# LAC

# A Review of South Carolina School Bus Operations

April 2001

embers of the General Assembly requested that we conduct an audit of the cost, safety, and service of South Carolina's school bus operations. The State Department of Education (SDE) shares responsibilities for student transportation with the 86 school districts. The districts are served by 44 bus maintenance shops and a central rebuild facility. School districts establish bus routes and also recruit, employ, and supervise more than 5,000 school bus drivers. Statefunded transportation is provided to eligible public school students to and from school on regular route buses and special needs buses.

We estimated the state's operating expenditures for student transportation (including state and local funds) at about \$111.9 million in FY 98-99. SDE spent approximately \$73 million (65%) of the state's cost for school transportation. No buses were purchased during FY 98-99. These calculations do not include the cost of buses or depreciation.

#### FLEET STATISTICS

- An average of 319,482 public school students are transported each day.
- S.C. is the only state that owns and maintains an entire school bus fleet.
- As of July 2000, SDE's fleet consisted of 5,008 route buses and 580 spare buses.
- There are about 17,000 daily bus routes, and school buses traveled almost 74 million miles in FY 99-00.

## TRANSPORTATION COSTS

#### **CALCULATION OF COST PER STUDENT**

According to SDE, cost per student should be used to measure the efficiency of the state's school bus transportation system. We found a significant difference between the cost per student as defined by SDE and the actual cost per student.

SDE defines cost per student as the average number of one-way trips students take each day divided into transportation operating expenditures. For FY 98-99, this results in a cost of \$227. This is not the actual cost per student. Actual cost per student is based on a count of students and not a count of trips. Using the average number of students transported daily in FY 98-99 results in a cost of \$350 — a difference of 54%.

#### COST PER STUDENT CALCULATIONS (FY 98-99)



- 1 Transportation operating expenditures of \$111.9 million divided by 492,179 trips.
- 2 Transportation operating expenditures of \$111.9 million divided by 319,482 students.

NATIONAL SCHOOL BUS TRANSPORTATION DATA LACKS UNIFORMITY, THEREBY PREVENTING MEANINGFUL INTERSTATE COMPARISONS.

#### INTERSTATE COST COMPARISONS

In 1999, we reported that SDE had purchased buses with high cost specifications. SDE stated that we had not considered operational costs and that South Carolina had A. . . the lowest per pupil transportation cost in the country.@ SDE used unreliable data in reaching this conclusion.

We found that other states calculate cost per student differently, and also that the types of costs included in their expenditures vary. Georgia and Tennessee include school bus purchases. At least two states (Florida and Virginia) include the cost of summer school. None of the eight states include state administrative office expenses.

National school bus transportation data lacks uniformity, thereby preventing meaningful interstate comparisons. Until the quality of data is improved, cost comparisons between states are not valid. As a result, it is questionable whether South Carolina's costs are low in comparison to other states.

#### **SCHOOL BUS PURCHASING**

In 1999, we recommended that:

- SDE reevaluate its specifications for school buses.
- SDE establish a formal school bus replacement schedule.
- The General Assembly use a formal replacement schedule for funding the replacement of buses.

The table below summarizes school bus purchases by various states and communities in 2000. We found that

#### FOR A 78-PASSENGER BUS:

- South Carolina paid \$71,876.
- Roanoke County, Virginia paid \$54,638.
- North Carolina paid \$65,340.

#### FOR A 66-PASSENGER BUS:

- South Carolina paid \$72,651.
- North Carolina paid \$47,562.
- Fulton County, Georgia paid \$49,872.

SDE purchased school buses which cost significantly more than those purchased by other states and communities.

SDE recently revised its bus specifications, which should result in lower bus prices in 2001. In addition, SDE has recommended implementation of a 15-year / 200,000–300,000 mile replacement schedule.

#### SCHOOL BUS TYPES



#### Transit

These are "flat-nosed" buses with the engine located behind the windshield.



#### Conventional

These are buses with hooded engines located in front of the windshield.

EXAMPLES OF SCHOOL BUS PRICES IN 2000							
BUS TYPE AND CAPACITY	UNIT PRICE	Horse Power	NUMBER PURCHASED	STATE CONTRACT	REPLACEMENT CYCLE		
South Carolina							
78-Passenger Rear-Engine Transit	\$71,876	250	51	Yes	20 years / 200,000 miles*		
66-Passenger Rear-Engine Transit	\$72,651	250	100	Yes	20 years / 200,000 miles*		
15-Passenger Special Needs Conventional	\$69,927	250	50	Yes	15 years / 150,000 miles*		
North Carolina							
78-Passenger Rear-Engine Transit	\$65,340	210	8	Yes	20 years / 200,000 miles		

78-Passenger Rear-Engine Transit	\$65,340	210	8	Yes	20 years / 200,000 miles
66-Passenger Conventional	\$47,562	190	826	Yes	20 years / 200,000 miles
44-Passenger Special Needs Conventional	\$51,329	190	48	Yes	20 years / 200,000 miles

#### FULTON COUNTY, GEORGIA

84-Passenger Front-Engine Transit	\$64,465	210	4	No	16 years
72-Passenger Conventional	\$50,508	190	42	No	12 years
66-Passenger Conventional	\$49,872	190	22	No	12 years
48-Passenger Conventional	\$49,656	190	6	No	12 years
19-Passenger Special Needs Conventional	\$54,649	190	4	No	12 years

#### Nashville, Tennessee

84-Passenger Front-Engine Transit	\$62,087	225	20	No	15 years
47-Passenger Special Needs Front-EngineTransit	\$68,209	205	5	No	15 years
39-Passenger Special Needs Front-EngineTransit	\$65,768	190	5	No	15 years

#### ROANOKE COUNTY, VIRGINIA

78-Passenger Front-Engine Transit	\$54,638	190	2	No	12 years
64-Passenger Conventional	\$50,065	190	3	No	12 years

\*SDE's anticipated replacement cycle for buses purchased in FY 00-01 as reported in its FY 00-01 budget request. Source: SDE and education officials in NC, GA, TN and VA.

#### **MECHANIC AND BUS DRIVER WAGES**

In April 2000, a private consultant hired by SDE reported that school bus mechanics and bus drivers are underpaid, when their wages are compared with wages paid by other employers in South Carolina. The consultant also reported that the turnover rate had been 34% for bus mechanics and 27% for bus drivers.

SDE employs more than 400 bus maintenance staff across the state. Local school districts employ more than 5,000 school bus drivers, whose wages are funded primarily by the state, with additional funding provided by the districts.

In April 2000, SDE's consultant recommended:

- A 10.2% pay increase for bus mechanics costing \$900,000 per year.
- A 13.1% to 45% pay increase for bus drivers costing between \$4.6 million and \$15.9 million per year.

In FY 00-01, SDE gave a "special salary adjustment" of 3% to its mechanics. In addition, in its FY 01-02 budget request, SDE asked for funds to raise both drivers' and mechanics' salaries.

We reviewed only the transportation component of the state's educational system. Therefore, we did not determine whether the additional funds needed are available from existing education resources or whether there is a need for additional funding.

### SAFETY AND SERVICE

#### SCHOOL BUS INSPECTIONS

SDE has not adequately monitored its school bus inspection program. Bus mechanics check many parts of each bus, including the brakes, transmission and warning lights. We reviewed a sample of inspections performed at three bus shops during FY 99-00 and found that only 191 (68%) of the 280 required 6-week inspections had been performed. In addition, only 32 (80%) of the 40 annual inspections had been performed.

#### FY 99-00 BUS INSPECTION RESULTS

COUNTY BUS SHOP	BUSES IN SAMPLE	6-WEEK INSPECTIONS PERFORMED	ANNUAL INSPECTIONS PERFORMED
Greenwood	15	105 / 105 (100%)	15 / 15 (100%)
Kershaw	15	85 / 105 (81%)	15 / 15 (100%)
Richland	10	1 / 70 (1%)	2 / 10 (20%)
TOTAL	40	191 / 280 (68%)	32 / 40 (80%)

Source: SDE bus shops.

## INTERSTATE COMPARISON OF SCHOOL BUS SAFETY STATISTICS

SDE officials have noted that it is important to consider safety when developing bus specifications. According to the National Highway Transportation Safety Administration (NHTSA), school buses are "... one of the safest forms of transportation."

In 1999, SDE reported that higher cost buses were necessary, in part, due to the increased level of safety they provide. NHTSA and other safety organizations state that a statistically valid comparison of school bus accident and injury rates between states cannot be done with existing data. As a result, there is no basis for comparing the safety of South Carolina's school bus system, with its higher cost buses, to systems in other states.

The definitions of an accident, an injury, and even a school bus are not consistent from state to state. Furthermore, an official with NHTSA reported that interstate comparisons of school bus safety data are not likely to be statistically valid because accident and injury rates are very low across the nation.

#### **BUS DRIVER QUALIFICATIONS**

We found that SDE could improve its monitoring of school district compliance with commercial driver's license (CDL) requirements.

School bus drivers in South Carolina are required to undergo random drug and alcohol testing and possess a valid commercial driver's license. In a limited review of three school districts (Beaufort County, Fairfield County, and Orangeburg 5) we found Orangeburg 5 had not conducted random drug testing between October 1999 and September 2000.

#### QUALITY OF SERVICE

SDE could improve its performance measures that relate to quality of service. For example, data on the length of bus rides, morning pick up times, and tardiness are not included in SDE's annual accountability report. If SDE were to compile and report this data, parents, students, and administrators would be better able to assess school transportation services. As an illustration of quality of service performance data, we conducted a limited analysis of the morning bus routes reported by three districts. In one district, no regular route exceeded two hours while over 87% of the special needs routes had at least one student who rode longer than two hours.

SCHOOL BUS ROUTES IN 2000-2001*							
	FIRST STOP	ROUTE > 2 HOURS					
DISTRICT	REGULAR ROUTES	SPECIAL NEEDS ROUTES	REGULAR ROUTES	SPECIAL NEEDS ROUTES			
Calhoun	15%	0%	0%	0%			
Florence 1	1%	33%	0%	87%			
Lexington 2	0%	13%	0%	25%			

<sup>\*</sup> This data reflects the percentage of routes where at least one student is picked up before 6 a.m. or where at least one student rides longer than two hours.

Source: SDE bus route descriptions.



his document summarizes our full report, *A Review of South Carolina School Bus Operations*. SDE's response is included in the full report. All LAC audits are available free of charge. Audit reports and information about the LAC are also published on the Internet at www.state.sc.us/sclac . If you have any questions, contact George L. Schroeder, Director.