

Reported Public School Conditions And Needs⁴¹

Four major factors contribute to a public school system's need for infrastructure:

growth in student populations
compliance with class size standards
natural wear-and-tear or neglect
structural age

In addition, school systems are expected to comply with mandates, upgrade facilities, and add new technology infrastructure to keep up with changing times. According to local officials, most of Tennessee's public school buildings are in good or excellent condition; nevertheless, significant needs remain. Infrastructure improvements, including new schools as well as improvements and additions to existing schools that need to be in some phase of development during the five-year period of July 2001 through June 2006, are estimated at \$3.6 billion. This figure is nearly \$162 million less than that reported in the last inventory, which was begun two years ago. The decline may indicate that Tennessee's school systems are beginning to catch up with their facilities needs, though clearly they have not yet done so.

Table 16. Total Reported Cost of Public School Infrastructure Needs^{41, 42} by Type of Need—Five-year Period July 2001 through June 2006

Type of Need	Estimated Cost [in millions]	Percent of Total
New School Construction	\$1,634.9	45.8%
<i>EIA-related Needs⁴³</i>	1,202.4	33.7%
<i>Enrollment Growth & Other New School Needs</i>	432.4	12.1%
Existing Schools	\$1,907.8	53.5%
<i>Facility Component Upgrades</i>	1,472.7	41.3%
<i>Technology</i>	230.5	6.5%
<i>EIA Mandate</i>	150.0	4.2%
<i>Federal Mandates</i>	39.7	1.1%
<i>Other State Mandates</i>	14.8	0.4%
System-wide Needs	\$23.2	0.7%
Statewide Total	\$3,565.8	100.0%

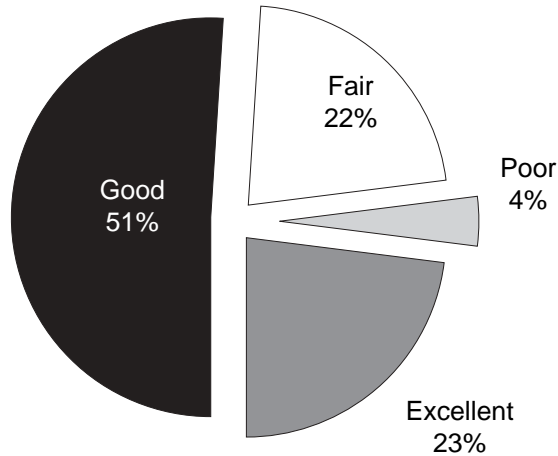
⁴¹ This section of the report covers only local public school systems. It does not include the state's special schools, and therefore, totals presented here will not match totals elsewhere in this report.

⁴² Detailed information for each school system is presented in Appendix E.

⁴³ TACIR staff analyzed patterns of growth in student counts to develop estimates of the percentage of new school construction attributable to the lower class sizes required by the Education Improvement Act of 1992 rather than to enrollment growth or replacement of existing schools. For a description of the TACIR methodology, see Appendix F.



Figure 4. Condition of Schools as Reported by Local Officials



Seventy-four percent of Tennessee's public schools are in good or excellent condition, but upgrades of \$1.5 billion are still needed.

Defining what constitutes a high-quality learning environment is subjective in nature and difficult to quantify. While the optimum condition for schools may be a qualitative rating of excellent, as a practical matter, the goal of the inventory is to capture the cost of getting our schools in good condition—both overall and for each facility component.⁴⁴ As shown in Figure 4, nearly three-fourths of Tennessee's public schools are in good or excellent condition. However, even schools in good or excellent condition overall can have components in less than good condition.

As shown in Table 17, just over 90 percent of Tennessee's public school systems rate at least half of their school buildings good to excellent. Only two school systems indicate that none of their buildings are in good or excellent condition. The cost of putting all public schools in good condition varies among the school systems depending on the percentage of schools already in good or excellent condition. The cost per student for the two systems that rate none of their school buildings good or excellent is nearly three times the statewide cost per student.

Table 17. Cost per Student to Put All Schools in Good Condition by Percent of Schools Currently in Good or Excellent Condition

Percent of Schools Good or Excellent	Number of School Systems	Percent of School Systems	Cost per Student to Put All Schools in Good Condition
None	2	1.4%	\$ 3,504
Less than 25%	1	0.7%	\$ 887
25% to 50%	10	7.2%	\$ 3,309
50% to 75%	17	12.3%	\$ 1,343
75% to 100%	108	78.3%	\$ 627
Total	138	100.0%	\$ 1,248

Local school officials report a need to upgrade one or more facility components at 47 percent of all schools at a total estimated cost of almost \$1.5 billion as shown in Table 16 on the preceding page. This figure is almost \$340 million more than the amount recorded in the inventory two years ago, but is offset to a great extent by the nearly \$275 million decrease in needs attributable to the EIA at new and existing schools.

⁴⁴ See the Education Survey Form, Section B-9, in Appendix C for more specific information about the facility rating scale.

The EIA remains the most significant mandate for Tennessee schools.

Approximately \$1.4 billion is needed in order for Tennessee's public schools to comply with state and federal facilities mandates, which was a decrease of \$430 million since the February 2001 report, which is based on a period two years earlier than the current timeframe. Ninety-six percent of the total mandated needs is attributable to the Education Improvement Act (EIA) adopted by the Tennessee General Assembly in 1992;⁴⁵ the remainder is attributable primarily to federal mandates. (See Figure 5 and Table 18.) One of the hallmarks of the EIA is the reduction of class size for students in all grades. Smaller classes mean more teachers, and more teachers mean more classrooms. The EIA set a deadline of fall 2001 for the new standards to be met, and school systems across the state have been striving to meet it since 1992. According to the Tennessee Department of Education, all schools hired enough teachers to meet this mandate on time. The decrease between the current and the previous inventories in the estimated cost of housing new classes created by the EIA mandate makes sense given these facts.

Figure 5. Percent of Reported Cost of Facilities Mandates at Public Schools by Type of Mandate

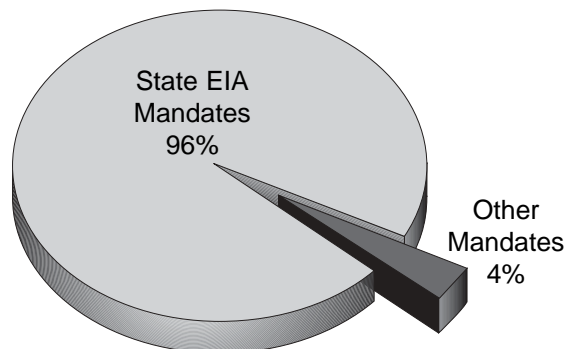


Table 18. Total Reported Cost of Facilities Mandates at Public Schools Five-year Period July 2001 through June 2006

Mandates	Estimated Cost [in millions]	Percent of Total Mandate Cost
State Mandate Total	\$1,367.3	97.2%
<i>State-EIA (New & Existing Schools)</i>	1,352.5	96.1%
<i>State-Fire Codes</i>	11.5	0.8%
<i>State-Other</i>	3.3	0.2%
Federal Mandate Total	\$ 39.7	2.8%
<i>Asbestos</i>	21.3	1.5%
<i>Americans with Disabilities Act</i>	15.1	1.1%
<i>Special Education</i>	1.9	0.1%
<i>Title I</i>	0.5	0.0%
<i>Underground Storage Tanks</i>	0.4	0.0%
<i>Lead</i>	0.3	0.0%
<i>Radon</i>	0.2	0.0%
Mandate Total	\$1,407.0	100.0%

⁴⁵ TACIR staff analyzed patterns of growth in student counts to develop estimates of the percentage of new school construction attributable to the lower class sizes required by the Education Improvement Act of 1992 rather than enrollment growth or replacement of existing schools. For a description of the TACIR methodology, see Appendix F.

Average cost per student to meet infrastructure needs varies widely.

Drawing conclusions about the variation across school systems in reported infrastructure needs is difficult. Based on the information provided by local officials for their schools and the estimates developed by TACIR staff for new school construction attributable to the EIA, the overwhelming majority of school systems (92 of the 137 full-service systems) have the classroom space they need for the teachers hired to meet the new class-size standards imposed fall 2001. Most of the remaining school systems can meet that need for less than \$500 per student. This is a dramatic improvement since the previous inventory of needs and indicates in general that Tennessee's public school systems planned well to the meet the new requirement with adequate facilities. (See Table 19 above)⁴⁶

Table 19. Number of School Systems by Range of EIA-Related Infrastructure Cost per Student Five-year Period July 2001 through June 2006

Reported EIA Costs per Student	Number of School Systems	Percent of School Systems
None	92	67.2%
Less than \$500	31	22.6%
\$500 to \$1,000	6	4.4%
\$1,000 to \$1,500	2	1.5%
\$1,500 to \$2,000	4	2.9%
More than \$2,000	2	1.5%
Total	137*	100.0%

* There are 138 public school systems in Tennessee. The Carroll County system was removed from all statistical analyses because it does not serve elementary school students and therefore is not comparable to the other 137 systems.

While EIA-related needs have declined dramatically, upgrade needs at existing schools have increased. Local officials assessed the condition of classrooms and other facilities at their existing schools and reported a total need of \$1.5 billion (see Table 16) to upgrade them to good condition. This figure is about \$340 million or thirty percent more than the figure presented in

Table 20. Number of School Systems by Range of Upgrade Costs per Student Five-year Period July 2001 through June 2006

Reported Upgrade Cost per Student	Number of School Systems	Percent of School Systems
None	43	31.4%
Less than \$500	64	46.7%
\$500 to \$1,000	12	8.8%
\$1,000 to \$1,500	9	6.6%
\$1,500 to \$2,000	5	3.6%
More than \$2,000	4	2.9%
Total	137*	100.0%

* There are 138 public school systems in Tennessee. The Carroll County system was removed from all statistical analyses because it does not serve elementary school students and therefore is not comparable to the other 137 systems.

the February 2001 report. The difference may result in part from a change in the inventory format designed to better align facility ratings with estimated costs to put them in good condition and increased efforts by TACIR staff to interpret and verify reported needs.

As shown in Table 20, nearly a third of all systems report no need to upgrade their facilities, and nearly half report that they can put all of their facilities in good condition for less than \$1,000 per student system wide. This is no small amount, but nine school systems report a cost of more than triple that amount per student. TACIR staff attempted to limit the subjectivity

⁴⁶ Appendix E includes the cost per student for each school system.



inherent in rating the condition of schools by carefully defining the terms used to do so in the survey itself (see Appendix C). However, with 138 school systems, it is impossible to ensure that the condition of all facilities is rated in a consistent manner. Determining the reasons for the variation in reported needs would require more information than was gathered for the infrastructure inventory. Differences among schools systems in the costs they estimate to put their schools in good condition may relate to the judgment of local officials or, in the case of unusually high costs per student, may reflect either neglect or attempts to set a higher standard.

As shown in Table 16, local officials estimated a total need for \$231 million in technology infrastructure at existing schools. While the total amount is slightly higher than the amount reported in the previous inventory, more school systems are reporting no new technology needs, and about the same number are reporting needs of less than \$100 per student system wide. Twenty-four school systems now report no need to upgrade technology in their schools, which is nine more than in the previous inventory. The same number of systems (twelve) report needs of more than \$400 per student. (See Table 21 above.) Reasons for variations like these include local priorities; in the case of relatively low costs, earlier efforts to meet technology needs; and in the case of relatively high costs, current or planned efforts to provide more state-of-the-art technology. It cannot be said without further study whether any of these costs are unreasonably high or whether other estimates are low.

Table 21. Number of School Systems by Range of Technology Infrastructure Costs per Student Five-year Period July 2001 through June 2006

Technology Cost per Student	Number of School Systems	Percent School Systems
\$0	24	17.5%
Less than \$100	57	41.6%
\$100 to \$200	28	20.4%
\$200 to \$300	7	5.1%
\$300 to \$400	9	6.6%
More than \$400	12	8.8%
Total	137*	100.0%

* There are 138 public school systems in Tennessee. The Carroll County system was removed from all statistical analyses because it does not serve elementary school students and therefore is not comparable to the other 137 systems.