds generated from the sale of these surplus vehicles could then be returned to the state fund to purchase new (replacement) buses and avoid those costs for one year. In addition, reductions in the number of school buses to optimum levels may also help to reduce school bus operating expenses associated with the cost of performing statutorily-required safety inspections.

**Improved inventory management for school bus replacement parts can reduce state funding by \$3 million.** In Fiscal Year 2012–13, counties used \$27.5 million in state funds to purchase school bus replacement parts. At the end of FY 2012–13, the value of the inventory of school bus replacement parts was \$14.1 million.

Effective management of school bus replacement parts helps ensure student bus transportation services are safe, reliable, and efficient. Minimizing the amount of time school buses are out of service also minimizes service disruptions and reduces the number of vehicles required to support the State's student transportation needs.

LEAs should have the minimum number of parts and supplies on-hand necessary to operate the fleet efficiently. Insufficient parts inventories can result in higher maintenance downtime for buses and the need to maintain extra spare buses. Conversely, excessive parts inventories represent inefficient use of state resources.

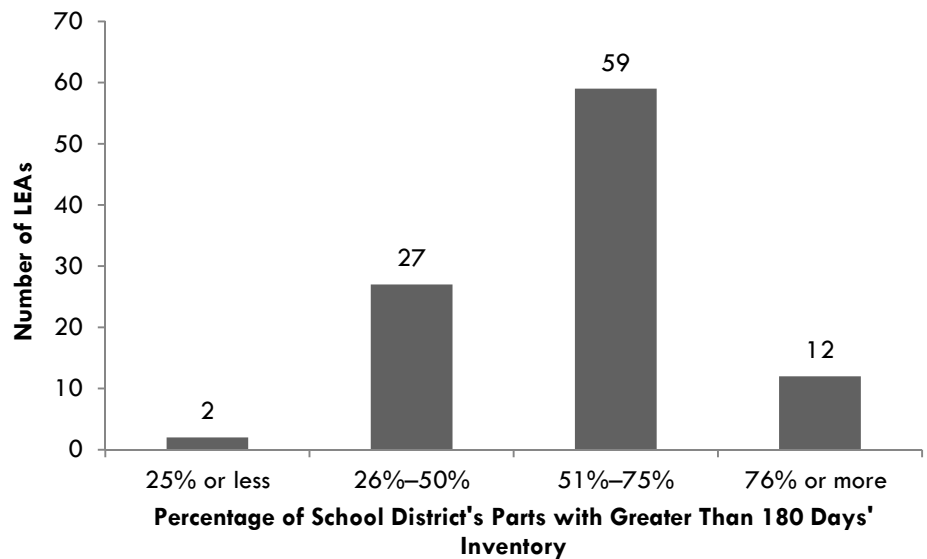
The Program Evaluation Division analyzed the effectiveness of the management of school bus replacement parts by comparing each county's ending inventory levels with the corresponding annual usage for replacement parts with the highest annual sales. For example, a replacement part with annual usage of 100 units and an ending inventory of 50 units would have six months of inventory. The number of days of inventory measures how fast LEAs are using and replenishing their

inventories; lowering the number of days of inventory supply reduces the amount of inventory in storage.

County school bus maintenance facilities have excessive inventories for many types of replacement parts. As shown in Exhibit 7, at the end of Fiscal Year 2012–13, 12 of the 100 county school bus maintenance facilities had inventory levels exceeding 180 days for more than 75% of their high-value replacement parts, while 59 additional facilities had inventory levels exceeding 180 days for more than half of such parts. Although concerns regarding the delivery times for replacement parts contribute to these high inventory levels, implementation of better procurement and inventory management practices should enable county school bus maintenance facilities to reduce replacement part inventories without adversely impacting performance.

### Exhibit 7

Inventory Levels for 12 of the 100 County School Bus Maintenance Facilities Were Greater Than 180 Days for More Than 75% of Their High Value Replacement Parts



Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI.

Reducing the inventory of replacement parts to the minimum necessary to efficiently operate the fleet of school buses would temporarily reduce the costs associated with replacement part purchases. For instance, a reduction in the statewide average days of inventory for these 100 high-value parts to 30 days would result in an estimated \$2.98 million reduction in state funding requirements. The associated cost savings would be attributable to the temporary reduction in replacement part purchases until the target inventory is reached.

**Increased use of term contracts for replacement parts can help to reduce state funding for replacement parts.** Term contracts establish suppliers and prices for selected goods and services for a period of time without guaranteed purchase quantities. Term contracts are also used to consolidate the purchasing requirements of multiple entities into one agreement.

The purpose of term contracting is to achieve increased value from goods and services purchased. This increased value is achieved by leveraging the volume of total purchases of selected goods and services made by all of the participating entities in order to obtain lower prices. Vendors are

encouraged to provide lower costs in exchange for assurances that purchases made by participating entities for the associated goods or services will utilize the selected vendor.

In addition to providing increased value for purchased goods and services, the use of term contracts improves the efficiency of the procurement process. Participating entities can reduce procurement costs for commonly purchased goods and services through utilization of term contracts because costs associated with competitive bidding requirements are significantly reduced or eliminated.

Establishment of term contracts with specified delivery requirements can help to improve inventory management for school bus replacement parts. By establishing term contracts with specified delivery requirements for replacement parts with large expenditures, counties will be able to make more accurate determinations regarding appropriate inventory levels.

The Department of Administration (DOA) uses the state government's aggregated market share to attract more economical prices for term contracts for selected parts and services state entities frequently purchase.<sup>17</sup> North Carolina law requires all state agencies to use term contracts established by DOA. State law also requires North Carolina's public universities and community colleges to use term contracts but allows for purchases from other sources that offer a lower price.<sup>18</sup>

**LEAs may purchase bus parts from term contracts established by DOA, but state law does not require LEAs to use term contracts and DPI does no monitoring to identify potential savings.** DOA has established term contracts for 11 types of replacement parts with high annual sales volume. In Fiscal Year 2012–13 the sales of these 11 replacement parts with state term contracts totaled \$6.15 million. DPI does not monitor the utilization of these term contracts by LEAs. Consequently, DPI cannot determine the amount of savings that can be attributed from these term contracts. Increased utilization of available term contracts for school bus replacement parts can reduce the amount of state funding for student transportation services. The General Assembly can improve the efficiency of school bus transportation services by requiring LEAs to use existing term contracts. In addition, state funding for school bus transportation services can be further reduced through establishment of term contracts for all replacement parts with high sales volume.

**DPI has not conducted an evaluation of the impact of the change in the school bus replacement schedule.** School bus replacement decisions affect the achievement of Transportation Services program objectives. Specifically, the school bus replacement schedule affects whether the program cost-effectively provides a safe and reliable system of transportation for eligible pupils in North Carolina's public schools. It is not cost-effective to hold buses in service past the point when maintenance costs begin to outweigh their resale values. In addition, keeping school buses beyond the optimum replacement schedule may also require the

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<sup>17</sup> As specified in NC Administrative Code, DOA Purchase and Contracts, Subchapter 5B, Section .1100.

<sup>18</sup> N.C. Gen. Stat. § 115D-58.14.

State to maintain a larger fleet to accommodate buses that are undergoing repair work.

In 2013, the General Assembly changed the guidelines for replacing school buses. School buses are now eligible for replacement when they are either 20 years old or have been in operation for 250,000 miles.<sup>19</sup> The previous replacement cycle required buses to be driven for only 20 years or 200,000 miles before being replaced. This change in the replacement guidelines was intended to reduce expenditures associated with the replacement of school buses.

However, the Program Evaluation Division was unable to determine the overall impact on school bus transportation operating costs associated with this change in the school bus replacement schedule. To determine the impact of this change in the school bus replacement schedule, DPI should conduct an analysis of the life-cycle costs of owning and operating a school bus. The analysis should consider factors such as acquisition, fuel, maintenance, and administrative costs. In addition, the analysis should consider rehabilitating buses rather than procuring new buses and whether the estimated cost of body or mechanical repairs will exceed fair market value. Such an analysis helps ensure replacement decisions support the efficient achievement of program objectives.

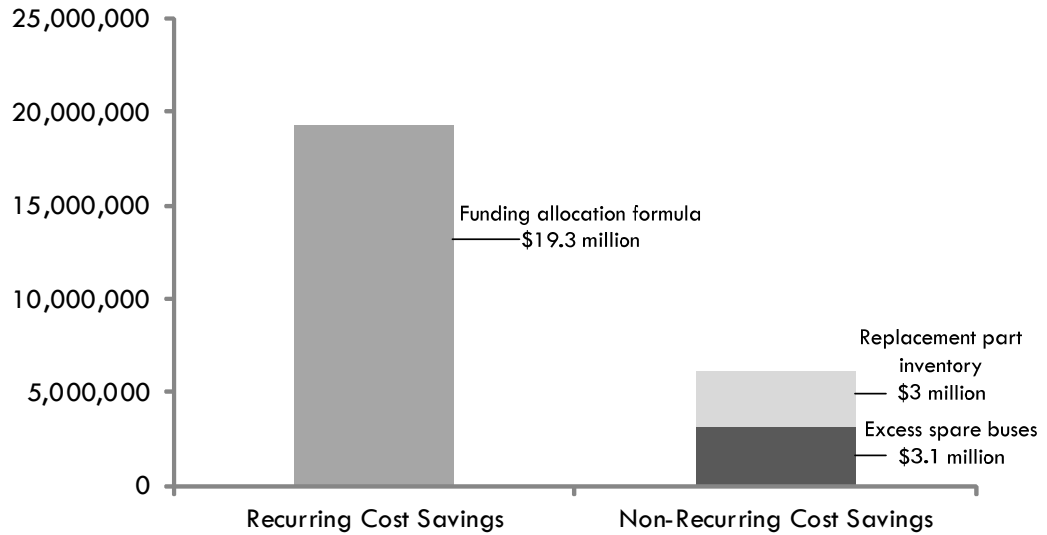
In summary, state funding for the School Bus Transportation program can be reduced without adversely affecting the quality of services. As shown in Exhibit 8, improvements in operating efficiency can result in \$19.3 million in annual cost savings. In addition, the State can realize a one-time savings of \$6.1 million through improved management of spare bus and replacement part inventories.

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<sup>19</sup> As specified in 2013 N.C. Sess. Laws, 2013-360, Section 8.11.(a). In addition, the legislation specified that: (1) A bus that has been operated for less than 150,000 miles is not eligible for replacement regardless of its model year; and (2) A bus that is less than 15 years old by model year is not eligible for replacement until the bus has been operated for 300,000 miles. The legislation also specified that: (1) The State Board of Education may authorize the replacement of up to 30 buses each year due to safety concerns regarding the bus or mechanical or structural problems that would place an undue burden on a local school administrative unit, and (2) A local school administrative unit shall receive an incentive payment of two thousand dollars (\$2,000) at the beginning of each school year for each bus that it continues to operate although the bus is eligible for replacement, until the bus is 23 years old by model year. The local school administrative unit may use these bonus funds for the additional maintenance costs of operating buses with higher mileage or for any other school purpose.

**Exhibit 8**

School Bus Transportation Funding Can Be Reduced Without Adversely Impacting Safety and Reliability



Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI, and Fiscal Year 2012–13 data provided by DOA.

**Finding 2. The Department of Public Instruction’s inadequate oversight of school bus inspections and scheduled maintenance may be compromising school bus safety and the efficient use of resources.**

**In Fiscal Year 2012–13 more than 1,000 school buses were operated while out of compliance with statutorily-required bus safety inspection requirements.** In accordance with North Carolina law, DPI requires each school bus be inspected every 30 days for mechanical or safety-related defects which may affect the safe operation of the bus.<sup>20</sup> Compliance with this requirement helps DPI achieve the objectives of the school transportation program by helping ensure students are provided with safe and reliable transportation and that school buses are durable, safe, and well-maintained.

To help ensure compliance with the school bus safety inspection requirement, LEA maintenance employees are provided a 10-day advance notification prior to the due date of a 30-day inspection.<sup>21</sup> Despite this advance notification, the Program Evaluation Division identified numerous instances of non-compliance with school bus safety inspection requirements.

**Specifically, the Program Evaluation Division found in Fiscal Year 2012–13 that 1,076 different school buses were in operation a total of 3,164 times while not in compliance with the 30-day inspection requirement.** Instances of non-compliance with the statutory school bus inspection requirement were identified by comparing school bus inspection information with associated fueling information for each school bus. These

<sup>20</sup> As specified in N.C. Gen. Stat. § 115C-248(a).

<sup>21</sup> The system used for school bus fleet management is the Business Systems Information Portal (BSIP). BSIP is an online information system through which 100 school bus garages are provided access to their fleet maintenance data. The bus garages share the system with the Department of Transportation and the State Highway Patrol.

identified instances of non-compliance with school bus safety inspection requirements occurred in 73 of the 100 counties in North Carolina.

Non-compliance with school bus safety inspection requirements can adversely impact both the safety and reliability of school bus operations. School bus safety inspections can help limit the number of accidents and associated injuries to students and employees by detailing conditions that would result in unsafe driving conditions. In addition, school bus safety inspections help improve the reliability of school bus operations by detecting any and all items that have failed, or could reasonably be expected to fail before the next regularly scheduled inspection.

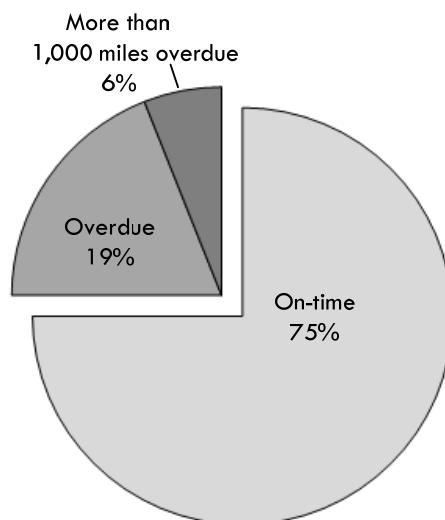
**Approximately 25% of all scheduled maintenance activities were performed after the recommended mileage.** Scheduled maintenance is maintenance that is scheduled ahead of time based on the mileage of the bus and not as a result of failure or breakdown. Adherence to school bus maintenance schedules helps to ensure resources are used efficiently and school buses are maintained in safe operating condition.

Scheduled maintenance activities help to achieve the objectives associated with providing safe, reliable, and efficient school bus transportation services. To help ensure this goal is achieved, the information management system used for preventative maintenance notifies LEA maintenance staff 900 miles prior to the due mileage.

However, as shown in Exhibit 9, Program Evaluation Division analysis determined that in Fiscal Year 2012–13 counties performed 9,103 of 36,685 (25%) scheduled maintenance activities after the recommended mileage had been eclipsed. Of these overdue maintenance inspections, 2,185, or 6% of the total number of scheduled maintenance activities, were performed more than 1,000 miles after the recommended mileage.

**Exhibit 9**

Twenty-Five Percent of All Scheduled Maintenance Activities Were Performed After the Recommended Mileage



Source: Program Evaluation Division based on Fiscal Year 2012–13 data provided by DPI.

**DPI inspections of county school bus maintenance facilities are not effectively contributing to safe and reliable school bus operations.** In Fiscal Year 2012–13, DPI utilized three field transportation consultants to inspect each county school bus maintenance facility. The purpose of these annual inspections is to provide LEA superintendents with feedback regarding the condition of the fleet and fleet maintenance processes. DPI's inspection process requires that 10% of the buses are inspected. The bus inspection performed by DPI is the same as the statutorily required bus safety inspection.

DPI inspections of county school bus maintenance facilities can be improved through greater use of available maintenance data to identify counties deficient in performing scheduled maintenance activities. Each of the 100 county school bus maintenance facilities is required to enter maintenance data into the Business Systems Information Portal (BSIP). In addition, BSIP provides information on replacement part usage and purchases.

This information can be used by DPI to monitor compliance with school bus safety inspections and adherence to preventative maintenance schedules. DPI can thusly identify county school bus maintenance facilities with ineffective processes that can most benefit from the services provided by the department's field transportation consultants. In addition, DPI's on-site inspection process can be used to verify school bus maintenance information entered into BSIP is a reliable monitor of the performance of county school bus maintenance facilities.

In summary, DPI is not monitoring and ensuring LEAs are performing school bus safety inspections in accordance with statutory requirements. In addition, DPI is not monitoring and ensuring school bus maintenance activities are performed as scheduled.

**Finding 3. Since Fiscal Year 2008–09, textbook orders processed by the Textbook Services program have declined significantly, but staffing levels and warehouse space allocated to the program have not been adjusted to reflect the reduced workload.**

In accordance with the North Carolina constitution, state law requires that a system of free public schools shall be provided for all students.<sup>22</sup> To help ensure students are provided a system of free public education, North Carolina law requires that public school students are provided with free basic textbooks.<sup>23</sup> To meet this requirement, in Fiscal Year 2012–13 the General Assembly appropriated \$22.8 million for textbooks and other instructional materials.<sup>24</sup>

The Textbook Services program within DPI is responsible for acquiring adopted textbooks, and for administering a system to distribute these textbooks to students.<sup>25</sup> In Fiscal Year 2012–13 the Textbook Services

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<sup>22</sup> N.C. Gen. Stat. § 115C-1.

<sup>23</sup> N.C. Gen. Stat. § 115C-96.

<sup>24</sup> In addition, local governments expended \$6.1M in FY 12–13 to purchase textbooks and instructional materials for K–12 public school students.

<sup>25</sup> N.C. Gen. Stat. § 115C-96.

program was authorized 10 staff and expended \$549,250. The Textbook Services program utilizes a state-owned warehouse in Raleigh, North Carolina to receive and process adopted textbook shipments for subsequent transfer to appropriate LEAs.

SBE is responsible for the implementation of a Basic Education Program, which includes a description of the education programs to be offered to every child in the public schools. In addition, the Basic Education Program is required to include a listing of course requirements and the associated textbooks for use in providing the curriculum.<sup>26</sup> The textbooks for each course in the Basic Education Program curriculum are adopted by SBE through a process administered by the North Carolina Textbook Commission.<sup>27</sup>

**Unlike the optional use of statewide contracts for school bus parts, contracts established by the Textbook Services program for the purchase of adopted textbooks help to reduce the costs.** The Textbook Services program is responsible for establishing contracts to purchase adopted textbooks. These contracts help to reduce the overall cost of textbooks by ensuring the State realizes cost savings associated with its large purchasing volume and distribution process. Each contract stipulates that individual textbook prices will be equal to the lowest offered to any other entity nationally, and also include a 6.25% discount in recognition of the economies associated with a single shipment point for all adopted textbook purchases.

Each contract stipulates that orders for adopted textbooks receive free shipping. LEAs are responsible for establishing the terms and conditions for their purchases of non-adopted textbooks. DPI reported that LEAs with small student enrollments may not be able to realize the cost savings associated with contracts for non-adopted textbooks because their enrollments do not warrant the discounts associated with large volume purchases. North Carolina law authorizes LEAs to select, procure, and use textbooks that have not been adopted by SBE.<sup>28</sup> LEAs are responsible for performing all of the activities associated with the acquisition and distribution of textbooks that have not been adopted by SBE, though they can use state funding to purchase such textbooks.

During the five-year period from Fiscal Year 2008–09 through Fiscal Year 2012–13, the number of textbook orders processed by the Textbook Services program declined by nearly 79%. As shown in Exhibit 10, textbook orders processed by the Textbook Services program decreased from 15,100 in FY 2008–09 to 3,166 in FY 2012–13.

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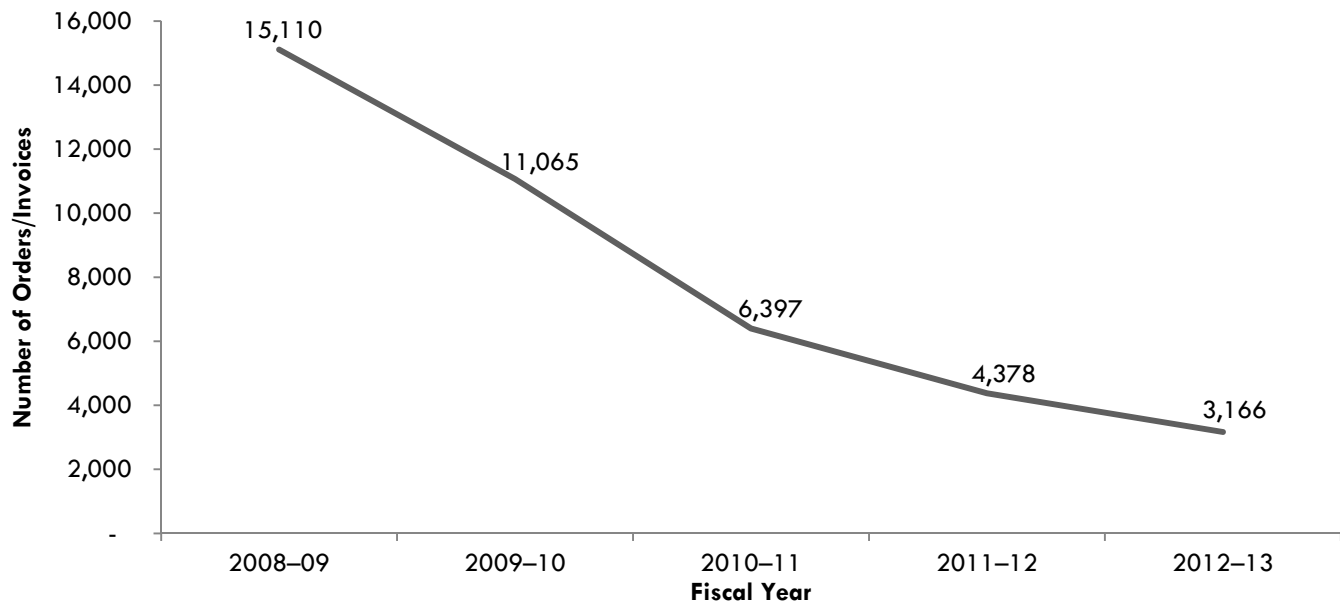
<sup>26</sup> N.C. Gen. Stat. § 115C-81.

<sup>27</sup> N.C. Gen. Stat. §§ 115C 87, 102.

<sup>28</sup>N.C. Gen. Stat. § 115C-98.



## Exhibit 10: Textbook Orders Decreased by 79% Between Fiscal Years 2008–09 and 2012–13



Source: Program Evaluation Division based on data from Fiscal Years 2008–09 to Fiscal Year 2012–13 provided by DPI.

The Program Evaluation Division identified three factors that have contributed to the decrease in the number of textbook orders processed by the Textbook Services program. First, legislative appropriations for textbooks and instructional materials have declined by 77% from \$100.7 million in Fiscal Year 2008–09 to \$22.8 million in Fiscal Year 2012–13.<sup>29</sup>

Second, the number of purchases of non-adopted textbooks has increased since Fiscal Year 2008–09. Specifically, in Fiscal Year 2008–09, \$9.1 million (15%) of the \$60.4 million spent by LEAs was for the purchase of non-adopted textbooks, while in Fiscal Year 2012–13, \$14.9 million (58%) of the \$25.6 million spent on textbooks was associated with the purchase of non-adopted textbooks.

The absence of SBE-adopted textbooks for some courses of study has contributed to the increase in non-adopted textbook purchases by LEAs. For example, DPI reported there are currently no adopted books associated with the science curriculum area of the Basic Education Program. In addition, adopted books do not reflect current standards in some curriculum areas, such as Common Core Mathematics. As a result, LEAs may be purchasing non-adopted textbooks because the adopted textbook for the associated curriculum does not contain the content material needed to teach the course.

Third, the public school system is planning to transition from traditional textbooks to digital learning, which should result in less demand for Textbook Services program resources. In 2013, the General Assembly expressed its intent to transition from funding textbooks to funding digital

<sup>29</sup> As specified in N.C. Gen Stat. § 115C-105.25, State funds allocated for textbooks may be transferred for the purchase of instructional supplies, instructional equipment, or other classroom materials.

learning in public schools by 2017.<sup>30</sup> To help ensure this transition from traditional textbooks to digital learning is effectively implemented, the General Assembly also authorized DPI to use up to \$1 million to develop a plan to transition funding from textbooks to digital materials.<sup>31</sup> This transition should result in a reduction in the number of traditional textbooks used by students and serve to further reduce the resources needed by the Textbook Services program.

However, the staffing levels and warehouse space allocated to the Textbook Services program have not changed to reflect the reduction in workload. In addition, the state-owned warehouse space allocated to the Textbook Services program has not changed during this five-year period.

**Due to decreased demand, the objectives of the Textbook Services program can be achieved with reduced staff and warehouse space.**

Annual staffing expenditures for the Textbook Services program can be reduced by \$254,459 without adversely impacting operational effectiveness. Based on the decline in the number of adopted textbooks and the corresponding reduction in orders processed, the Program Evaluation Division has determined that funding for six staff can be eliminated without impacting the operational effectiveness of the program. Specifically, these six staff would be two Accounting Technicians, three Stock Clerks, and one Processing Assistant. This reduction in staff will produce approximately \$254,459 in annual savings.

In addition, the Textbook Services program can meet its operational requirements with less warehouse space. In Fiscal Year 2012–13, the state-owned warehouse used by the Textbook Services program had 45,285 square feet of usable storage space. However, not all of this space was used to process textbook requisitions. In Fiscal Year 2012–13, 8,950 square feet of this available storage space was used by other entities within DPI or by other state agencies to meet their storage requirements. Meanwhile, some of the remaining storage space remained unused the entire fiscal year. The low utilization rate of available warehouse space is due to the reduction in the number of textbook orders processed by the Textbook Services program. Reallocation of unneeded textbook warehouse space to other state agencies located in Wake County would generate cost savings as a result of these agencies not having to pay for leased space.

In summary, the number of textbook orders processed by the Textbook Services program has declined by 79% during the last five fiscal years. Trends in state appropriations, utilization of non-adopted textbooks, and the use of digital learning materials have contributed to this reduction in the demand for services provided by the Textbook Services program. Consequently, staffing levels and the associated warehouse space should be reduced to reflect current operational requirements.

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<sup>30</sup> 2013 N.C. Sess. Laws, 2013-12.

<sup>31</sup> 2013 N.C. Sess. Laws, 2013-360.

**Finding 4. The Department of Public Instruction has insufficient information to determine the cost-effectiveness and continued need for the services provided by the Plant Operation and the School Planning sections.**

As specified in North Carolina law, LEAs are responsible for the funding, operation, and maintenance of public school facilities.<sup>32</sup> However, both the School Planning and Plant Operation sections use moneys from the State's Lottery Fund to provide technical consulting and design services to assist LEAs with their facility requirements.

**The objective of the Plant Operation section is to help LEAs improve the cost-effectiveness of public school facility maintenance activities.** In Fiscal Year 2012–13, the Plant Operation section was allocated 10 staff and expended \$848,083 to provide these services to LEAs. The Plant Operation section is funded with proceeds from the State's Lottery Fund, and is primarily staffed by professional engineers with expertise in structural, civil, electrical, mechanical, and environmental engineering.

In Fiscal Year 2012–13, DPI reported that the Plant Operation section performed 170 consultations. DPI reported that these consultations resulted in \$889,350 in benefits to LEAs. DPI attributed these savings to estimated costs LEAs would have had to pay for these services from the private sector.<sup>33</sup>

DPI reported that during the five-year period from July 1, 2008 through June 30, 2013, the Plant Operation section provided 778 consulting engagements for 85 LEAs. These consulting engagements were not evenly distributed among the LEAs. During this five-year period, 30 LEAs were not provided with any consulting services. Of those receiving consulting services during this period, 25 of the 115 LEAs (22%) received 582 of the 778 consulting engagements (75%) provided by the Plant Operation section.

In addition, the Program Evaluation Division found that most of these consulting engagements were provided to low-wealth LEAs.<sup>34</sup> Specifically, 87% of these consulting engagements were provided to low-wealth school districts, which comprise 69% of the school districts in North Carolina.

**DPI does not maintain sufficient information to evaluate the effectiveness of the services provided by the Plant Operation section.** It is unclear whether the value of the benefits received by LEAs from the Plant Operation section exceeds the cost to the State for these services. Also, DPI does not charge LEAs for services or calculate the cost to provide these services. Consequently, there is insufficient information to evaluate whether these services can be more cost-effectively provided by private engineering consulting firms, or whether these funds could be better used to perform other facility and operations activities. In addition, without information on the costs and time required to provide these services, the

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<sup>32</sup> N.C. Gen. Stat. § 115C.408.

<sup>33</sup> The estimated cost savings provided by DPI was based on private consulting fees, to be 10% of the total cost of the associated construction project.

<sup>34</sup> As specified in the Allotment Policy Manual, low-wealth public schools are located in counties that do not have the ability to generate revenue to support public schools at the state average level.

Program Evaluation Division could not determine whether Plant Operation resources were being fully utilized.

**The objective of DPI's School Planning section is to assist LEAs in the planning and design of new school facilities.** Many of the activities performed by the School Planning section are statutorily required.<sup>35</sup> These statutorily required activities include:

- **Collection and compilation of LEA long-range facility need.** DPI assists LEAs with the development of legislatively required long-range plans for school facility needs by providing a specialized computer program to collect, collate, and disseminate information about statewide school facility needs.
- **Portable classroom plan approval.** DPI is legislatively required to review and approve the use of temporary, re-locatable, or mobile classrooms to help ensure that each proposed unit complies with all applicable requirements of the North Carolina State Building Code and of the building and electrical codes applicable to the area in which the school is located.
- **Build-versus-renovate analysis review.** As a condition of constructing a new school building, LEAs are legislatively required to submit to DPI an analysis that compares the costs and feasibility of constructing the new building as opposed to renovating the existing building. Upon submission by the LEA, the analysis is then forwarded by DPI to the Historical Commission.<sup>36</sup>
- **Building plan review.** Using best practices and references such as the NC Public School Facilities Guidelines, LEAs are legislatively required to develop and submit building construction plans for new buildings to DPI for its review and comments. In addition, when state funds are planned to be used, DPI is legislatively required to review the plans for school building repairs or equipment.
- **Develop and issue energy guidelines.** DPI is legislatively required to develop and maintain the Energy Guidelines for School Design and Construction for use by LEAs to help reduce the cost of operations on local and state budgets.
- **Science lab plan approval.** Before applying for a certificate of occupancy of any new middle or high school, LEAs are legislatively required to have DPI review and approve plans for the science laboratory areas.
- **Establish and maintain facility clearinghouse.** DPI is legislatively required to establish and maintain a central clearinghouse of school prototype designs for distribution to LEAs.

Although not statutorily required, the School Planning section also provides professional reviews of LEA-owned facilities as requested. These professional reviews include technical assistance relating to specific issues of school design and funding. During the five-year period from July 1,

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<sup>35</sup> N.C. Gen. Stat. § 115C-521.

<sup>36</sup> As described in N.C. Gen. Stat. § 121-12, the Historical Commission is responsible for the protection of national and state historic properties.

2008 through June 30, 2013, the School Planning section completed nine such professional reviews for LEAs.

School facility construction services are supported by both the General Fund and the State Lottery Fund. In Fiscal Year 2012–13, the School Planning section was allocated eight staff and expended \$825,195. State Lottery funds were used to fund \$540,704 of these expenditures, with the remaining \$284,491 funded from the General Fund. DPI reported that approximately five staff utilized \$500,000 of state funding to perform statutorily required activities. In addition to professional reviews of LEA facilities, the remaining funding was utilized by DPI to perform other non-statutorily required activities including:

- data collection on school spaces, capacity, and construction;
- preparation, distribution, and compilation of miscellaneous surveys; and
- training of LEA staff.

**DPI does not collect sufficient information to determine the effectiveness of their reviews of facility construction plans.** The School Planning section is required to review and provide comments on LEA facility construction plans for all new buildings, as well as plans for portable classroom and science laboratory areas. The objective of these construction plan reviews is to help ensure facilities owned by LEAs are adequate, functional, safe, long-lasting, and efficient.

However, LEAs are not required to incorporate DPI review comments into their plans. In addition, DPI reported it could not provide the number of review comments associated with each building plan review and that it does not know how many of these review comments were incorporated into each associated final building plan. Without an effective process to determine the contribution of these reviews toward achievement of intended objectives, the General Assembly cannot determine the effectiveness of these services.

LEAs are also not charged for any of the services provided by the School Planning section.<sup>37</sup> DPI reported that it does not have a process to monitor the time and resources required to produce these services because LEAs are not charged for any of the services it provides. Without a process to monitor the time and resources required to produce these services, LEAs and the legislature cannot determine whether DPI is the most cost-effective service provider.

**DPI does not maintain sufficient information to evaluate the effectiveness of the process to determine whether existing schools should be replaced or renovated.** North Carolina law requires school districts, as a condition of constructing a new school building, to submit an analysis that compares the costs and feasibility of erecting the new building versus renovating the existing building. The analysis is required to be submitted to DPI, which submits it to the Historical Commission.

Upon receipt of the analysis, the Historical Commission is responsible for providing LEAs with recommendations regarding the use and disposition of

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<sup>37</sup> DPI reported that local school districts are requested to pay for associated travel expenses.

properties listed in the National Register of Historic Places established pursuant to P.L. 89-665. However, the Historical Commission reported that no LEA has accepted any of its recommendations to renovate and reuse a historic school.

The Historical Commission also reported “by the time an analysis gets to the Historical Commission, the decision to demolish a building has pretty much been made by the district and recommendations by the Commission are dismissed outright.” In addition, the Historical Commission reported that “as districts are more often turning to architects to complete the analysis, it is adding cost to the planning process seemingly without meaningful consideration of the value of a historic school’s place in the community and how it might provide educational or other community benefits.”

DPI does not collect sufficient information to determine the cost-effectiveness of this legislative requirement. Specifically, DPI does not monitor the cost incurred by LEAs, the Historical Commission, and DPI to satisfy this statutory requirement. In addition, DPI does not collect information regarding the impact of the analysis and associated recommendations provided to LEAs by the Historical Commission.

In summary, DPI does not collect sufficient information to determine whether the services provided by the Plant Operation and School Planning sections are cost-effective. Neither of these sections collects information on the cost or time associated with services provided to LEAs. Without this information, a determination of the cost-effectiveness of these services could not be established.

**Finding 5. DPI is not ensuring that local school administrative units have effective workers’ compensation programs that minimize program costs.**

North Carolina law requires the State provide workers’ compensation benefits to all state-funded public school employees.<sup>38</sup> Workers’ compensation benefits afforded to state-funded school employees are paid through the Workers’ Compensation Self-Insured Fund (WC Fund).<sup>39</sup> Workers’ compensation benefits for locally-funded public school employees are the responsibility of the LEA and are covered under the LEA’s locally funded provider.<sup>40</sup>

In Fiscal Year 2012–13, \$49.2 million in state funds was used to pay workers’ compensation benefits to state-funded public school employees. As shown in Exhibit 11, these state-funded payments were primarily attributable to either medical expenses or indemnity benefits for lost wages. Specifically, in Fiscal Year 2012–13, \$26.2 million (53%) in payments was related to medical-related expenses while \$20.6 million

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<sup>38</sup> N.C. Gen. Stat. § 115C-337.

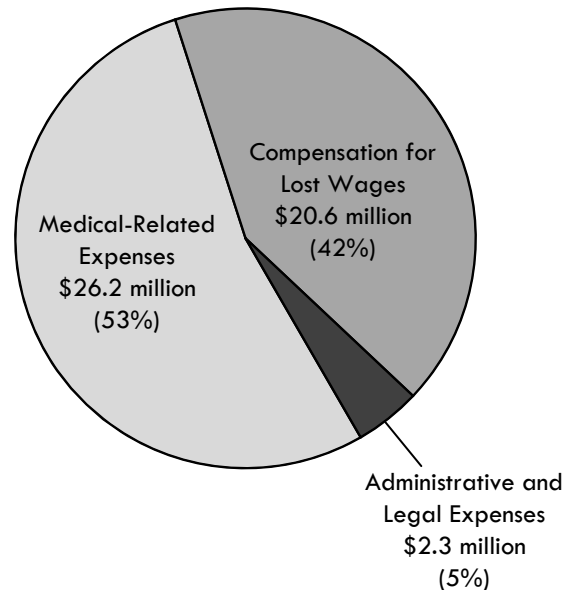
<sup>39</sup> The Workers’ Compensation Fund is retained in the State Treasury and is the source of funds for workers’ compensation-related claim payments.

<sup>40</sup> Workers’ Compensation benefits for employees paid from both local/special and State funds are considered “split-funded” and benefits are provided under the Locally Funded Provider and WC Fund in proportion to the payments required from the respective State and local funds.

(42%) was associated with lost work time.<sup>41</sup> Other expenses derived from costs associated with legal and administrative expenses.

## Exhibit 11

Workers' Compensation Benefit Payments Are Primarily Attributable to Medical Expenses and Indemnity Benefits for Lost Wages



**Total State-funded Expenses: \$49.2 million**

Source: Program Evaluation Division based on data provided by DPI.

An effective workers' compensation program should have two primary objectives:

- **Loss prevention.** Preventing workplace injuries before they occur helps reduce costs and improve productivity. In addition to costs directly associated with lost wages and medical expenses, workplace injuries also have indirect costs associated with the time to administer claims and train new or replacement employees.
- **Return to work.** Getting injured employees back to work as soon as possible is another primary objective of an effective workers' compensation program because it can serve to reduce the overall costs of the program. In addition to reducing workers' compensation benefit costs associated with payments for lost wages, bringing employees back to work as soon as possible has indirect benefits associated with increased productivity because it limits the chances that work habits and working relationships degenerate.

An effective loss prevention program promotes safe, healthful work conditions for all employees while reducing the costs associated with workers' compensation claims. A well-designed loss prevention program should include a loss prevention policy and associated procedures. A loss prevention policy should prioritize safety and establish that supervisors and employees are responsible and accountable for safe work practices and procedures. Well-designed loss prevention procedures should include the following attributes:

<sup>41</sup> Under N.C. Gen. Stat. § 97-29, employees receive 66 2/3% of their average weekly salary from the State Workers' Compensation Fund, paid directly to the employee.

- assigns supervisors the responsibility and authority to develop safe work procedures;
- recognizes and corrects physical hazards;
- trains employees and enforces safety rules;
- holds supervisors accountable for identifying, eliminating or controlling hazards;
- investigates all accidents that may have or did result in property damage and injury;
- maintains accurate records of accidents to identify ways to reduce the risk of future accidents and measure the results of these efforts;
- trains supervisors and employees in safe work procedures and job hazards; and
- schedules safety meetings or group safety training.

Effective return-to-work programs can also serve to reduce workers' compensation program costs. Workers' compensation return-to-work programs consist of creating ways to bring injured employees back to work as soon as possible following their injuries, then carefully monitoring their progress until they return to full duty. An adequate return-to-work program should include the following attributes:

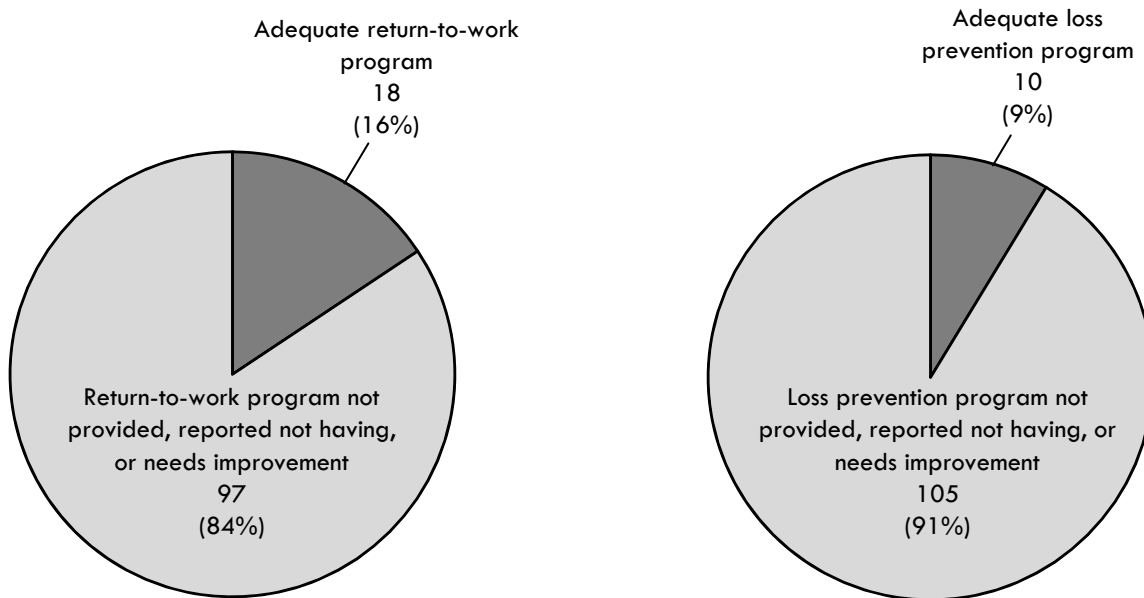
- designation of a Return-to-Work Coordinator to serve as the liaison with medical provider, employer and employee;
- description of duties and responsibilities of Return to Work Coordinator, employer supervisor, and employee; and
- notification, either through interview or in writing, of employee rights and responsibilities.

**Most LEAs do not have well-designed procedures for helping reduce the number of injuries resulting in a workers' compensation claim or for returning injured employees back to work as soon as possible.** In response to a request from the Program Evaluation Division, 83 of the 115 LEAs provided procedures for helping prevent workplace-related injuries and resulting workers' compensation claims. As shown in Exhibit 12, the Program Evaluation Division determined that only 10 of these LEAs have procedures that include all of the attributes of a well-designed workers' compensation loss prevention program.

Exhibit 12 also shows only 18 of the 83 responding LEAs had procedures which included all of the attributes of a well-designed return-to-work program. Of these 18 LEAs with adequate return-to-work procedures, four also had adequate loss prevention procedures to help prevent injuries that result in claims for workers' compensation benefits.



### Exhibit 12: Most LEAs Do Not Have Adequate Workers' Compensation Loss Prevention or Return-to-Work Programs



Source: Program Evaluation Division based on data provided by DPI and school districts.

**Finding 6. DPI’s performance management system does not adequately ensure its administrative programs and activities are effectively contributing to the vision of the State’s public school system.**

Performance management represents an ongoing, systematic approach to improving results through evidence-based decision-making, continuous organizational learning, and a focus on accountability for results. Performance management systems help ensure programs and activities are effectively contributing to the achievement of strategic goals. Information from an effective performance management system can be used by employees to better understand how their individual jobs relate to one or more of the organization’s objectives and goals. Agency managers can use performance management information to identify problem areas and respond with appropriate actions.

The SBE, legislators, and the public can use performance information to determine whether a state agency is improving its efficiency and effectiveness over time and make decisions regarding the most cost-effective use of available resources to accomplish statewide goals and objectives.

An effective performance management system should include the following components:

- **Procedures.** Procedures document the processes for each program activity as it is intended to be performed. Well-designed and well-implemented procedures help to ensure resources are efficiently utilized to produce outputs that contribute to organizational objectives.

- **Program objectives.** Objectives are measurable, time-based statements of intent that are used to monitor the progress toward achievement of strategic goals and objectives.<sup>42</sup>
- **Activity outputs.** Activity outputs provide information on the efficient use of available resources.
- **Monitoring.** Monitoring involves regular reporting on the performance of programs and activities.

**DPI's administrative services programs do not have all of the necessary components of an effective performance management system.** The Program Evaluation Division conducted a review of the performance management system used by DPI to manage its administrative services programs. This review found DPI's administrative services programs do not regularly maintain all of the information necessary for an effective performance management system. Instead, SBE Board members and DPI management are primarily relying on an informal structure consisting of presentations to SBE on requested topics and briefings to DPI management during periodically scheduled meetings.

**Program objectives should be aligned with one or more strategic goals.** To help ensure achievement of the organizational mission and vision, strategic plans include goals. These strategic goals also help ensure that resources are efficiently and effectively used by enabling program staff to identify how the results of their activities contribute to the achievement of an agency's mission and vision.

The North Carolina State Board of Education's current strategic plan was developed in 2006. However, in September 2013 SBE initiated a process to develop a new strategic plan with associated goals and objectives. SBE reported this new strategic plan is slated to be completed and considered for adoption in 2014.

The Program Evaluation Division conducted a review of the draft strategic plan, which was presented at an SBE Board meeting held in December 2013. The Program Evaluation Division's review found that the draft strategic plan lacks strategic goals that can be used to monitor the efficiency and effectiveness of administrative support programs.

The draft strategic plan states the mission for North Carolina's public school system as follows: "The State Board of Education has the constitutional duty to lead and uphold the system of public education in North Carolina." The draft strategic plan identifies the vision for public schools thusly: "Every public school student will graduate ready for post-secondary education and work, and prepared to be a globally-engaged and productive citizen." The draft strategic plan also identified four strategic goals, as described below:

1. Every student in the NC Public School System graduates from high school prepared for work, further education and citizenship;
2. Every student has the opportunity for a personalized

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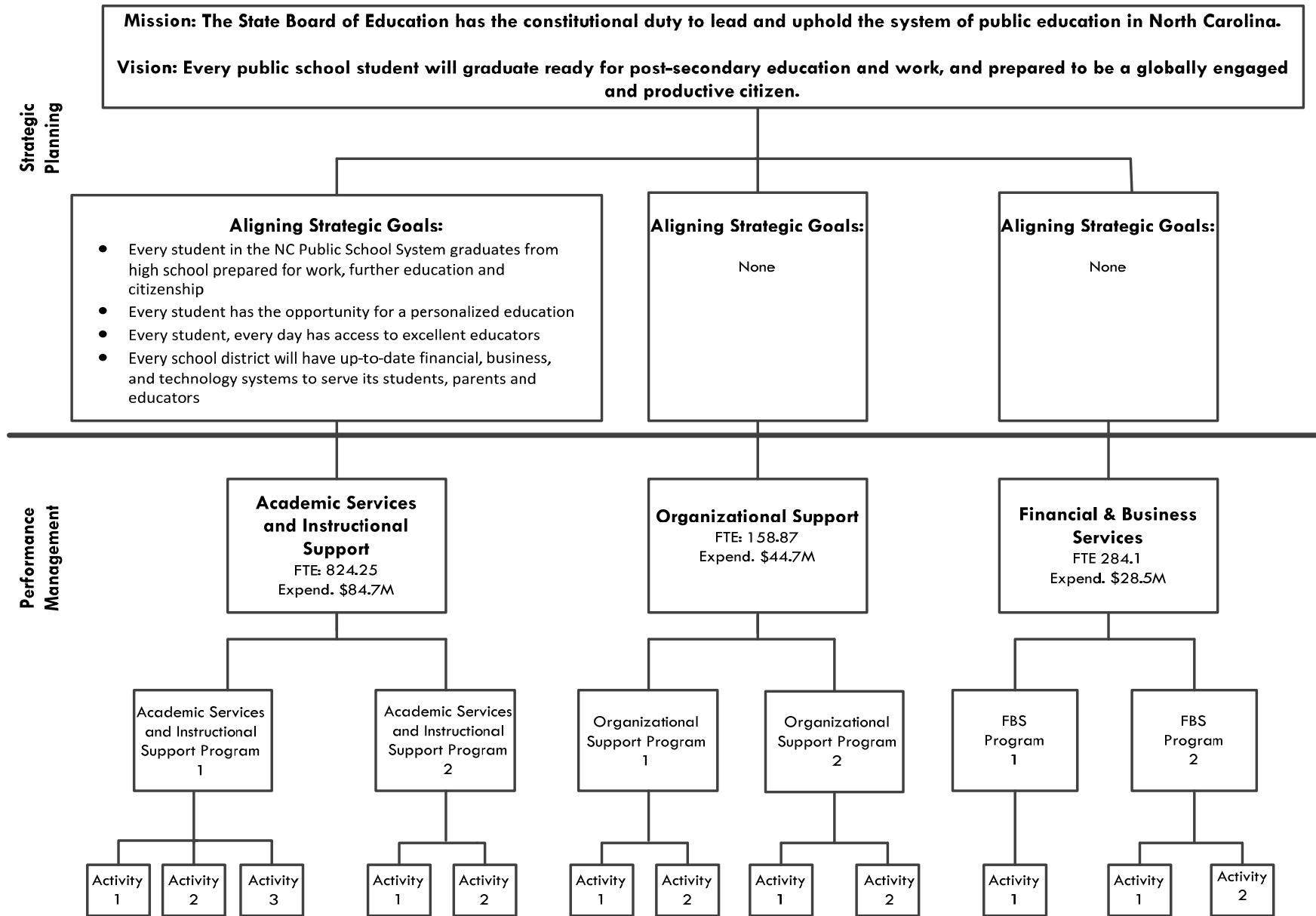
<sup>42</sup> As described in *Planning Guidelines for North Carolina State Government* published by the Office State Budget and Management (OSBM).

- education;
- 3. Every student, every day has access to excellent educators; and
- 4. Every LEA will have up-to-date financial, business, and technology systems to serve its students, parents and educators.

**However, as shown in Exhibit 13, the draft strategic plan does not include strategic goals that can be used to guide administrative support programs toward achievement of the vision for the public school system.** Instead, the strategic goals in the draft strategic plan focus on student achievement, educator quality, and access to learning technologies. For example, the strategic goal for every LEA to have up-to-date financial, business, and technology systems to serve its students, parents, and educators indicates that a corresponding objective would identify the efficiency of LEA operations. However, this goal focuses only on the effective utilization of information systems as communication tools with teachers and parents, and not on any of their potential benefits as financial management and reporting tools.

Without strategic goals that specifically evaluate the contribution of administrative support programs, program managers cannot design and monitor activities to ensure program objectives are efficiently and effectively contributing to the intended outcomes for public education. Consequently, these administrative programs cannot be certain that their resources are effectively aligned with the mission and vision of North Carolina's public education system.

# Exhibit 13: The Draft Strategic Plan Does Not Include Strategic Goals for DPI's Administrative Programs



Source: Program Evaluation Division based on data provided by DPI and the SBE.

**Only five of the 18 administrative services programs had comprehensive and well-maintained procedures.** Well-designed and well-maintained procedures help to ensure activities are performed efficiently and serve to achieve intended objectives. The Program Evaluation Division identified four characteristics of effective procedures for ensuring DPI achieves the objectives of its administrative support programs. The four characteristics used in our evaluation of procedures were

- periodic reviews and revision;
- identified authority and responsibilities;
- objectives of associated processes; and
- process descriptions that include identified outputs.

In response to a request from the Program Evaluation Division, DPI provided procedures for each of the 18 administrative support programs. As shown in Exhibit 14, DPI reported that three of the 18 administrative programs did not have documented procedures. In addition, the Program Evaluation Division determined that of the 15 programs with documented procedures, only five of these programs had procedures that met the requisite criteria for comprehensive procedures.

**Over one-third of administrative services program activities do not have identified outputs.** To accomplish intended objectives, administrative services programs perform activities. Activities consist of processes that convert resources into an output. A characteristic of these activities is that an associated output is used outside the organization or by another program within the agency. For example, an activity performed by the Licensure Program is processing licensure requests. This activity is performed by evaluating teaching credentials and issuing new and renewal licenses that qualify individuals to seek employment and be employed in North Carolina schools.

The 18 administrative support programs perform 102 activities that directly contribute to the achievement of program objectives. DPI reported that 36 (35%) of the 102 activities did not have identified outputs. Outputs are the results of activities and are often associated with business processes for the provision of goods or services. Without identified outputs, agency managers cannot determine whether resources are efficiently utilized.

**Only three of the 18 administrative services programs provide regular performance reporting.** DPI reported that there are periodic documented performance reports for 30 of the 102 activities. However, as shown in Exhibit 14 only three of the 18 administrative services programs routinely provided performance reports for all of their activities.

Providing this information on the performance of programs and activities is essential to engaging managers, policymakers, and staff in improving results and in keeping stakeholders informed. The creation and distribution of performance information can provide a vehicle for understanding results and trigger discussion and debate on how to improve results. However, performance data will not lead to improved results unless the information provided is communicated effectively. Effective communication requires that the target audience has access to and understands the message or information contained in the data.

In summary, DPI's administrative support programs do not have all the necessary components of an effective performance management system. These components include procedures, program objectives, activity outputs, and management reporting. An effective performance management system would provide useful information to ensure strategic objectives are cost-effectively contributing to the mission and vision of the public school system.

Exhibit 14: DPI's Administrative Support Programs Lack Necessary Components of an Effective Performance Management System

Division	FBS Program	Documented Procedures	Number of Activities	Number of Activities with Outputs	Documented Management Reports
<b>School Business</b>	School Allotments	●	2	1 (50%)	●
	School Reporting	●	9	9 (100%)	○
	Monitoring & Compliance	●	10	9 (90%)	○
	Information Analysis	○	5	0 (0%)	○
<b>Financial Services</b>	Purchasing & Contracts	◐	9	0 (0%)	○
	Accounts Payable and Child Nutrition Claims	◐	3	0 (0%)	○
	Budget Management	◐	2	0 (0%)	○
	Accounting Controls and Reporting	◐	8	8 (100%)	○
	Cash Management	◐	6	6 (100%)	●
<b>Safe and Healthy School Support</b>	Plant Operation	○	3	0 (0%)	○
	School Planning	○	6	4 (66.7%)	○
	Insurance	◐	4	0 (0%)	○
	Textbook Services	◐	6	6 (100%)	○
	Transportation	●	3	2 (66.7%)	○
	Child Nutrition	●	11	10 (90.9%)	○
<b>Charter Schools</b>	Charter Schools	◐	4	3 (75%)	○
<b>Licensure</b>	Licensure	◐	8	6 (75%)	○
<b>Systems Accounting</b>	Systems Accounting	◐	3	2 (66.7%)	●
<b>Totals</b>		●= 5, ○= 3 ◐= 9	102	66 (64.7%)	●= 3, ○=15

● = Fully implemented

◐ = Partially Implemented

○ = Not implemented

Source: Program Evaluation Division based on data provided by DPI.

# Recommendations

**Recommendation 1. The General Assembly should direct the Department of Public Instruction to increase the efficiency of school transportation services by adjusting the budget rating formula buffer, selling unnecessary spare school buses, reducing school bus replacement part inventories, and requiring term contracts for school bus replacement parts with high sales volume.**

As shown in Finding 1, the Program Evaluation Division found that the Department of Public Instruction’s failure to adjust the budget rating formula for school bus operations, limit the number of spare school buses, and monitor school bus replacement part inventories has resulted in unnecessary expenditure of state funds. Correcting these issues would result in cost savings to the State and could result in reduced state appropriations for school transportation services. The General Assembly should direct the Department of Public Instruction to increase the efficiency of school transportation services by taking the following actions:

- Adjust the budget rating formula buffer.** The Program Evaluation Division found that the Department of Public Instruction chose not to follow the 2006 Public School Transportation Funding Allotment Report recommendation that the buffer for the budget rating formula be reduced from 10% to 5%. The proposed reduction was intended to more accurately reflect the operational efficiency of local school transportation services. The General Assembly should direct the Department of Public Instruction to begin reducing the budget rating formula buffer by 1% annually in Fiscal Year 2014–15 until the buffer reaches 5% in Fiscal Year 2018–19. This modification will result in \$19.26 million in cost savings in Fiscal Year 2018-19 when fully implemented. See Exhibit 15 for the estimated savings over the five-year phase-in period.

## Exhibit 15

Incrementally Reducing the Transportation Buffer Will Help Ensure Resulting Funding Reductions Do Not Affect School Bus Transportation Performance

Fiscal Year	Cost Savings	Buffer Percentage
FY 2014-15	\$4,185,892	9%
FY 2015-16	\$8,326,220	8%
FY 2016-17	\$12,294,204	7%
FY 2017-18	\$15,979,552	6%
FY 2018-19	\$19,260,085	5%

Source: Program Evaluation Division based on Fiscal Year 2011–12 data provided by DPI.

- Sell unnecessary spare buses.** The Program Evaluation Division found that the Department of Public Instruction does not enforce its 10% target ratio of spare school buses to regular buses and that many LEAs exceed this ratio. The General Assembly should direct the Department of Public Instruction to limit the statewide inventory of spare school buses that meet the replacement criteria to 10% of the total statewide inventory. The Program Evaluation Division



estimates such a reduction would allow 996 surplus school buses to be sold and generate nonrecurring revenues of \$3.1 million.

- **Reduce school bus replacement parts inventories.** The Program Evaluation Division found that county school bus maintenance facilities have excessive inventories for many school bus replacement parts. Reducing the inventory of replacement parts to the minimum necessary to efficiently operate the State's school buses would temporarily reduce costs for replacement part purchases. The General Assembly should direct the Department of Public Instruction to develop and implement a replacement part inventory management policy that would ensure replacement part inventories are reduced to levels still sufficient to meet the operational requirement of the school bus transportation program. Resulting changes to recommended inventory levels, along with associated savings, should be reported to the Joint Legislative Education Oversight Committee and the Fiscal Research Division no later than December 31, 2014.
- **Term contracts for school bus replacement parts.** The Program Evaluation Division found that county school bus maintenance facilities are not required to purchase school bus replacement parts under term contracts established by the Department of Administration. The General Assembly should direct the Department of Public Instruction, in consultation with the Department of Administration, to establish term contracts for school bus replacement parts with statewide annual sales exceeding \$100,000. The General Assembly should also amend state law to require county school bus maintenance facilities to purchase school bus replacement parts with term contracts, unless a lower price can be obtained.

The General Assembly should also consider requiring the Department of Public Instruction to perform an evaluation of the 2013 changes to the school bus replacement schedule to determine how the changes may affect the life-cycle costs associated with school bus operations. The results of this evaluation should be reported to the Joint Legislative Education Oversight Committee and the Fiscal Research Division no later than December 31, 2014.

**Recommendation 2. The General Assembly should ensure school bus safety and reliability by directing the Department of Public Instruction to improve oversight of local school bus maintenance operations.**

As seen in Finding 2, the Department of Public Instruction is not utilizing the school bus fleet management system to track compliance with school bus safety inspections required under state law or with scheduled maintenance operations.

To ensure safe and reliable school bus operations, the General Assembly should direct the Department of Public Instruction to revise the State inspection process for county school bus maintenance operations by incorporating school bus inspection, maintenance, and utilization information

from BSIP, the school bus fleet management system. This information would allow the Department of Public Instruction to identify non-compliant county school bus maintenance facilities and improve its oversight of local school bus operations. The revised state inspection process, along with an associated implementation schedule, should be submitted to the Joint Legislative Education Oversight Committee no later than December 31, 2014.

**Recommendation 3. The General Assembly should reduce the operational requirements of the Textbook Services program by directing the Department of Public Instruction to eliminate six positions and to jointly develop a plan with the Department of Administration to reallocate warehouse space that is not needed to store textbooks.**

As seen in Finding 3, textbook orders processed by the Textbook Services program have declined significantly, yet staffing levels and warehouse space allocated to the program have not been adjusted to reflect the reduced workload. The General Assembly should take the following actions to reduce the operational requirements of the Textbook Services program:

**Staff reductions.** The Program Evaluation Division identified six positions that are no longer needed to support the reduced workload of the Textbook Services program. The General Assembly should direct the Department of Public Instruction to eliminate the six positions identified in this report (two Accounting Technicians, three Stock Clerks, and one Processing Assistant). This reduction in staff will generate approximately \$254,000 in annual savings.

**Textbook warehouse space allocation.** The Program Evaluation Division found that the Textbook Services program can meet its operational requirements with less warehouse space. The General Assembly should direct the Departments of Public Instruction and Administration to jointly develop a plan to reallocate unneeded textbook warehouse space to other state agencies located in Wake County. The plan should include estimated cost savings resulting from other state agencies using the excess warehouse space as opposed to paying for leased space. The two agencies should submit a plan to the Joint Legislative Education Oversight Committee and the Fiscal Research Division no later than December 31, 2014.

**Recommendation 4. The General Assembly should direct the Department of Public Instruction to justify the continued need for services provided by the Plant Operation and School Planning sections.**

As seen in Finding 4, the Department of Public Instruction has insufficient information to document the cost-effectiveness and continued need for services provided by the Plant Operation and School Planning sections. The Program Evaluation Division found the Department of Public Instruction does not have a process to monitor the time and resources required for providing facility maintenance and school design services to LEAs. The Department of Public Instruction also lacks sufficient information to measure the benefits LEAs receive from utilizing the services provided by the Plant Operation and School Planning sections. Without this information, the

Program Evaluation Division could not determine whether these programs were fully utilized or provided a benefit to LEAs that exceeded the cost of funding these services.

To determine whether these services are cost-effective, the General Assembly should direct the Department of Public Instruction to document and justify the continued need for the services provided by the Plant Operation and School Planning sections. Effective for Fiscal Year 2014–15, the Department of Public Instruction should be directed to

- develop and implement a process for monitoring time and resources required for the services provided by the Plant Operation and School Planning sections; and
- collect and compile information from LEAs to measure the benefits that LEAs receive from the services provided by each section.

The Department of Public Instruction should report this information to the Joint Legislative Education Oversight Committee and the Fiscal Research Division by September 1, 2015.

**Recommendation 5. The General Assembly should direct the Department of Public Instruction to develop model loss prevention and return-to-work programs and require local school administrative units to implement programs based on the models.**

In Finding 5, the Program Evaluation Division found that most LEAs did not have effective loss prevention or return-to-work programs that minimize workers' compensation costs funded by state appropriations. The General Assembly should direct the Department of Public Instruction to develop model programs designed to reduce the number of injuries resulting in workers' compensation claims and ensure injured employees with workers' compensation claims return to work in accordance with current State Board of Education policy. The General Assembly should also require LEAs to implement injury prevention and return-to-work programs based on the models developed by the Department of Public Instruction.

**Recommendation 6. The General Assembly should direct the State Board of Education to develop strategic goals and the Department of Public Instruction to develop a performance management system that will ensure administrative support programs effectively contribute to the vision for North Carolina's public school system.**

As reported in Finding 6, the Department of Public Instruction does not have an effective performance management system to evaluate the performance of its administrative services programs and activities. The General Assembly should direct the Department of Public Instruction to report to the Joint Legislative Education Oversight Committee by December 31, 2014, and annually thereafter on the performance of each strategic objective, as identified in the strategic plan adopted by the State Board of Education. The report should include

- a description of the measure(s) used to evaluate achievement of each strategic objective, to include the performance target,

which clearly defines what level of work is desired and can serve as a guidepost for judging whether progress is being made on schedule and at the levels originally envisioned;

- the most recent performance, as identified from each associated performance measure; and
- comparison of the most recent performance with the performance target.

The General Assembly should also direct the Department of Public Instruction to develop a performance management system for administrative support programs, to include processes for identifying and monitoring the

- objectives and associated performance outcomes for each program, including measures and targets to evaluate whether programs are effectively achieving each of the objectives;
- outputs produced by each program activity to include the number of outputs and associated unit cost, along with targets for activity efficiency improvements; and
- procedures that ensure the efficient and effective use of state resources to perform each activity.

In addition, the General Assembly should direct the Superintendent of Public Instruction to report to the Joint Legislative Education Oversight Committee by December 31, 2014 and annually thereafter on the performance of each administrative support program in the performance management system. The report should identify the contribution of each administrative program toward the achievement of the strategic goals identified in the strategic plan as adopted by the State Board of Education.

SBE should adopt strategic goals that can be used to guide administrative support programs toward the achievement of the vision for the public school system. These strategic goals should be incorporated into the strategic plan for North Carolina's public school system, and provided to the Joint Legislative Education Oversight Committee by June 30, 2014.

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## Appendices

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Appendix A: Methodologies for Cost-Related Analyses  
Appendix B: LEA Transportation Budget Ratings

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## Agency Response

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A draft of this report was submitted to the Department of Public Instruction for review. Its response follows the appendices.

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## Program Evaluation Division Contact and Acknowledgments

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For more information on this report, please contact the lead evaluator, Chuck Hefren at [chuck.hefren@ncleg.net](mailto:chuck.hefren@ncleg.net).

Staff members who made key contributions to this report include Sean Hamel and Brent Lucas. John W. Turcotte is the director of the Program Evaluation Division.

## Appendix A: Methodologies for Cost-Related Analyses

### Finding 1: Modification to the LEA Transportation Funding Formula

PED calculated the cost savings associated with modification of the transportation budget formula that affects each LEA's allotment. The school bus transportation budget rating formula assigns scores to each LEA based on a number of factors, two of which primarily relate to the efficiency of school bus transportation: buses per 100 students and transportation expenditures per student. Currently, the budget formula assigns a 10% buffer to all school bus transportation departments. For example, a LEA earning a budget rating of 82 would actually score a 92 with this 10% buffer. Cost estimates had not been conducted previously with the buffer reduction recommended by a legislatively mandated study in 2006; thus, PED calculated the potential cost savings with the recommended buffer reduction. The budget rating formula is important as it is the primary funding mechanism for the next fiscal year. In the example above, the LEA would receive 92% of its base allocation from the prior fiscal year.

To calculate the savings associated with reducing the budget rating buffer to 5%, PED assumed a gradual implementation of the buffer reduction. For this, PED used data provided by DPI along two dimensions; first, each LEA's base allotment in Fiscal Year 2012–13, and second, each LEA's true budget rating score (without the buffer) for the previous fiscal year (which served as a base for the current fiscal year's allocation).<sup>43</sup> Since the budget rating formula is a direct representation of funding levels (i.e. a rating score of 95% means an LEA received 95% of its prior year base allocation), it is modified through each annual reduction of one percent for each fiscal year to reflect prior years' changes (i.e. an annual reduction to the base allotment per LEA) to the formula.<sup>44</sup> Fiscal Year 2012–13 funding allocation was used as the based year.

- For the first fiscal year (2014–15), PED added 9% to the true budget rating for each LEA, thus showing only a one percent reduction in the formula. Since the budget rating score uses the prior fiscal year's allotment amount, 9% was multiplied by the prior year's allotment to identify the amount to be added to each LEA's new base allotment (rather than the automatic 10%). The difference between the prior year's allotment amount and the amount at 9% was then taken to calculate the savings for the first fiscal year.
- To calculate savings for the second and subsequent fiscal years, PED used the new allotment amount for each LEA (which is 1% less per fiscal year) to calculate potential cost savings for these years. For example, the new allotment amount for fiscal year 2015–16 was based on the new allotment amount with the 9 percent buffer from the prior fiscal year (2014–15). The newly computed base allotments for each LEA for each fiscal year serves as the base amount to which each incremental reduction in the buffer is applied. For each fiscal year, the difference between the base allocations for each year-to-year change indicates the savings for the respective fiscal years.<sup>45</sup>

### Finding 1: Spare Bus Inventory Reduction

DPI has established a goal of each LEA's bus fleet to have 10% of its fleet designated as spare buses. Excess spare buses could cause LEAs to spend unnecessary funds on scheduled maintenance of buses that are not in regular use. PED utilized data provided by DPI on each LEA's fleet, which had a unique identifier for each bus, its respective LEA, and the bus's designation as regular-use, spare, etc.

- The spare bus inventory for LEA was computed by summing the regularly used buses and spare buses according to a number of classifications. Regularly used buses were classified E2LC, E2RB, E2RC, and

<sup>43</sup> PED excluded school districts whose budget rating scores were above 95% in Fiscal Year 2012–13 because these school districts would still obtain a budget rating of 100%.

<sup>44</sup> PED assumed each school district maintained its current true budget rating score (without any buffer) for the purposes of this analysis. Thus, potential savings would likely be greater as school districts continue to improve their efficiency, as would be reflected through higher true budget rating scores, as a result of these reductions.

<sup>45</sup> This analysis was repeated for each level of the proposed buffer modification, for each one-unit decrease from 10% to 5%. As the buffer could only be reduced by a particular percentage each year, these calculations do not include adjustments for inflation.

E2RR. Buses considered spares were classified ESP and ESS.<sup>46</sup> With the total number of buses in a LEA's fleet, the percentage of spares was computed by dividing the number of spares by the total number of buses available for use. This is expressed below by the number of buses in each LEA's fleet comprising these classifications.

$$\frac{ESP + ESS}{E2LC + E2RB + E2RC + E2RR}$$

- This produced the percentage of spares for each LEA's fleet. To compute the target number of spare buses for each LEA fleet, as recommended by DPI guidelines of 10%, each LEA's total fleet size of buses available for regular use was multiplied by this percentage.

PED staff then subtracted target number of spares from the current total number of spares in inventories. Then, PED summed the number of spares to be sold across all LEAs (N=996) by the average price of buses across all LEAs sold in Fiscal Year 2012–13, which was \$3,075.<sup>47</sup> This produced cost savings of \$3,062,700.

### Finding 1: Excess Replacement Part Inventory

PED examined the inventory levels of LEA's transportation facilities to identify the amount of time that parts are held by LEAs before being used on school buses. Holding excess inventory could indicate parts are not utilized and that LEAs are spending money at the end of the fiscal year, particularly because the next year's allotment for the section is based on the office's expenditures, which could be inflated in order to attempt to maintain current budget levels. Data provided by DPI on each LEA's inventory was used in this analysis, and contained the following elements: replacement part identifiers, quantity of each part as of November 13, 2013 in each LEA's inventory, quantity of each part consumed in Fiscal Year 2012–13 (i.e. used on a bus), and the average unit price for the part within the LEA. To calculate an LEA's excess parts inventory, PED examined the 100 replacement parts with the highest annual statewide sales. This procedure involved the following steps as outlined below:

- The number of days inventory each LEA has on-hand for each of these 100 parts was calculated using the following formula:

$$\frac{\text{Quantity on Hand}}{\text{Quantity Consumed}} \times 365.25 \text{ days}$$

- PED then calculated a 30-day supply (or target inventory level) for each of these replacement parts for each LEA using the following formula:

$$\frac{30 \text{ days}}{365.25 \text{ days}} \times \text{Quantity Consumed}$$

- To determine the days of excess inventory, PED then subtracted the 30-day inventory level from the number of days inventory on hand for each LEA.

$$\text{Number of Days of Excess Inventory} = \text{Days of Actual Inventory} - \text{Days of Target Inventory}$$

<sup>46</sup> DPI transportation policies dictate that buses designated as ESP are not eligible for replacement, but are counted as part of each school district's 10% spare fleet.

<sup>47</sup> The average price per bus sold does not assume uniform characteristics of buses sold in the prior fiscal year to the current fiscal year (i.e. age, manufacturer, etc. of the bus) which may differ from those buses school districts select to sell.

- Using the number of days of excess inventory for each LEA among each of these 100 replacement parts, PED then calculated the number of excess parts for each part with greater than a 30-day supply for the LEA using the following formula:

$$\text{Number of Excess Parts} = \frac{\text{Number of Days of Excess Inventory}}{365.25 \text{ days}} \times \text{Quantity Consumed}$$

- Then, PED calculated the costs associated with these excess parts by multiplying the price paid for that replacement part in Fiscal Year 2012–13 by the average price paid for the LEA in that same fiscal year. For each part at each LEA, PED utilized the following formula:

$$\text{Average Part Price} \times \text{Number of Excess Parts}$$

### **Finding 2: Compliance with Safety Inspections**

PED investigated compliance with school bus safety inspections, as required to be conducted every 30 days for a bus operated by a LEA. Missed safety inspections and buses operated after missed inspections could indicate potential safety concerns for student transportation.

This analysis utilized two sources of data. The first source is a database of the inspections of buses in FY 2012–13, which included unique identifiers for each bus, the scheduled date of inspection, and the number of hours of work the inspection required from county school bus facility staff. The second source of data utilized is a record of each fueling of a public school bus available for regular use. This database captures each date a bus was refueled.

Instances of operation non-compliance with the statutory school bus inspection requirement were identified by comparing school bus inspection information with associated fueling information for each school bus. Each instance identified was based on a refueling date occurring more than 30 days after the most recently completed school bus inspection.

$$\text{Inspection Date} = \text{Date of bus inspection by school districts}$$

$$\text{Next Scheduled LEA Inspection Date} = \text{Prior LEA Inspection} + 30 \text{ days}$$

$$\text{Bus Fueling Date} = \text{Date the bus was next fueled}$$

To calculate the compliance of LEAs with 30-day inspections, and to determine if buses were operated without the required inspection, PED:

- Identified the next fueling date for any buses occurring after the next scheduled inspection date. Ideally, the following depicts compliance with the statutory requirement of buses being inspected every 30 days:

$$\text{Prior LEA Inspection Date} < \text{Bus Refueling Date} < \text{Next Scheduled School District Inspection Date}$$

- Identified cases of non-compliance; PED examined instances where a bus had been refueled after the next scheduled LEA inspection date and where an inspection had not occurred. This can be expressed as follows:

$$\text{Inspection Date} < \text{Next Scheduled School District Inspection Date} < \text{Bus Refueling Date} < \text{Inspection Date}$$

- The number of non-compliant bus inspections was determined by identifying buses refueled on a date past their next scheduled inspection, and before their next actual inspection. These were considered instances of non-compliance.

### **Finding 2: Compliance with Maintenance Schedule**

Preventative maintenance activities by LEAs are scheduled on the projected mileage of each bus given a number of factors such as its last scheduled maintenance activity and projected usage. Missing scheduled maintenance activities indicate buses are not being as well-maintained as they could be, and could be at risk of voiding manufacturer's warranties.

PED sought to investigate how well local school transportation facilities were complying with scheduled maintenance activities. The source of data for this analysis was all scheduled maintenance activities for any public school bus in Fiscal Year 2012–13. This data was provided by DPI. The actual scheduled activity to be performed varies and is highly based on the manufacturer's suggestions and requirements for warranty.

- Because of data validity concerns, and upon the recommendation of DPI Transportation officials, all PM activities with "0" labor hours were excluded from this analysis, as this indicates the scheduled maintenance activity was actually performed, but the mileage at which the activity was performed was inaccurate.
- With this modified dataset, PED examined all scheduled maintenance activities in Fiscal Year 2012–13 where the date of completion of the scheduled maintenance activity was past the scheduled date for the scheduled maintenance activity. A bus was considered non-compliant if the date the scheduled maintenance activity was completed was past the scheduled completion date. This produced a count for the total instances that scheduled maintenance activities were not completed on time.
- Next, for all those missed or late scheduled maintenance activities, PED subtracted the mileage at the date of completion of this missed/late PM and subtracted it from the scheduled bus mileage for the scheduled maintenance activity that was missed.

### **Finding 3: Textbook Services Program Staffing**

PED investigated the potential savings from a reduction in staff that should be associated with the continued reduction of textbook orders from 2008–09 to 2012–13. PED used a number of sources of data provided by DPI to estimate the potential cost savings with this reduction in orders, including the following for each of the five fiscal years: number of textbooks received and processed by the Textbook Services program, salaries and classifications of program staff, and the number of invoices processed.

- First, PED determined the demand for the Textbook Services program based on the number of invoices processed by the program over the last five years.<sup>48</sup> PED identified four peak months of service (determined by the number of invoices processed) from Fiscal Year 2008–09 to Fiscal Year 2012–13. For each fiscal year, each month was ranked based on its number of invoices processed by the program (highest number of invoices, second highest number of invoices, etc.). PED then calculated the percent change in the number of invoices by category (highest number of invoices, second highest number of invoices, etc.) for each month given the beginning and ending fiscal year under analysis by using the following formula:

$$\% \text{ Change in Monthly Invoices} = \frac{\text{FY 2008 Invoices} - \text{FY 2012 Invoices}}{\text{FY 2008 Invoices}}$$

- This procedure was performed for each fiscal year to measure the annual percent change each year in the peak months of operations. Then, PED calculated the average percent change across the four highest

<sup>48</sup> PED determined the number of invoices to be an appropriate measure of throughput to measure the workload of the program's staff.



months, which resulted in an average decline of invoices in these peak months of 76.34%. Rather than apply the 76.34% reduction across the board to all Program employees, PED determined a targeted reduction would serve to ensure the Program still accomplishes its objectives.

- With the demand for the Textbooks Services program established, PED then conducted a staffing analysis to determine the corresponding decline in throughput (number of invoices received and processed). Because the number of textbooks being processed directly relates to the number of staff necessary to process orders, PED identified three position classifications that the data indicate are not fully utilized currently:<sup>49</sup> Accounting Technician (N=2), Stock Clerk II (N=3), and Processing Assistant (N=1). Using the average salaries and benefits for these individuals, PED determined the Textbook Services program could continue to be able to meet its operational requirements during peak workload periods (April-May and August-September) using temporary staffing. Based on current operational requirements using the average salary among those individuals in these position classifications, PED estimates this temporary increase in staff could cost \$9,619 for one additional stock clerk and \$13,755 for an additional accounting tech.
- The results of the demand analysis and staffing analysis showed the Textbook Services program has maintained operations at peak capacity throughout the year for the five-year period. It was determined that the reduction in the demand for the program's services should correspond to a reduction in the staff required to fulfill these functions. To calculate the savings from these reductions, while still allowing flexibility in hiring temporary employees as demand requires, PED used current demand levels and position salaries and benefits to determine the demand for peak cycles. The salaries of these six positions totaled \$277,833.61 in Fiscal Year 2012–13, which PED then determined the monthly amounts for position. With the associated costs of hiring temporary workers during the most recent peak time, and using the average salary figures (\$9,619 for one stock clerk and \$13,755 for one accounting technician), PED estimates total potential savings of \$254,459 for the Textbooks Program.<sup>50</sup>

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<sup>49</sup> This is based on the Textbook Services program only reporting a decrease of 1 FTE during the fiscal years under analysis, which coincided with a dramatic reduction in the program's workload (measured by the number of invoices processed).

<sup>50</sup> Because the Textbook Services program is receipt-supported from LEAs using their textbook allotment funding to order adopted textbooks, this cost savings potentially would be realized only by LEAs, unless the General Assembly directs modification to the textbook funding allotment to account for these position reductions and/or the amounts charged to school districts are modified to reflect these additional operational cost decreases.

## Appendix B: LEA Transportation Budget Ratings

LEA Name	Budget Score Without Buffer	LEA Name	Budget Score Without Buffer	LEA Name	Budget Score Without Buffer
Alamance	92.66%	Guilford	75.80%	Rockingham	75.90%
Alexander	85.33%	Halifax	86.56%	Rowan	77.07%
Alleghany	73.83%	<b>Harnett</b>	<b>94.73%</b>	Rutherford	79.03%
Anson	83.28%	Haywood	87.77%	Sampson	88.98%
Ashe	82.64%	<b>Henderson</b>	<b>102.05%</b>	Scotland	81.94%
Asheboro	80.58%	Hertford	65.65%	Stanly	74.74%
Asheville	84.89%	<b>Hickory</b>	<b>91.58%</b>	Stokes	83.14%
Avery	75.93%	<b>Hoke</b>	<b>99.27%</b>	Surry	88.69%
Beaufort	79.42%	<b>Hyde</b>	<b>93.31%</b>	<b>Swain</b>	<b>98.68%</b>
Bertie	87.69%	Iredell	83.26%	Thomasville	89.05%
Bladen	81.38%	Jackson	70.07%	<b>Transylvania</b>	<b>92.74%</b>
Brunswick	77.32%	Johnston	86.38%	Tyrrell	85.20%
Buncombe	84.89%	Jones	85.91%	Union	87.98%
<b>Burke</b>	<b>93.41%</b>	Kannapolis	89.52%	Vance	82.26%
Cabarrus	89.52%	<b>Lee</b>	<b>93.33%</b>	Wake	78.52%
Caldwell	87.56%	Lenoir	79.89%	Warren	88.00%
Camden	87.35%	Lexington	89.05%	Washington	85.98%
Carteret	82.44%	Lincoln	82.95%	Watauga	89.74%
Caswell	82.70%	<b>Macon</b>	<b>90.06%</b>	Wayne	78.72%
<b>Catawba</b>	<b>91.58%</b>	Madison	86.92%	Weldon	86.56%
Chapel Hill	79.14%	Martin	82.26%	Whiteville	84.13%
Chatham	85.83%	Mcdowell	82.63%	<b>Wilkes</b>	<b>90.78%</b>
Cherokee	83.98%	Mecklenburg	83.94%	Wilson	78.71%
Chowan	80.17%	Mitchell	76.02%	Yadkin	81.34%
<b>Clay</b>	<b>92.53%</b>	Montgomery	88.72%	<b>Yancey</b>	<b>92.48%</b>
Cleveland	89.55%	Moore	88.11%		
Clinton	88.98%	Mooresville	83.26%		
Columbus	84.13%	Mount Airy	88.69%		
Craven	85.93%	Nash	88.23%		
Cumberland	81.95%	New Hanover	77.78%		
Currituck	82.15%	<b>Newton-Con.</b>	<b>91.58%</b>		
Dare	68.44%	<b>Northampton</b>	<b>95.60%</b>		
Davidson	89.05%	Onslow	81.13%		
Davie	86.23%	Orange	79.14%		
<b>Duplin</b>	<b>93.93%</b>	Pamlico	82.49%		
Durham	83.81%	Pasquotank	74.49%		
Edgecombe	80.41%	Pender	85.52%		
Elkin	88.69%	Perquimans	80.82%		
Forsyth	87.69%	Person	88.61%		
Franklin	86.19%	Pitt	86.83%		
Gaston	89.73%	Polk	77.71%		
Gates	78.86%	Randolph	80.58%		
Graham	81.34%	Richmond	87.21%		
Granville	88.29%	Roanoke Rapids	86.56%		
Greene	80.27%	Robeson	84.29%		

Note: LEAs with budget ratings above 90% but below 95% are highlighted in gray. LEAs with budget ratings above 95% are in bold.



# PUBLIC SCHOOLS OF NORTH CAROLINA

DEPARTMENT OF PUBLIC INSTRUCTION | June St. Clair Atkinson, Ed.D., *State Superintendent*

WWW.NCPUBLICSCHOOLS.ORG

April 4, 2014

Mr. John W. Turcotte, Director  
Program Evaluation Division  
North Carolina General Assembly  
Legislative Office Building, Suite 100  
300 North Salisbury Street  
Raleigh, NC 27603-5925

Dear Mr. Turcotte:

The North Carolina Department of Public Instruction (DPI) appreciates the opportunity to review and comment on the Program Evaluation Division's (PED) study of DPI's Office of Financial, Business, and Technology Services' (FBS) operational efficiency as directed by the Joint Legislative Program Evaluation Oversight Committee. We respect PED staff's attempt to obtain a thorough understanding of the complex and numerous FBS programs, processes and procedures; all of which are designed to support and implement the strategic priorities established by the State Board of Education (SBE). DPI and FBS staff involved in the review appreciates the professionalism and courtesy PED staff displayed during the interview and fieldwork processes. DPI considers the perspectives provided by PED as a valuable opportunity to review existing processes and identify areas where changes may be appropriate.

While DPI does find merit in the external evaluation of its programs, DPI finds that much of the information, findings, and recommendations in the report cast an incomplete picture of the benefit that the described services offer to the State. As outlined in the responses to specific recommendations, DPI asserts that the savings enumerated could be obtained only by adversely affecting public schools:

	Amount	Revenue or Savings?
Transportation Formula	\$ (19,260,085)	Reduction to LEAs
Sale of Spare Busses	\$ 4,100,000	Sales Revenue to NC
Sale of Bus Parts Inventory	\$ 3,000,000	Sales Revenue to NC
Textbook Staff	\$ (254,459)	Reduction to Receipts

By centralizing service providers within the School Planning and Plant Operations Divisions, districts can take advantage of the expertise without having to identify limited resources to cover the costs.

## OFFICE OF THE STATE SUPERINTENDENT

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AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

DPI does find the 2011 review by the State Auditor that outlined a positive opinion of the Agency’s performance management system goals, measurements, and tracking to be an informative external evaluation. DPI continuously validates the alignment of Agency tasks with the SBE’s objectives. Unfortunately, this review was not referenced in the report after being provided to PED staff and so is attached here.

Careful consideration has been given to the findings and recommendations in the report and responses to each recommendation are on the following pages.

<b>Recommendation 1:</b>	<b>The General Assembly should direct the Department of Public Instruction to increase the efficiency of school transportation services by adjusting the budget-rating formula buffer, selling unnecessary spare school buses, reducing school bus replacement part inventories, and requiring term contracts for school bus replacement parts with high sales volumes.</b>
<b>DPI Response to Recommendation 1:</b>	<p>Please see below for an individual response for each component of the recommendation.</p> <p><b>Adjust the budget-rating formula buffer.</b> DPI acknowledges a reduction of the buffer from 10% to 5% would result in savings to the state by instituting this policy, which is essentially an “across the board cut” to transportation allotments. However, we believe the unintended impact of such a policy change will require LEAs to expend more scarce local funds for school transportation, essentially eliminating potential overall savings. In our opinion, recent across the board cuts implemented by the General Assembly to the appropriation for school transportation (\$10 million in 2012, \$15 million in 2010) has had the same effective impact as the proposed reduction to the budget-rating buffer. Further, contrary to the impression given in the report, recent appropriations have not been approved at the estimated fuel cost for the year, resulting in another “across the board cut.”</p> <p>The budget-rating buffer is the amount added to the calculated efficiency rating to obtain the budget rating on which each LEA is funded. The intent of the 10% buffer is to ensure no LEA is penalized due to unique circumstances in their county that makes transportation more expensive or less efficient. For example, existing site characteristics do not adequately account for (1) the areas in Chatham County that have to be accessed through Durham and Wake counties because of Jordan Lake, (2) buses that take the ferry from Knott’s Island in Currituck County, and (3) counties that have had to cap the enrollment at schools and as a result are sending students further away to schools with available space.</p>

**DPI Response to Recommendation 1, cont'd.**

Concerning the “bus side” of the funding formula, approximately 85% of the variability in the number of buses operated per 100 students is predicted by the site characteristics (e.g. pupil density, distance of students from school, etc.). Site characteristics are generally geographic properties (such as the number of transported students per mile of county roadway) beyond the control of the LEA. On the “cost side” of the funding formula equation, only 60% of the variability is predicted by the site characteristics. The remaining percentage is comprised of things within the LEA’s control (such as routing, contracting or setting school bell times) or are unique situations not predicted by the standard site characteristics. The 10% buffer enables particular LEAs to accommodate these unique situations rather than being penalized for them.

Finally, LEA transportation budgets have been strained because the Office of State Budget and Management typically only allows the funding base for LEA transportation operations to increase for three reasons: (1) Enrollment/ADM increases; (2) Fuel Cost Increases (sometimes) and (3) Legislated Salary/Benefits Increases. At the same time, transportation operations have experienced significant cost increases in a number of areas that would be difficult for LEAs to accommodate with a smaller buffer. Examples include increased costs for parts required on new buses such as DEF fluid and LED lights, increases in transportation costs for myriad educational programs (e.g., students transported across district and county lines as required by the McKinney-Vento Act) and major engine repair and replacement costs.

**Sell unnecessary spare school buses.**

DPI disagrees that a problem with excessive spare school buses exists, and questions the inherent assumption in the report that additions to the list of surplus school buses for sale would result in a quick sale that would generate additional funds. The market for used school buses, with our current pricing structure, has reached a level of relative equilibrium. There is simply not a sufficient demand to absorb an influx of vehicles added to the “for sale” inventory.

Following the review of the draft report, our transportation staff discussed with PED staff the flaws in the analysis used to produce these findings. We provided a comparable analysis showing less than 1.5% of the fleet is considered to be excess spares or beyond what is allowed. Specifically, PED calculations from a set of data captured during the transitional bus replacement process indicated

<p><b>DPI Response to Recommendation 1, cont'd.</b></p>	<p>an extra 996 school buses, which could be sold. Our calculated number of extra spares is 231. Further, half of those 231 school buses considered to be excess spares are from Wake and Mecklenburg counties for which explanations were provided to PED. PED, however, chose not to use this more current analysis.</p> <p>Exhibit 6 of the report is particularly misleading. Warren and Pamlico Counties, for instance, currently have the exact number of spares to which they are entitled: 10% (rounded up to the nearest bus) of the number of non-lift-equipped route buses plus 10% (rounded up to the nearest bus) of the number of lift-equipped route buses). NOTE: The implementation of the “10% Spare Rule” as explained here is different from the “10% of the statewide fleet” numbers used in the PED analysis. Similarly, the 30% spare ratio reported in Exhibit 6 for Tyrrell County translates as follows: Tyrrell County has three spares instead of two.</p> <p>Also in Exhibit 6, Johnston County is reported as having 24% spares. However, most of these are buses that have not yet reached replacement thresholds, but have been removed from service by the LEA in the interest of improved efficiencies. Selling these vehicles would be an LEA option, not one within state authority.</p> <p>Because state replacement school bus appropriations have fluctuated wildly in recent years, DPI Transportation Services procedures include processes to prevent any situation where the state is in the position of needing buses at the same time that many retired buses were recently sold as surplus.</p> <p><b>Reduce school bus replacement parts inventories.</b> DPI acknowledges some LEAs have inventory levels for some parts exceeding the optimum as described in the report. However, we also stipulate some levels appearing excessive based on percentages are actually reasonable. Purchasing procedures aimed at minimizing shipping costs and stocking to ensure limited down-time for buses (especially when delivery time on specific parts is lengthy) is a sound business practice. For example, there may be instances when it is more cost effective to purchase two of a part rather than one, to save on shipping costs, which could potentially double if the parts were to be purchased separately.</p> <p>PED’s recommendation to keep 30 days inventory in stock makes sense for a large, centralized inventory warehouse, but would be problematic for the many transportation operations in small, rural LEAs. A 30-day inventory policy means that any part that has an annual use quantity of 12 or less should not be stocked – or stocked</p>
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<p><b>DPI Response to Recommendation 1, cont'd.</b></p>	<p>with only one part. The 47,559 LEA-stocked parts referenced in the report include 38,025 parts (80%) that had less than 12 used over the year. While there may be waste in high stocking levels, there may be additional expense and delay associated with such low stocking levels on so many parts.</p> <p>In our opinion, LEAs have little incentive to purchase more repair parts than needed. The funding formula yields a higher budget rating as expenses are minimized, which is complicated by an overall increase in the price of repair parts, which has not been accompanied with increased appropriations. The continuation budget for transportation does not include allowances for increased costs for certain repair parts. For example, as oil prices increase, so do tire prices. Certain safety-related parts required for the newer school buses have increased in cost over the years including mirrors, LED lights, one-piece windshields, and more. In addition, LEAs must now stock Diesel Exhaust Fluid required for the new, environmentally-friendly engines built to meet the latest EPA emissions requirements.</p> <p><b>Require term contracts for school bus replacement parts with high sales volumes.</b></p> <p>DPI acknowledges cost savings may be recognized by increased LEA purchase from state-term contract for school bus parts. We agree savings would be realized if an LEA elected to purchase off-state contract instead of purchasing from a more convenient, but more expensive, local vendor. DPI Transportation Services Section's policy is to encourage LEAs to utilize the state contract for parts when applicable. The section will continue to reiterate this policy to all LEAs.</p> <p>It is worth noting here that the required 1.75% e-procurement fee that vendors on state contract build into their cost may be cost prohibitive to purchasing from the state contract. One scenario would be the purchase of diesel fuel. Most LEAs have a standing purchase order for diesel fuel and do not issue a new purchase order each delivery of 7,500 gallons of fuel at an approximate cost of \$3 per gallon. A vendor on state contract with low profit margins and a high-unit cost has to build most or all of the 1.75% e-procurement fee (in this case \$400) into his price. An LEA like Wake County Schools, which receives one or two tanker-loads of fuel daily, would pay an additional \$8,000 to \$16,000 per month in fuel costs to cover the vendor's built-in e-procurement fee. Just as many LEAs solicit outside bids for fuel to ensure the best price, they also issue bids or get quotes from non-contract vendors for other parts as well. We believe that an analysis of the pros and cons of purchasing from non-contract vendors should include such savings as well as the differences in cost referenced in the report.</p>
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<p><b>Recommendation 2:</b></p>	<p><b>The General Assembly should ensure school bus safety and reliability by directing the Department of Public Instruction to improve oversight of local school bus maintenance operations.</b></p>
<p><b>DPI Response to Recommendation 2:</b></p>	<p>DPI agrees increased oversight could improve the timeliness of inspections and preventative maintenance at the LEA level. With current staff, the objective is to conduct sample inspections in order to provide feedback to the LEA superintendent. The superintendent is required by law (G.S. § 115C-248) to ensure inspections and to make sure that buses which do not pass inspection are not allowed to operate. DPI Transportation Services provides important service in the area of maintenance in order to provide feedback to the local superintendent regarding the condition of the school bus fleet. This feedback includes a snapshot inspection of 10% of route buses as well as a sampling of office procedures, including compliance with maintenance and inspection schedules. DPI relies on regular communication between its field consultants and all LEAs, especially when related to matters of fleet maintenance. While we agree with the recommendation to focus on areas most in need as identified by increased analysis of available maintenance data, the section needs additional dedicated resources for adequate staff to implement and execute the recommendation while continuing to provide the existing level of assistance to all LEAs. The addition of extra inspectors could improve school bus safety by adding a monitoring component to oversight of school bus maintenance operations.</p>
<p><b>Recommendation 3:</b></p>	<p><b>The General Assembly should reduce the operational requirements of the Textbook Services program by directing the Department of Public Instruction to eliminate six positions and to jointly develop a plan with the Department of Administration to reallocate warehouse space that is not needed to store textbooks.</b></p>
<p><b>DPI Response to Recommendation 3:</b></p>	<p>DPI concurs with the finding that textbook orders processed by Textbook Services have declined significantly while staffing levels and warehouse space allocated to the program have remained the same. The only reason for the decline relates to the significant reduction in appropriations. This decline severely limits the LEAs’ ability to purchase textbooks for Textbook Services to process. As noted in the report, the legislated Basic Education Plan (BEP) outlines the requirement for textbooks needed to support the prescribed curriculum. The BEP also outlines the legislated formula for textbooks of \$20 per average daily membership as adjusted from 1985 dollars. This funding level would indicate that the current funding level should be \$68.58 per ADM (compared to \$14.26 per ADM for FY 2013-14). We anticipate that funding for textbooks will be at least partially restored towards the BEP required formula level of \$104.7 million in FY 2014-15. While hardback textbooks continue to be needed, textbook funding is also used for digital resources, which will be procured and managed also through the warehouse operations.</p>



<p><b>DPI Response to Recommendation 3, cont'd.</b></p>	<p>As funding for textbooks and/or digital programs and products increases, the need for Textbook Services' purchasing responsibilities, including capitalization on economies of scale and contractual advantages, will increase correspondingly. DPI also disagrees with PED's methodology used to determine that Textbook Services could continue to meet operational requirements during peak workflow periods through the use of temporaries because it did not take into consideration the knowledge and experience needed for duties such as preparation of new adoption databases, communication and education related to new adoptions to all 115 LEAs and 127+ charter schools, training for LEA and charter textbook and purchasing coordinators and the administration of authorized return(s) to publishers. PED also failed to address the creation and support of the lending library of modified format adopted titles procured, to order, for all qualified children with exceptional needs in North Carolina public schools.</p> <p>The State Board approved the development of a Plan, which will partially be supported by the \$1 million in lottery receipts appropriated to support a Plan for digital learning. The elimination of textbooks is not a part of the required Plan. The legislation is requiring that digital learning be in place by 2017. To accomplish this objective the schools (and local communities) will need to have consistent and available internet access, students will need managed and useable devices, teachers will need extensive professional development, digital resources will need to be procured, and recurring appropriations will be required to cover the costs. The Plan outlined in the legislation and approved to proceed by the State Board, will address all aspects of meeting the 2017 requirement.</p> <p>We appreciate the reference in Appendix A, that the Textbooks program is receipt-supported from LEAs using textbook allotment funding to order adopted textbooks and materials (by collecting a small fee from each order). The potential cost savings would only be realized by LEAs...," thereby eliminating any true savings of state funds if the recommendation is implemented.</p> <p>DPI agrees to work with the Department of Administration to reallocate warehouse space without infringing on current operations and procedures or creating additional costs to DPI. We are also examining the feasibility of moving the storage/distribution of assessments to the warehouse.</p> <p>The cost effectiveness of operating a state-owned centralized textbook warehouse has been studied on numerous occasions. The latest study is included in our response. All studies have concluded that our textbook warehouse operations are the most cost effective method to manage a state's textbook distributions.</p>
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<b>Recommendation 4:</b>	<b>The General Assembly should direct the Department of Public Instruction to justify the continued need for services provided by the Plant Operation and School Planning sections.</b>
<b>DPI Response to Recommendation 4:</b>	<p>DPI’s response to Recommendation 4 should serve as justification to the General Assembly for the continued need of services provided by both the Plant Operation and School Planning sections. To begin, DPI respectfully disagrees with several key points included in PED’s Finding 4. The data provided indicates that Plant Operation provides a net savings and is thereby cost effective; the fact that 74% of LEAs utilized Plant Operation services during the time period referenced in the report demonstrates the usefulness of services provided to the LEAs across the state. Plant Operation technical services are available to all the public schools systems in North Carolina at the request of the individual LEAs. Plant Operation will continue to seek ways to increase outreach efforts to all LEAs as opportunities arise during the 2014-15 fiscal year. Finally, Plant Operation’s current method of tracking savings by project is the most cost effective option to do so in our opinion. One alternative option would require additional project set up and project data maintenance work within the state’s time recording system and would likely not be supported by a cost-benefit analysis. Plant Operation will review and upgrade the current project tracking efforts to ensure maximum benefit.</p> <p>With regard to the recommendation to justify the continued need for services provided by the School Planning section, DPI reiterates this section’s staff often performs the only professional review of plans and designs for school buildings. State law and building codes do not require review by the Department of Insurance for any renovations nor for any school buildings less than 20,000 square feet. In addition, staff expertise in the functional aspects of school design helps insure that buildings are constructed efficiently, functionally and cost effectively. Typical input includes comments on inefficient HVAC systems, buildings that are difficult to supervise, functions that should be adjacent but are not, classrooms that are too small to teach an average class in and many other items.</p> <p>DPI disagrees with the assertion made in the PED Report that, “DPI does not monitor how or if their review comments are being used by LEAs.” Designs for school buildings are submitted in several phases of development. School Planning comments made in early phases of development are incorporated in to subsequent phases of design. If not, and the comment was deemed very important, the comment is made again. Where comments made are critical to safety, function, cost effectiveness or other similar issues, School Planning issues a letter stating that response is required to complete the review. If the comments continue to not be addressed, a letter is automatically issued to the designer stating that DPI cannot complete the review until they have</p>

<p><b>DPI Response to Recommendation 4, cont'd.</b></p>	<p>done so. When those comments have not been addressed, DPI will not issue a “Certificate of Completion of Review” and/or issue a memorandum of deviation from the Public School Facility Guidelines noting the deviation. The LEA and designer are both copied with these documents as well as copies being placed in that particular school’s permanent file. In the database, the project is listed as “filed without completion of review.” Between 2008 and 2012, 25 projects were as such.</p> <p>DPI also disagrees with the statement in the report that, “DPI does not maintain sufficient information to evaluate the effectiveness of the process to determine whether existing schools should be replaced or renovated.”</p> <p>The stakeholders involved in historic preservation laws were concerned that potentially historic school buildings were being abandoned or demolished without such consideration for re-use. As such, the law was enacted as a safeguard. The vast majority of school buildings that are demolished have no significant historic or educational value. They include old vocational shops, buildings that are unsafe, or inadequate for reuse. We find that school buildings that do have historical value often no longer meet the needs of a modern educational program due to classroom spaces being too small, worn out or unsafe mechanical and electrical systems, or limited space available for the many other education programs that have been enacted over the years. DPI agrees that such buildings should perhaps be saved; just not as a school. Numerous such buildings have been successfully re-adapted into elderly housing, community use, even as a hotel and conference center.</p> <p>DPI can claim 100% success with this program because the study is performed by designers or school officials prior to the final decision to tear down or abandon the building(s). Forms submitted to DPI must clearly indicate that the building(s) should be demolished or abandoned.</p> <p>If the buildings are to be abandoned, other uses may still be found for the structure and, in fact, the LEA is usually more than willing to work with others to achieve such a re-use. The process only becomes an issue if the building is located on the site of the school and the space is needed for a replacement building or other use is incompatible with that of a school.</p> <p>In summary, DPI believes this response suffices as justification for the continued need for Plant Operation and School Planning section services. If so required by the General Assembly, DPI will provide this information in any requested reports to the Joint Legislative Education Oversight Committee and the Fiscal Research Division by September 1, 2015.</p>
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<b>Recommendation 5:</b>	<b>The General Assembly should direct the Department of Public Instruction to develop model injury prevention and return-to-work programs and require local school administrative units to implement programs based on the models.</b>
<b>DPI Response to Recommendation 5:</b>	<p>DPI acknowledges that Loss Prevention and Return-to-Work objectives are effective programs in controlling workers’ compensation costs, sustaining a safe working environment for employees, and providing incentives for injured employees to return to their working environment after an injury occurs. Specific responses to the recommendations follow:</p> <ul style="list-style-type: none"><li>• Loss Prevention: Management Commitment, Written Safety Policies, Loss Prevention Goals, Employee Training, Self-Inspection and Accident Investigation are key components to successful and effective loss prevention programs. DPI will prepare a written general loss prevention policy for schools to follow and implement.</li><li>• Return-To-Work: As noted in the report, DPI developed a return-to-work policy for schools to follow; or to modify in accordance with their needs. Additionally, the SBE written policy states schools “shall” return employees back to work. DPI initiated a procedure requiring our workers’ compensation third party administrator to advise DPI when a school is resistant to returning injured employee back to work. DPI will implement a procedure requesting all school districts to file a return-to-work policy with DPI Insurance effective July 1, 2014.</li></ul> <p>Key components of Loss Prevention and Return-to-Work programs require NC school systems to support the implementation of the specific components of management, self-inspection and accident investigation. DPI cannot conduct individual school district assessments without additional staffing. DPI will implement training for school districts to attend and will provide written policies on these programs and engage every school district to implement and provide support. Upon completion, prepared policies will be available to school districts via the DPI website.</p>

<b>Recommendation 6:</b>	<b>The General Assembly should direct the State Board of Education to develop strategic goals and the Department of Public Instruction to develop a performance management system that together will ensure administrative support programs effectively contribute to the vision for North Carolina’s public school system.</b>
<b>DPI Response to Recommendation 6:</b>	<p>In exercising the State Constitutional authority to administer and supervise public education, the State Board of Education has developed five strategic goals that have guided the development of the Department's performance management system since the mid-2000s. Local school districts have also used these strategic goals to develop local strategic plans.</p> <p>NCDPI has implemented a strategy and performance management tool, known as the Performance Navigator (see <a href="#">tool</a>) since 2008 both to organize and align the work of the Department to the Board’s goals and to provide transparency for stakeholders, including our primary customers (schools’ personnel, parents) and the general public. This tool captures the alignment between State Board’s full set of aspirational goals, its priority goals, measures used to track progress toward those objectives, and the work of each NCDPI Division. The tool also captures each Division’s priority objectives (for example, see <a href="#">performance management</a>) and, periodically, progress toward achievement of those objectives. NCDPI Senior Managers use these “Division pages,” as they are called, to guide planning and regular reviews with their staff, and to ensure that individual’s work plans are aligned to achievement of Divisional priority work. The State Board has used this tool to hold the Department accountable for making progress toward the Board’s goals; Board meetings and annual Board planning sessions have included NCDPI staff presentations on both progress toward achievement of Board targets and reviews of Divisional progress on priority activities.</p> <p>The State Auditor's report (previously supplied and attached) cites the Department of Public Instruction’s performance management system and points out that it is available on the our website. The performance objectives, strategies, timelines, etc. are also referenced in the Race to the Top section of the website.</p> <p>It is unnecessary for the General Assembly to direct the State Board of Education and the Department of Public Instruction to do that, which is a practice that has been in place since the mid-2000s.</p> <p>Currently, the State Board is revising its strategic goals, objectives, and measures that will be adopted by the 2014 summer. Subsequently, the Department will revise the performance management system to reflect any changes. Below is a description of the current re-visioning effort of the State Board of Education.</p>

**DPI Response to Recommendation 6, cont'd.**

Prior to its October 2013 meeting, the North Carolina State Board of Education (SBE) members and staff, along with Department of Public Instruction (DPI) staff, began the process of redeveloping a draft strategic plan of goals, objectives, and measures within the required framework of the Office of State Budget and Management. This initial work on revising the current strategic plan for the SBE became the foundation of the Board's planning and work session in Cullowhee, North Carolina, in October 2013. During the planning and work session, Board members worked individually, in teams, and as a full Board on the overall vision of its strategic plan. The Board began the process of detailing the specific goals, objectives, and measures that would continue to lead the Board and the Department of Public Instruction to a place of continued and accelerated growth in student achievement to facilitate career and college readiness and to continue the increase in graduation rates.

Following the planning and work session, the Board's five committee chairs and vice chairs were tasked with holding continued intense discussions with Board and Department of Public Instruction staff. Specifically, the document would identify those goals, objectives, and measures that would capture and become a road map for the next few years as the Board works to lead schools to higher levels of student achievement and college and career readiness. Board committee chairs and vice chairs held a series of meetings with Board and DPI staff who were experts in the particular areas represented by the Board's committees.

In addition to these meetings with staff for work sessions, the Board and its staff have made a concerted effort to make this plan highly visible and to invite feedback by posting the plan on its eBoard site. To ensure that external groups engaged with the Board's plan actively, the Board sent copies of the draft strategic plan to the NC Chamber of Commerce, the NC Business Committee for Education and local school superintendents. The inclusion of the public and external groups has yielded valuable feedback and perspectives that are now being incorporated into the draft SBE strategic plan.

A second two-day planning and work session on the Board's strategic plan took place on March 31 and April 1. At that time, Board members spent time finalizing its newly revised draft strategic plan. The SBE Chairman presented the final draft for approval by the Board at its April 2 meeting. The approved plan will be used by the Board as a means of measuring progress towards the goals. Additionally, the Board directed the State Superintendent to develop an implementation plan that will be presented to the Board in sixty days from the April 2014 meeting. The Board will act to approve the implementation plan from the State Superintendent in a timely manner.

Mr. John Turcotte – PED Study Response  
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April 4, 2014

Again, thank you for the opportunity to review and comment on the Program Evaluation Division's report on FBS' operational efficiency.

Sincerely,

A handwritten signature in cursive script that reads "June St. Clair Atkinson".

June St. Clair Atkinson

Enclosures (3)