JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION
OF THE VIRGINIA GENERAL ASSEMBLY

Best Practices for the Support Services of School Divisions

REPORT OF THE
JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION

Best Practices for the Support Services of School Divisions

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

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Preface

House Joint Resolution (HJR) No. 34 from the 2002 General Assembly Session required that the Joint Legislative Audit and Review Commission (JLARC) "examine the best administrative, fiscal, and service practices in the Commonwealth's public school divisions." The mandate for the study required an interim report for the 2003 General Assembly and a final report by the end of November 2003.

Pursuant to the mandate, this study focused on best practices for the non-instructional services provided by school divisions. For study purposes, the concept of "best practices" was defined broadly and inclusively as "work methods, resource allocations, processes, and initiatives to improve a school division's efficiency and/or effectiveness."

The interim report for this review focused on identifying a wide range of potential best non-instructional practices that are being used in some school divisions in the Commonwealth. JLARC staff established a location on the JLARC internet site where school division staff could submit practices that have been successful in their divisions. Through this process, over 180 best practice ideas were submitted by the school divisions. A list of descriptive titles for these best practices, with the names of the school divisions submitting them, is provided as an appendix at the back of both the interim report and this final report.

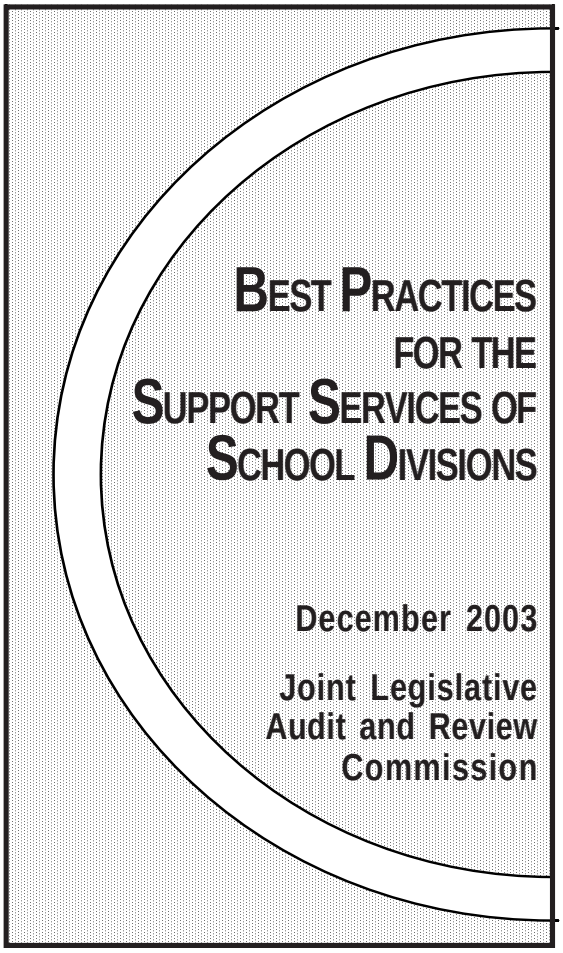
For this final report, JLARC staff examined the provision of support services in more detail, focusing on the following services: administrative services, attendance services, health services, operation and maintenance services, pupil transportation services, and school food services. The study found that in general, school division practices and expenditures for non-instructional support services in Virginia appear to be neither inadequate nor excessive. However, improvements could be made in some areas. For example, evidence from the review indicated that managerial control over staffing levels in some support areas could be tighter in some divisions. A summary listing of the 21 recommendations that resulted from the study is provided at the end of the report summary.

On behalf of the JLARC staff, I would like to thank the school divisions for their assistance in this phase of the review, and particularly the staff who prepared and submitted best practices for inclusion in the study. In addition, I would like to thank Department of Education staff for their assistance in providing requested information.

Philip A. Leone
Director

January 5, 2004

JLARC Report Summary



The operational activities and expenditures of school divisions are often categorized into instructional and non-instructional components. Instructional activities and expenditures are directed at student learning, and therefore address the core purpose of public education. However, there are various non-instructional functions that are performed to enable students to have access to instructional opportunities in a safe and comfortable environment. For example, central administrative activities are conducted in part to provide leadership and set policies for the school division, to plan for current and future building use and needs, to manage the resources available to the division, and to recruit and hire competent personnel to deliver the instructional program and other services to students. Transportation services are provided so that there is a reliable and economical means of getting students to the schools. Operation and maintenance services are provided so that the instruction can be provided in buildings that are safe, clean, and heated or cooled to appropriate temperatures.

There are many different policies and practices that are used by school divisions in providing non-instructional services. Given the public interest in seeing that education funds are spent efficiently and effectively, House Joint Resolution (HJR) No. 34 from the 2002 General Assembly directed that the Joint Legislative Audit and Review Commission "examine the best administrative, fiscal, and service practices in the Commonwealth's public school divisions." The language of the mandate indicated that the review should focus on best practices for the various non-instructional services delivered by the school divisions. For the purposes of the review, the concept of "best practices" was defined broadly and inclusively by JLARC staff as "work methods, resource allocations, processes and initiatives to improve a school division's efficiency and/or effectiveness."

This report is the second and final report that has been developed to meet the study mandate. In an interim report (January 2003), JLARC staff reported on the progress made during the initial phase of the review. JLARC staff developed a web site location to which school division personnel could report best practice ideas that were being used by their school division. Over 180 best practices were submitted. A listing of the submitted best practices was included as an appendix to the interim report (and a

listing is also included as an appendix at the back of this final report).

In the second phase of the review, the primary research activity involved site visit interviews with personnel in 20 school divisions. Through this process, the non-instructional policies and practices of school divisions were explored, to consider factors that may account for differences among divisions in the quality, quantity, effectiveness, and efficiency of non-instructional services. The non-instructional services that became the focus of the second phase of the review – central administrative services, attendance and health services, pupil transportation services, operation and maintenance services, and school food services – are referred to in the title and throughout this report as "support services."

This study found that in general, school division practices and expenditures for non-instructional support services in Virginia appear to be neither inadequate nor excessive. More specifically, Virginia's per-pupil expenditures for non-instructional services are below the national average, and are similar to the average for the southern region of the country. The proportion of expenditures allocated to non-instructional services is less than the national and southern region averages, and is less than all but two of the 16 states in the southern region. Looking across the school divisions visited for this review, the divisions did not appear to be characterized by glaring inefficiencies or gross inadequacies in the non-instructional support services provided. Unique, locality-specific factors have an impact upon the costs of these services, as do local policy choices about matters such as the level or caliber of services that are desired, or what salary and fringe benefit practices seem appropriate. Most of the school divisions visited – low cost as well as high cost divisions – appear to have implemented at least some support practice ideas that could be considered innovative or efficient.

However, while school divisions generally appear to provide non-instructional support services in a cost-conscious manner and to make use of some best practice ideas, there is always room for improvement. For example, while some divisions have standards or benchmarks that inform their staffing decisions, other divisions appear to make staffing decisions on a more subjective basis. (Evidence from the site visits for the review suggested that managerial control over staffing levels in some support areas, such as custodial staffing, could be tighter in some divisions.) Also, although school division personnel appear to already communicate to some extent with each other about best practice ideas – through means such as associations for occupation groups – it appears from the review that divisions could still benefit further from more routine dissemination across divisions of support services information, including best practice ideas. Some divisions also indicated that access to more specific information about the levels of support services used as the basis for determining State funding, and good comparative information about costs across divisions, would be useful to them in scrutinizing their costs.

This study, in both the interim and final phases, has sought to constructively identify a variety of practices that at least some school divisions in Virginia have found helpful in meeting the challenges of providing support services. It should be noted, however, that the findings from the review also suggest that the appropriateness of implementing many best practice ideas can depend on locality characteristics and circumstances, and community expectations. These factors need to be carefully considered at the local level. Therefore, most of the recommendations in this report suggest that school divisions consider the applicability of a best practice idea for their school division. The report generally avoids making blanket recommendations suggesting

that all divisions "ought" to perform particular support services in a given way. (Report recommendations are summarized in a table at the end of this summary.)

The remainder of this summary provides an overview of study findings and conclusions regarding: (1) non-instructional support expenditure levels in Virginia, (2) the practices used by school divisions to deliver non-instructional support services, and (3) a discussion of cross-cutting themes and implementation issues regarding best practice ideas.

Non-Instructional Support Expenditure Levels in Virginia

As part of the context for this review, Virginia's expenditures for non-instructional support services were compared to other states in the southern region of the country and the national average, based on FY 2001 U.S. Census Bureau data on school finances. The expenditures were examined as a percentage of overall operating costs, and as per-pupil amounts. The table below summarizes the findings from this review.

The analysis showed that Virginia ranked third among the 16 states in the southern region in having the lowest percentage of expenditures going to fund non-instructional support services (or if ranked from high to low as in the table below, Virginia was 14th of the 16 states). Overall, Virginia's per-pupil expenditures were similar to the regional norm. Virginia's per-pupil expenditures for central administrative activities ranked second lowest in the southern region, with only Tennessee having lower costs. Total costs per pupil in fall membership for non-instructional support services were compared both before and after including pupil transportation services. (Virginia transports a high percentage of its pupils, contributing to a high cost per pupil in fall membership. However, Virginia's costs for pupil transportation are relatively low on both a per-pupil transported and per-mile basis.) With pupil transportation excluded, Virginia's per-pupil costs were below both the national and regional averages. With pupil transportation services included, Virginia ranked between the national average and the average

Virginia's Expenditures for Non-Instructional Services Compared to Southern Region States and U.S. Average
(Based on FY 2001 U.S. Census Bureau Data on School Finances)

	Virginia	Southern Region Average	Virginia's Rank Among 16 SREB States	National Average
Expenditures as Percent of Operating Expenditures	26.7 %	29.1 %	14th	29.2 %
Expenditure Per Pupil Excluding Transportation	$1,620	$1,643	8th	$1,867
Expenditure Per Pupil Including Transportation	$1,958	$1,893	6th	$2,171

Note: The category of non-instructional services used in this comparison includes central administration, pupil services, operation and maintenance, pupil transportation, and "other functions" (predominately school food and enterprise operations). It excludes costs that are for instruction, instructional staff support, and school administration (the principal's office).

of the southern states, but closer to the southern region average.

Practices Used by School Divisions to Deliver Support Services

Virginia school divisions make use of numerous practices to achieve efficiencies and improve services. Although not all practices can be successfully applied in all locations, some of the practices have potential for broader use. Consideration should also be given to implementing best practices that are used by divisions in other states, or practices suggested by school divisions that appear to have potential, but are not currently in use in Virginia.

Administrative, Attendance, and Health Services. Like other governmental and private sector entities, school divisions must perform several types of administrative activities to meet organizational responsibilities and keep operations running smoothly. School divisions also provide attendance services that assist them in enforcing the State's compulsory attendance statute. In addition, school divisions provide some health services to students, most frequently through the use of school nurses who are employed by the division. (Some school divisions contract with the local health department for health services.) Virginia's per-pupil costs for central administration and pupil support services (which includes attendance and health activities, but also includes other pupil support services) are lower than both the national and southern region averages.

In the central administrative services area, several school divisions reported that they have achieved efficiencies by working cooperatively with their local governments in operating joint financial systems. In addition, some divisions participate in purchasing consortia to obtain bulk rates on purchases. Additional practices that might be used to achieve efficiencies include the use of clerical pools instead of one-to-one clerical assignments, and increases in the number of divisions that have cooperative relationships with their local governments.

In attendance services, school divisions during this review reported two types of challenges for which best practices are needed. The first of these is responding to new federal / State requirements for tracking the status of students who do not re-enroll or do not stay enrolled with the school system. A best practice in this area is for divisions to get involved early in the process in providing input and understanding the expectations involved in a new State-level education information management system that will be developed by the State in part to meet student tracking expectations. School divisions will need to perform a role in the collection of data that supports this system. The second type of challenge involves encouraging truant students to attend school. Divisions reported several practices that they use to help meet this challenge, including the employment of attendance officers, the use of a multi-agency approach, and the establishment of a good working relationship with the court system.

For health services, a best practice cited by several school divisions in this review – and a resource cited as an unmet need in some other divisions – is the availability of a full-time nurse in each school. Particularly with the efforts in recent decades to mainstream special education students, many school divisions have student populations with substantial medical issues. Also, in some schools without nurses, concerns are raised about issues such as the use of school secretarial staff to administer medications and the potential liability that may result from not having a health professional at the site. Other schools indicate that the practice of having a full-time nurse per school is currently beyond the resource levels available to the division, and see access to this service as a lesser need than some needs they have in instructional areas.

In the provision of health services, a practice that could generate some increased federal revenues (and potential revenue savings to local governments and the State) is to maximize recoveries for health-related special education services under Medicaid, by increasing the frequency with which divisions bill Medicaid for eligible services. This issue was raised during the review by one of the school divisions visited that does seek substantial reimbursements for these services through Medicaid. A report of the Department of Medical Assistance Services (DMAS) indicated that only 53 of Virginia's school divisions "billed for a little over $3 million in the 2001-2002 school year and received $1.6 million in revenue," and that "school divisions in other states of similar size bill considerably more." In 2002-03, efforts directed toward making improvements in this area led to 68 of 134 school divisions (DMAS counts the two schools for deaf and blind as divisions) billing Medicaid for about $5 million, and the divisions received $2.3 million in revenue from direct services. (School divisions also received $577,571 in federal Medicaid funds for their administrative claims, as did the State.) In addition to the local and State revenue-saving potential that can come from recovering more of the costs, DMAS and DOE have been examining options that might bring increases in the services delivered to students that can be reimbursed through Medicaid.

Operation and Maintenance Services. Operation and maintenance services include all activities necessary to keep a division's school buildings clean, safe, and in good repair. National data indicate that Virginia's operation and maintenance expenditures per pupil are very close to the national average, but are above the average for the southern region and most states in the region.

School divisions submitted a relatively limited list of operation and maintenance best practices in the first phase of this review (10 practices out of the over 180 practices submitted). During site visits in the second phase of the review, however, a number of the school divisions visited described practices that they have found helpful and that may have applicability in other divisions. A table in the operation and maintenance chapter of this report contains a number of these ideas. Within the category of operation and maintenance services, the area most frequently referenced by school divisions for its cost saving potential during this study is energy conservation. Savings in this area may be obtained through practices such as installing energy management systems and/or energy efficient lighting and equipment to help contain utility costs, or by the use of practices that change the behavior of school staff and students with regard to the use of energy.

One of the findings that emerged from the site visits is that school divisions appear to use a variety of methods to determine custodial staffing levels, some of which may lead to higher staffing levels than necessary. Some divisions appear to have difficulty in determining whether and how to respond to pressures from their principals for increased custodial resources. Using a formula that takes into account a variety of factors (such as square footage, number of students, and number of teachers) to provide some guidance in custodial staffing decision-making may result in more appropriate staffing levels. Some other practices reported by divisions during this review that may achieve efficiencies in custodial services include providing custodians with adequate access to equipment that promotes efficiency (such as propane burnishers and automatic buffers), and providing for better monitoring of nighttime custodial work.

In addition, the development and use of facility maintenance plans is a practice in the operation and maintenance category that is commended by some maintenance experts. Facility maintenance plans represent

an attempt to systematically identify what needs to be maintained (information that can come from facility audits), to set priorities as to the maintenance work that is needed, and to identify a strategy for conducting the needed maintenance work. (Some school divisions without these plans indicate that they try to achieve similar purposes through evaluating maintenance needs as part of the Capital Improvement Plan process and through the use of maintenance schedules for activities such as roof and filter replacements.) In addition to the benefit of potentially enabling divisions to avoid making ad hoc decisions that are inadequately considered, maintenance plans are seen by some experts as a useful vehicle to help ensure that a division gives adequate attention to preventive and predictive maintenance (routine servicing of maintainable items, as well as maintenance in advance of predictable declines in item performance) as opposed to "breakdown maintenance."

During the site visits, some school divisions indicated that they give a priority to preventive maintenance activities. In addition, several divisions indicated that they use work order systems to help organize and track work requests. The development and use of facility maintenance plans, increasing the priority given to preventive maintenance, and the use of work order systems to track maintenance work all appear to be best practice ideas that may offer benefits to some school divisions in Virginia not currently employing those practices.

Pupil Transportation and School Food Services. Pupil transportation and school food are two services that in most divisions are provided for shorter periods of time than the full school day, and that serve a subset of students. Virginia's transportation costs per student are higher than national and regional averages. However, Virginia's per pupil cost per pupil transported and the total cost per mile are both lower than national and regional averages. Virginia's food services costs are lower than the national and regional averages on several measures. However, some divisions' food services programs, which are supposed to be self-supporting through federal reimbursements and meal receipts, are operating at a deficit, which means that they require funds from the operating budget in order to operate.

Transportation practices used by divisions that achieve efficiencies include operating a bus maintenance garage with the local government, staggering school opening times so that each bus can pick up more than one load of students, and purchasing parts through a consortium. Other practices that could achieve efficiencies include considering factors other than the age of the bus (such as mileage and wear and tear) when deciding when to replace buses, which could result in replacing some buses less often. Other practices that may improve the effectiveness of the pupil transportation function include: increasing the pool of bus drivers by increasing salaries and providing benefits, providing training beyond what is required by the State, and State facilitation of a bus parts exchange program.

Practices that can reduce costs in the food services area and help the food services program be self-supporting include: purchasing food through a consortium; utilizing federal commodities as much as possible; and increasing student participation in the food services program by improving the marketing of food, increasing the variety of foods served, and using food court-style serving areas. Three divisions in Virginia have also privatized their food services operations, which they indicate has worked well.

Cross-Cutting Themes

HJR 34 requested that JLARC examine several issues that cross-cut support services, such as consolidations and privatization. In addition, the site visits for this review indicated that support staff teamwork and employee compensation issues

are matters that cross-cut support services and can have an impact on the provision of services.

JLARC staff found that in several divisions, there was concern that there are inefficiencies that could be addressed if some schools with particularly low enrollments were consolidated, or if schools were consolidated into central locations. Some division staff suggested that a State incentive fund similar to the incentive fund for regional jails might be helpful in prodding consolidations that are needed to achieve greater efficiency. In addition, the issue that efficiencies may be achieved by consolidating some school divisions was also raised.

School divisions have had a mixed experience with privatization. Almost all divisions visited outsource at least some services. In addition, several divisions have outsourced entire functions. The primary areas in which functions have been outsourced are: the provision of school food services (three divisions), the management of custodial staff, and bus maintenance services. Some contracts have worked out better than others. School divisions that most clearly benefit from the use of outsourcing appear to be those divisions that were struggling with management issues in the service area prior to outsourcing, and so the use of the outside vendor represents an upgrade in the quality of management.

During the review, staff in several divisions indicated the importance of teamwork and staff morale in the effective and efficient provision of services. The importance of teamwork was indicated within and across occupational and service categories. Comments of division staff indicated that activities promoting teamwork and support staff morale may serve as potential best practice ideas.

Another issue that school divisions reported facing across several support categories is compensation. Several divisions indicated some difficulties in obtaining quality support staff at existing salary levels. A particularly salient concern in many divisions, however, was the rising costs of health insurance. Similar to national experience, a number of divisions have experienced double-digit annual increases in these costs, and relief from these increases does not appear to be in sight. Some school divisions are increasing their use of part-time instead of full-time support staff to reduce the number of employees eligible for health insurance. Another division visited during this review had low premium costs that it attributed in part to its self-insured status, and to having some higher out-of-pocket co-payments. Due to the magnitude of the costs involved for health insurance, it may also be useful for the State and the school divisions to examine together whether there are additional actions that can be taken to negotiate a package or packages that bring divisions with high costs closer to the premium costs and co-pay arrangements negotiated for State employees.

Implementation Issues for Best Practice Ideas

The last chapter of this report discusses some of the obstacles that may exist to more widespread use of best practices, as well as potential ways that the State might help to promote the use of best practices. The last chapter also discusses the potential impact of best practices upon school division costs.

In general, best practices cannot be viewed as one-size-fits-all solutions. What works in one division may not work for another. Examples cited in the report of potential obstacles to more widespread use of certain best practices include concerns some divisions have about the reliability over time of cooperative arrangements with the local government in the delivery of services, and a lack of up-front funds in some divisions to implement best practices.

There are potential ways that the State could promote more widespread use of best practice ideas. Recently, the Governor has

announced an initiative to conduct performance or efficiency audits in school divisions. These audits could potentially be used to promote the use of best practices in areas where divisions have performance or efficiency problems. (The audits are currently being tried on a pilot basis in three divisions.) Besides this initiative, the State could potentially be involved to a greater extent in coordinating efforts across school divisions to obtain good negotiated prices that take advantages of economies in scale. Potential targets of opportunity may include contract prices for student and financial information systems, and health insurance.

In addition, the State (or any of various education associations) should consider establishing a single focal point of responsibility for the collection and dissemination of best practice information regarding non-instructional support services. This entity could build upon the web site work that was conducted for this review, as well as facilitate division discussion and periodically review salient technical literature. Also, the General Assembly may wish to consider establishing a best practices incentive fund. This fund could be awarded on a competitive basis for projects that have an up-front cost or other short-term drawback that serves as a deterrent to implementing best practices that can produce long-term annual operating cost savings. Examples of activities that might fall into this category include incentives to consolidate, investments in energy management systems, or the development of facility maintenance plans.

The pursuit of best practice ideas is a worthwhile objective. Because support costs are subject to cost pressures (such as increases in salary costs to obtain personnel, and health insurance cost increases), the greater use of best practices will not necessarily result in net dollar savings that can be reinvested back into classrooms. However, greater use of best practices that have cost-saving potential has the potential, at a minimum, to reduce the rate of increase that may be experienced. In particularly high-cost school divisions, individual local governments could realize substantial savings in local dollars if there are some inefficient practices that can be addressed through the use of improved practices.

Increased billing of certain health services to Medicaid has the potential to produce some revenue savings for the State as well as localities. However, the potential for other State savings in the non-instructional support services covered by this review appears to be more limited than for localities, in that the State currently uses a number of funding practices that limit its cost responsibility. Like most local governments, the State currently provides little funding for school food services; these costs are mostly paid by federal reimbursements under the National School Lunch and Breakfast Programs and by receipts from students. Also, State funding for other division non-instructional support costs is based on a methodology that emphasizes the unit costs of moderate-cost divisions. (The State does not reimburse high-cost divisions for their high expenditure levels.) In addition, the State has not paid a share of some support costs (for example, certain dropped administrative personnel costs), and has tended to assume that school division salary and fringe benefit costs will stay static (or largely static) during the years being funded.

Summary of Report Recommendations

Study Recommendations	Potential Cost Savings	Potential Quality of Service Benefits
1. Divisions should consider the potential for staffing economies through the use of pooled rather than one-to-one clerical staffing assignments.	√	
2. Where feasible, divisions should work closely with local government to eliminate redundancies and consolidate or share administrative services.	√	
3. DOE should involve the divisions in the development of the new system for tracking students, and in student tracking implementation issues.		√
4. Divisions should consider employing attendance officers / technicians if they have chronic attendance problems requiring personal attention.		√
5. Divisions should bill Medicaid for eligible student health services.	√ *	
6. Divisions in which nurses have needed to spend inordinate amounts of time on record-keeping may wish to obtain health services software.		√
7. Divisions should consider health clinic area space needs in the renovation of existing buildings and in the design of new facilities.		√
8 & 9. Custodial staffing decisions should be informed by the use of standards, with staffing adjustments considered where needed.* Standards should take into account more factors than just square footage.	√	√
10. Under some circumstances, school divisions should consider the possibility of hiring a floating custodian position.	√	√
11. To help keep utility costs manageable and to ensure comfortable temperatures in classrooms, school divisions should consider various energy management practices that are available.	√	√
12 & 13. School divisions should consider developing a facility maintenance plan, and should give a priority to preventive / predictive maintenance activities, and use a work order system that is adequate for tracking work.	√	√
14. In determining the timeframe(s) for replacing school buses, school divisions should consider a variety of factors in addition to bus age.	√	√
15. Large school divisions with comprehensive school bus driver training programs should consider opening their classes to drivers from smaller, neighboring divisions (for free or a fee).	√	√
16. DOE should facilitate a bus parts exchange program.		√
17. School divisions should examine their school food staffing practices in schools that are staffed outside of DOE's meal-equivalency range.	√	
18. Divisions with school food programs that are not self-supporting may want to conduct a thorough review of their program to determine if economies or adjustments to increase revenues are feasible.	√	
19. The State should consider hiring an independent consultant with health benefits expertise to look at the feasibility of various alternatives for obtaining more cost-effective premium prices across school divisions than have been negotiated under existing arrangements.	√	√
20. The State or any of the various education associations should consider establishing a single focal point for the collection and dissemination of best practice information regarding non-instructional support services.	√	√
21. The General Assembly may wish to consider establishing a best practices incentive fund.	√	√

*Cost saving notes:

Potential "cost savings" for Recommendation 5 are in the form of potential revenue savings for localities and the State, due to the potential for increased federal revenues. Cost savings from Recommendations 8 and 9 could be achieved if custodial staffing formulas indicate the division is overstaffed. Staffing may be added and the quality of service improved if standards indicate the division is understaffed.

Non-instructional services addressed by the review include central administration, attendance and health, operation and maintenance, pupil transportation, and school food services, but exclude instruction, instructional support, and school administration (principal's office staffing and resources).

Table of Contents

I. Introduction

House Joint Resolution (HJR) No. 34 from the 2002 General Assembly Session required that the Joint Legislative Audit and Review Commission (JLARC) "examine the best administrative, fiscal, and service practices in the Commonwealth's public school divisions" (Appendix A). The resolution referenced the General Assembly's constitutional responsibility to provide for a system of public education and to "ensure that an educational program of high quality is established and continually maintained." In light of this responsibility, HJR 34 indicated that "integral to the provision of a quality public education system is efficiency in the administration of programs, services, and budgetary matters." The study resolution noted that while there have been mechanisms in place in Virginia to identify and analyze effective instructional programs and practices, "no similar mechanism" has been available to accomplish this task for non-instructional activities.

The study mandate noted that "the Commonwealth's public schools face continuing challenges as enrollments grow and required programs and services increase." At a time of constrained State and local budgets, the mandate recognized that to provide a high quality system of education for the students, funding for schools will need to be used effectively and efficiently.

One of the ways this might be achieved is through additional dissemination and use of non-instructional best practice ideas among school divisions. This JLARC review was designed to generally assess how non-instructional services are provided in Virginia, and to specifically consider the potential role of best practice ideas in increasing the quality, efficiency, or effectiveness of services. Pursuant to the study mandate, an interim report on best practices was prepared prior to the 2003 General Assembly Session. This current, final report provides the conclusions and recommendations from the review.

In the interim phase of the review, the study focus was upon identifying potential best non-instructional practices that are being used in some school divisions in the Commonwealth. JLARC staff established a location on the JLARC internet site where school division staff could submit practices that have been successful in their division. Through this process, over 180 best practice ideas were submitted for the following categories of non-instructional services:

- Administrative systems and services,
- Attendance services,
- Health services,
- Operation and maintenance services,
- Pupil transportation,
- Safety and security,
- Technology support services,
- Food service operations, and
- School construction.

In the second phase of the study, JLARC staff visited 20 school divisions to learn more about several of the non-instructional services that are delivered by the divisions. A mix of urban, suburban, and rural school divisions in different parts of the State were visited. Through interviews at the school divisions, JLARC staff considered differences that may exist between school divisions in terms of unique locality characteristics, level of services offered, resources applied, and practices used. This information, in combination with additional data analyses, was used to provide a more detailed assessment of the status of support services in school divisions. The potential role that the more widespread dissemination of best practices might play in providing cost saving opportunities or in increasing the quality of services was considered in developing study recommendations.

This chapter of the final report begins with a description of how the concept of "best practices" has been defined for this review. Next, the research activities undertaken for the interim report are described. These activities focused on the collection of best practice ideas from school divisions. Finally, the research activities undertaken during the second phase of the review are summarized.

OVERVIEW OF BEST PRACTICES CONCEPT USED IN THIS REVIEW

The mandate for this study focuses on particular types of activities conducted by school divisions ("administrative, fiscal, and service practices"), and on a particular approach (the use of best practices) as a potential means to achieve efficiency and enhance the quality of public education. To implement that charge, attention was given to the specific definition of the concept of best practices that would be used for study purposes.

Study Definition of Best Practices

The mandate for the JLARC review does not provide a working definition of the term "best practices." In soliciting best practice ideas from school divisions for this review, JLARC staff defined the concept of best practices broadly. JLARC staff requested descriptions of practices that involved "work methods, resource allocations, processes, and initiatives to improve a school division's efficiency and/or effectiveness." The intent was to obtain a list of various practices that worked sufficiently well in a school division to be regarded as potential "best practices."

Practical Reasons Necessitate a Broad, Inclusive Definition of Best Practices for This Review

In common usage, "best practices" may be construed to mean "cutting edge" or "state of the art" methods of accomplishing work in the most efficient and effective manner. In the most rigorous sense, best practices for specific, targeted services might be determined by collecting detailed data (or even through conducting controlled experiments) regarding the use of several feasible alternative ways of accomplishing the same task or work objective. An attempt would be made to measure the time spent, costs incurred, and the quantity and quality of the products or outcomes

for these alternative approaches, and the alternative with the best (or at least satisfactory) outcomes at the least cost would be judged the best practice.

However, this type of approach has not been used in other states that appear to have done the most work to date with regard to studying best practices for education (for example, Florida and Texas). It is impractical to apply such resource-intensive scrutiny across the broad range of functions provided by school divisions. In Virginia, few, if any, school divisions have actually conducted such rigorous experimentation, and it was beyond the scope of this JLARC review regarding various non-instructional services of divisions to determine best practices in this manner.

In fact, although the term "best" practice may appear to connote that more than two practices have been compared before one of the practices is selected as a "best" practice, this is not how the term is frequently applied. For example, the literature on school division or district best practices in other states frequently refers to best practices that are simply considered better than one other implied alternative. For example, a "management structure" best practice from Florida states that "the district periodically reviews its organizational structure and staffing levels to minimize administrative layers and processes." The implied alternative to this best practice is to <u>not</u> periodically conduct such reviews.

The credibility of practices that are asserted to be "best practices" often rests on the fact that "common sense" strongly suggests that the best practice is appropriate, efficient, and effective relative to the alternative(s). The documents from other states, for example, do not cite elaborate studies or analyses providing the underpinnings of the stated best practices. It appears to make sense, for example, that a school division that periodically reviews its organizational structures and staffing levels to minimize administrative processes and layers will, on balance, benefit over time by locating some increased efficiencies. Nonetheless, it is also possible that some divisions that are already quite efficient might in the long-term invest substantial time conducting such reviews and not realize any economies or efficiencies as a result; or some divisions could possibly become convinced through the constant comparison that they are too parsimonious, and they may add a layer or staffing to achieve parity with their comparison group. There are risks that practices that appear based on common sense to be "best" might not actually withstand experimental scrutiny. However, as a practical matter, this is often the basis upon which ideas to improve efficiency or effectiveness are pursued.

STUDY APPROACH FOR COLLECTING BEST PRACTICE IDEAS

Two approaches were used for collecting best practice ideas: (1) potential best practices were solicited from Virginia school divisions, and (2) some exploratory research was conducted regarding the work done in some other states to identify best practices. The focus of Phase I of the study was to collect best practice ideas from Virginia school divisions, because the mandate requires examination of practices that are "in the Commonwealth's public school divisions." JLARC staff also obtained information about best practice work in other states, to help provide a context for the Virginia review, and to identify some ideas of practices that may be missing

in Virginia. However, this work was considered a lower priority activity. Each of these approaches is discussed in this section.

Obtaining Best Practices from Virginia School Divisions

To solicit best practice ideas from Virginia school divisions and systematically provide all divisions with the opportunity to provide input to the study, JLARC staff developed a web site that school divisions could use to submit best practices that they have implemented. The web site also enabled school divisions to view best practices submitted by other school divisions.

The best practices web site was accessed through JLARC's web site. School division staff entered their best practices into a template (see Exhibit 1) so that all best practices were in a similar format. After a school division submitted a best practice, it was reviewed by a JLARC staff member before being posted to the public web site. The intent was to have a fairly comprehensive inventory of best practices. Therefore, JLARC staff provided only a minimum filter of the submitted practices. Once a best practice was posted to the public web site, it could be viewed by any individual who had access to the internet.

JLARC staff used two methods to make school divisions aware of the web site: (1) a letter to all Virginia school division superintendents, and (2) a more tailored follow-up memo to various support services supervisory staff. The letter to the division superintendents informed them of the web site, and requested that they ask the appropriate supervisory staff in their division to submit best practices. Subsequently, a follow-up effort was initiated to encourage more best practice submissions.

The follow-up effort involved mailing memos to approximately 820 support services supervisory staff in all school divisions, except for those school divisions that had already submitted a substantial number of best practices in response to the initial superintendent letter, or had indicated to JLARC staff that they had an effort already under way to identify and submit their best practices. JLARC staff used the Department of Education's school division directory to obtain the names and titles of supervisory staff in the various functional areas under review (for example, transportation, food services, and technology). The follow-up memos were tailored for each of these functional areas. In addition, a generic memo was sent to supervisory staff who were responsible for more than one functional area.

The follow-up effort resulted in a substantial number of new best practice submissions. More information on the practices that were submitted is provided in the section entitled "Overview of Best Practices Received During the Study."

Research on Best Practice Efforts in Other States

In addition to collecting best practices from school divisions in Virginia, JLARC staff conducted research on best practices in other states. Two states appear to be leading the way in terms of identifying best practices for public education support services: Florida and Texas. This fact does not suggest that the two states are

Exhibit 1

Template for Submitting Best Practices

INSTRUCTIONS VIEW BEST PRACTICES JLARC HOME CONTACT US

Best Practice Area: - Select One -

School Division:
(where this practice is used) - Select One -

Description of Best Practice:
(please provide enough information so that the best practice can be implemented by other school divisions)

Estimated Cost Increases or Savings Your Division Has Experienced from Implementing this Best Practice, if Any:
(please specify whether the dollar amount is a cost increase or savings)

Barriers to Overcome, or Factors that May Impact Whether the Best Practice Will Be Successful:

School Division Contact Name:
(where we can find out more information about this practice)

School Division Contact Phone Number:

School Division Contact Email Address:

Source: School Division Best Practices for Support Services web site.

therefore leaders in the effective and efficient provision of support services. Rather, these states appear to have gone farther than most states in developing best practices for use in assessing support services. In addition, other states, such as Pennsylvania and Arizona, have conducted performance audits of local school divisions, and many of the recommendations made in these reports can be considered best practices. While the focus of this review is on Virginia's practices, a brief overview of the work done in Florida, Texas, Pennsylvania, and Arizona is provided in Appendix B.

OVERVIEW OF BEST PRACTICES RECEIVED DURING STUDY

During the study, the JLARC best practices web site received 189 best practice submissions from 39 Virginia school divisions, which is 30 percent of all school divisions in the State. (This figure represents a total count of submissions, and is not an unduplicated count. Some best practice ideas, such as the use of a nurse in each school building, were submitted by more than one division.) Table 1 shows the number of best practices received by functional area. A complete list of the best practices that were submitted can be found in Appendix C. Organized by functional area, the listing gives a descriptive title for each best practice and the name of the school division using the practice.

Table 1

Summary of Best Practices Received From Virginia School Divisions

Best Practice Area	Number of Best Practices Submitted	Percentage of All Best Practices Submitted
Administrative Systems and Services		
Personnel/Benefits	12	6%
Fiscal Services	7	4%
Purchasing Services	11	6%
Budget	6	3%
Other	19	10%
Subtotal	**55**	**29%**
Other Support Services		
Attendance	10	5%
Food Services	24	13%
Health Services	13	7%
Operation and Maintenance Services	10	5%
Pupil Transportation	31	16%
Safety and Security	5	3%
School Construction	6	3%
Technology Support Services	35	19%
Subtotal	**134**	**71%**
TOTAL	**189**	

Source: JLARC staff analysis of best practices submitted to JLARC's "School Division Best Practices for Support Services" web site.

JLARC staff examined both the size (based on the number of students served) and geographic location of school divisions that submitted best practices. As indicated by Table 2, overall, large and medium school divisions submitted a substantial proportion (79 percent) of the best practices, with the percentage of best practices equaling or exceeding their proportion of ADM and the total number of divisions. A lesser proportion of small school divisions submitted best practice ideas to the web site. Although small divisions comprise 82 percent of all school divisions in the State, they accounted for only 21 percent of the best practices submitted. In the second phase of the study, several small school divisions were visited, to gain additional information about unique cost factors and support practices that are utilized in such divisions.

Table 2

Percentage of Best Practices Submitted by Large, Medium, and Small School Divisions

	Percent of ADM	Percent of School Divisions (n=132)	Percent of Best Practices
Large Divisions	33.7%	3.8%	33.5%
Medium Divisions	32.9%	14.4%	45.7%
Small Divisions	33.3%	81.8%	20.7%

Note: Division size categories were based on roughly having one-third of the State's pupils in divisions of each grouping. As a result, large divisions ranged in size from 42,333 pupils to 158,537 pupils. Medium divisions ranged in size from 10,711 pupils to 38,129 pupils. Small divisions ranged in size from 307 to 10,685.

Source: JLARC staff analysis of Department of Education March 31, 2002 Average Daily Membership data and the JLARC staff best practices data base.

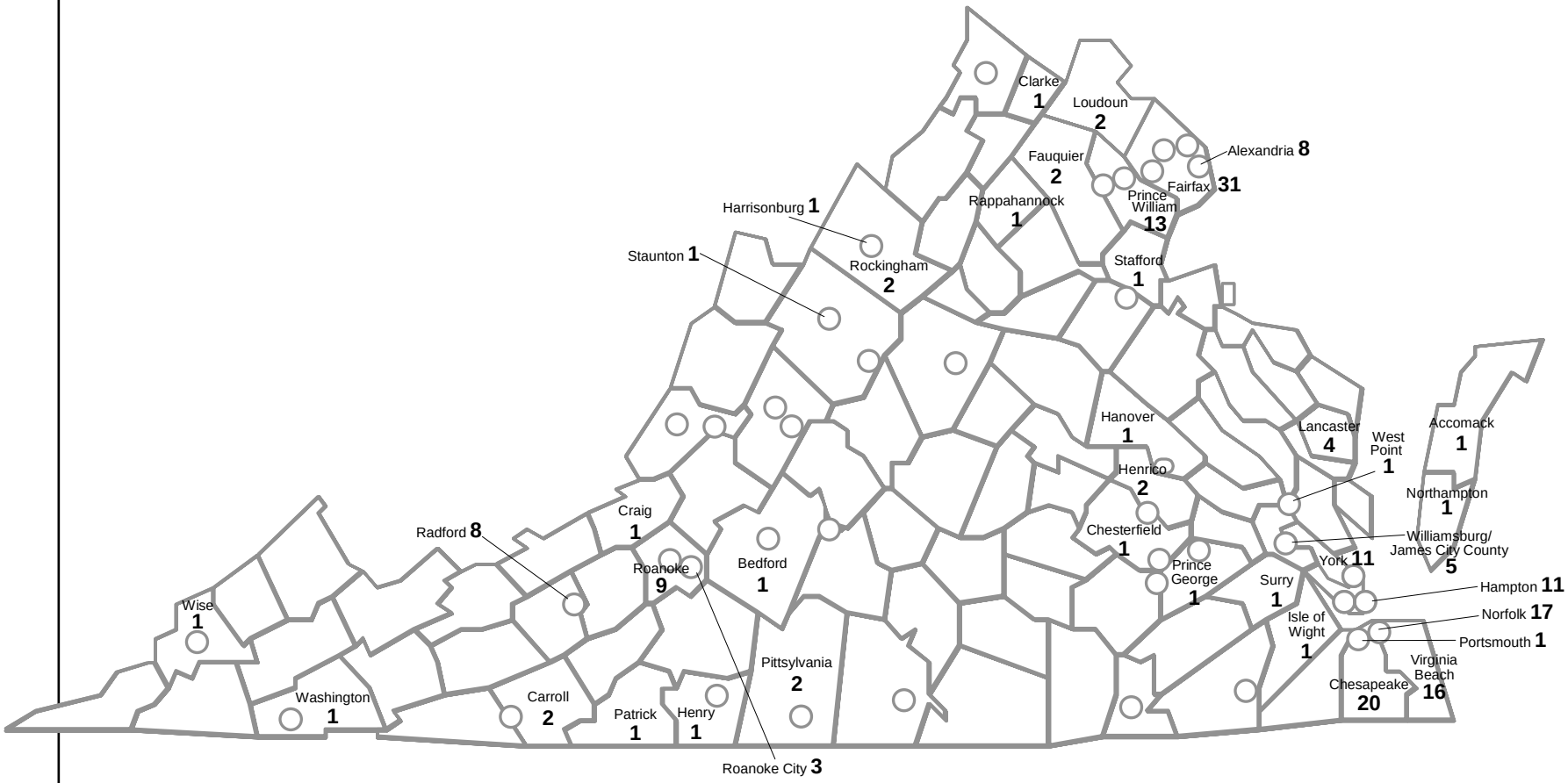
In general, school divisions that submitted best practices tended to be clustered in three areas of the state: Tidewater, Northern Virginia, and the Roanoke area (including several divisions in western Southside Virginia). Of the four school divisions that submitted the most best practices (Fairfax, Chesapeake, Norfolk, and Virginia Beach), three are located in the Tidewater region. Few best practices were received from school divisions in the central to eastern portions of Southside Virginia, the far Southwest, and the Piedmont region of the State (see Figure 1).

In general, the best practices that were submitted in each of the support areas were wide ranging and diverse, and there was a good mix of practices that improved services and reduced costs. Approximately 52 percent of the best practices submitted were designed to improve services, 39 percent were designed to reduce costs or improve efficiency, and 9 percent accomplished both of these objectives.

In general, school divisions did not submit many duplicate best practices. There were a few exceptions, however. For example, several school divisions submitted best practices in the Health Services area that advocate having a nurse in every school. In addition, there were a few common themes that emerged, such as:

Figure 1

School Districts Submitting Best Practices for this Study



Source: JLARC staff analysis of best practices survey results.

- purchase items with the local government or through a consortium to reduce costs (for example, a regional consortium of school divisions for the purpose of purchasing food for the school lunch program),

- work cooperatively with the local government in other ways, such as operating joint financial systems,

- use technology to automate tasks that were once performed manually (such as work orders and bus routing), and

- communicate/distribute information to staff, parents, and the community electronically (via email, intranets, and the Internet).

SECOND PHASE RESEARCH ACTIVITIES AND FINAL REPORT ORGANIZATION

The mandate for this study called for an examination of best support practices in Virginia's school divisions. It anticipated that the review would entail a more in-depth review of the support services of a subset of school divisions. Thus, it required that in conducting the study, JLARC staff were to select a sample that reflected a mix of urban, suburban, and rural school divisions in the Commonwealth.

In the second phase of the review, then, JLARC staff focused particular attention on and visited a subset of school divisions, while conducting an analysis of expenditure, staffing, compensation, and workload data for all school divisions. Appendix D shows some of the variation that exists in the daily per pupil costs of Virginia school divisions for non-instructional support services. Nineteen divisions were selected for a more in-depth review, with a twentieth division added to gain information about that division's privatized bus garage operation.

In determining the school divisions for visitation, JLARC staff sought to ensure a mix of urban, suburban, and rural schools. JLARC staff also sought to ensure that all regions of the State were visited. For study purposes, "urban" divisions were defined as divisions in metropolitan statistical areas (MSAs) that were less than 80 square miles in land area. "Suburban" divisions were defined as divisions in MSAs with 80 or more square miles in land area. A "rural cities and towns" group was defined as divisions outside of MSAs that are less than 80 square miles in land area. Finally, a grouping of "rural counties" was defined as divisions outside of MSAs with 80 or more square miles in land area. Table 3 shows how the various divisions were classified for purposes of the study. These groupings were used as one way of organizing the data analysis, as well as for selecting sites for visitation purposes.

Table 4 shows the specific school divisions that were chosen for visitation. It also shows that the study included five "rural counties," three "rural cities and towns," six "suburban" divisions, and six "urban" divisions. The locations selected also provided a regional and cost mix. As indicated in the table, two or more sites

were visited within the geographic boundaries of each of the eight regional superintendent study groups. Divisions were also selected so that there was a mix of divisions with relatively high, medium, and low per-pupil support costs, as well as the inclusion of divisions that had submitted best practice ideas to JLARC, and divisions which had not.

Table 3

Classification of School Divisions into Types for Study Analysis and Site Visitation Selection Purposes

Rural Counties (N=59)		Rural Cities and Towns (N=13)	Suburban (N=38)	Urban (N=21)
Accomack	Northumberland	Buena Vista	Albemarle	Alexandria
Alleghany	Nottoway	Col. Beach	Amherst	Arlington
Amelia	Orange	Covington	Bedford	Bristol
Appomattox	Page	Franklin City	Botetourt	Charlottesville
Augusta	Patrick	Galax	Campbell	Col. Heights
Bath	Prince Edward	Harrisonburg	Charles City	Danville
Bland	Pulaski	Martinsville	Chesapeake	Falls Church
Brunswick	Rappahannock	Norton	Chesterfield	Fredericksburg
Buchanan	Richmond Co.	Radford	Clarke	Hampton
Buckingham	Rockbridge	Staunton	Culpeper	Hopewell
Caroline	Rockingham	Waynesboro	Dinwiddie	Lynchburg
Carroll	Russell	West Point	Fairfax	Manassas
Charlotte	Shenandoah	Winchester	Fauquier	Manassas Park
Craig	Smyth		Fluvanna	Newport News
Cumberland	Southampton		Gloucester	Norfolk
Dickenson	Surry		Goochland	Petersburg
Essex	Sussex		Greene	Poquoson
Floyd	Tazewell		Hanover	Portsmouth
Franklin Co.	Westmoreland		Henrico	Richmond City
Frederick	Wise		Isle of Wight	Roanoke City
Giles	Wythe		King George	Salem
Grayson			Loudoun	
Greensville			Mathews	
Halifax			New Kent	
Henry			Pittsylvania	
Highland			Powhatan	
King & Queen			Prince George	
King William			Prince William	
Lancaster			Roanoke Co.	
Lee			Scott	
Louisa			Spotsylvania	
Lunenburg			Stafford	
Madison			Suffolk	
Mecklenburg			Virginia Beach	
Middlesex			Warren	
Montgomery			Washington	
Nelson			Williamsburg	
Northampton			York	

Source: JLARC staff analysis.

Table 4

Site Visit Selections for the Support Services Review, By Region and Locality Type

Regional Study Group Number	Locality Type				
	Rural Counties	Rural Cities or Towns	Suburban	Urban	Number of Sites
1 (Richmond)			Hanover	Richmond*	2
2 (Tidewater)			Chesapeake	Norfolk Portsmouth	3
3 (Northern Neck)	King & Queen		Mathews		2
4 (Northern Va.)			Loudoun Prince William		2
5 (Valley)		Harrisonburg Staunton	Bedford		3
6 (Roanoke area)		Martinsville		Danville Roanoke City Salem	4
7 (Southwest)	Dickenson Wise				2
8 (Southside)	Brunswick Greensville				2
Number of Sites	5	3	6	6	20

*Richmond City site visit was limited to a discussion of the privatized school bus garage operation.
Source: JLARC staff site visit schedule, spring / summer 2003.

Site visits to the school divisions were used to gather additional data for the study. At each division visited, JLARC staff spent between a half and a full day conducting interviews and in many instances visiting a few support facilities or schools. Typically, JLARC staff interviewed the superintendent, the finance director, the director of health services, the director of operations and maintenance, the transportation director, and the school food services director. Adjustments were made based on the availability of these staff and other division personnel at the time of the visit. In some instances, for example, an assistant superintendent or a support services director was interviewed regarding several services. In other instances, visits to school division facilities provided opportunities to speak to line staff, such as custodians, garage mechanics, or school food workers.

This process was useful in gaining a general sense of the professionalism of division managers, information about how the services are staffed and delivered, and information about what program managers see as the strengths and best practices, as well as weaknesses, of their operations. It provided an opportunity to see some of the common issues, challenges, and themes across divisions, as well as identify some differences.

However, it should also be noted that the site visits were not designed to be in-depth management reviews or performance audits of individual divisions. With the focus of the study on best practice ideas, the general focus was on the challenges

faced in divisions and some of the ideas that divisions have utilized to meet those challenges. Time constraints impacted the level of detail to which services could be examined. In states where school division management reviews or performance audits have been done, such as Florida, Pennsylvania, and Texas, review teams have spent a week or more assessing a single division. In Pennsylvania's work, for example, an average of 49 interviews are conducted at a single site, and various documents are reviewed in detail. This type of activity was beyond the intended study purpose and the scope of the work that could be conducted for this review.

Report Organization

This report is organized into six chapters. Chapter I has provided a general introduction to the study, including the work that was done in Phase I for an interim JLARC report that compiled best practice ideas. Chapter II provides some further context for the review, by considering the expenditure levels of Virginia's school divisions in comparison to other states, and by assessing factors that appear associated with staffing levels, compensation costs, and non-personnel costs for support services in Virginia.

Chapters III to V present descriptive information and study findings about particular support service areas that were the subject of the review. The study focused most on six particular non-instructional support services – central administration, attendance, health, operation and maintenance, pupil transportation, and school food. Chapter III addresses central administration, attendance, and health services. Operation and maintenance services are addressed in Chapter IV. Chapter V addresses pupil transportation and school food services.

Chapter VI concludes the report by considering several issues that are specifically cited in the study mandate or that cross-cut the individual support services. These issues include: the potential role for consolidations, the role or potential of privatization, the role of team work in support services, employee compensation challenges (especially the rising costs of health insurance), and the potential for cost savings from the use of best practices.

II. Expenditures in Virginia for Non-Instructional Support Services

The purpose of this chapter is to provide a broad overview of the costs associated with Virginia's various non-instructional support services, prior to examining issues in more detail for each individual service area. Based on the data analyzed and the site visits conducted for this review, several themes or findings have emerged.

School divisions in Virginia generally have done a good job of holding down the proportion of operating expenditures that are consumed by non-instructional support expenditures. Virginia compares favorably in this regard to the national average and to most other states in the southern region. Virginia's weakest area in comparisons based on cost percentages or costs per all pupils is student transportation. However, Virginia transports a higher proportion of students than most states, so Virginia compares more favorably in measures that take into account the number of pupils transported or bus miles driven. Virginia's per-pupil expenditures across the non-instructional support services are above the southern region average and below the national average, but are closer to the southern region average.

The delivery of non-instructional support services involves the substantial use of personnel. Across the non-instructional support services, almost two-thirds of the costs are for personal services. There are differences among urban, suburban, and rural school divisions in the personnel cost challenges that they face in trying to deliver support services at modest costs. Large cities and small rural divisions appear to be challenged to achieve cost-effective staffing ratios – cities, most typically, because of high proportions of pupils in poverty, and rural divisions, most typically, because of some poverty issues as well as substantial pupil transportation demands. On the other hand, suburban divisions – as well as large cities, which face a double cost squeeze – typically pay higher salaries for the staff they have, increasing their costs.

The comparative data reviewed for this study suggests an overall conclusion that is consistent with the general conclusions that came from JLARC staff's site visits to the school divisions in the second phase of the review. Overall, non-instructional support service levels in Virginia appear to be neither excessive nor inadequate. There are instances in almost every division of unmet service needs or employee compensation issues. However, there also appear to be some opportunities for more sharing of best practice ideas and efficiency improvements.

VIRGINIA'S NON-INSTRUCTIONAL SUPPORT EXPENDITURES COMPARED TO NATIONAL AND REGIONAL EXPENDITURES

To help provide a context for the discussion of the support practices employed by Virginia school divisions, JLARC staff analyzed data on current (operating) expenditures from the U.S. Census Bureau's report on Public Education Finances. The expenditure data from the March 2003 report are from FY 2001. Vir-

ginia's expenditures for various school division functions were examined on a per-pupil and percentage basis and were compared against the national average and the data from other states in the southern region. The states included in the examination are the 15 other states that are members in the Southern Regional Education Board (SREB). (The SREB, created in 1948, describes itself as "the nation's first interstate compact for education," and it seeks to help leaders to "work cooperatively to advance education.")

Table 5 shows how the Virginia, SREB state, and national averages compare, in terms of how elementary and secondary operating expenditures are allocated among several broad categories of expenditure: instruction, instructional support, school administration, and non-instructional support. One conclusion that stands out in reviewing the data is the relative consistency of the percentages, across states, and between the SREB and national averages. Despite substantial differences among states in size, population density levels, and other factors, the proportion of operating resources that is explicitly for instruction (excluding instruction support) is usually around 60 percent. The stability of this 60 percent figure, over the decades, and across states and school divisions, is a phenomenon that has been noted in education research literature. According to the data, Virginia's figure is slightly above this figure, at 61.31 percent.

Although the amount of variation among the SREB states in the percentage allocated for instruction is not great, Virginia ranks fourth among the 16 states in having the highest percentage of expenditures in the instruction category. Virginia also ranks above the national and SREB averages in terms of the percent of expenditures that are made for instructional staff support (ranking first among the 16 states) and for school administration (ranking seventh among the 16 states).

The category in which Virginia's proportion of expenditures is below most states and below the national and SREB averages is the category that encompasses the services addressed by this review of best practices: non-instructional services. The expenditures shown in the table for non-instructional services are based on all current (operating) expenditures reflected in the Census Bureau report that are not categorized into instruction, instruction support, or school administration. Again, there is not a high degree of variation among states in the proportion of expenditures that can be categorized as non-instructional support. However, Virginia ranks third among the 16 states in having the lowest percentage of expenditures for "non-instructional support."

It appears, then, that Virginia is placing a proportionately higher amount of resources in the categories that are most related to student instruction, compared to many other states. Virginia is placing a proportionately lesser amount of resources in non-instructional services, such as central administration, attendance and health services, operation and maintenance services, pupil transportation services, and school food services. These non-instructional services are important, and need to be provided to support the instructional program. However, the provision of these services is not the primary mission of the schools, and a relatively high proportion of resources allocated to this category is not considered to be desirable.

Table 5

Percentage Allocation of Operating Expenditures, Virginia, Region, and National Averages (FY 2001)

	Instruction	Instructional Staff Support	School Administration	Non-Instructional Support
Alabama	59.60	3.66	5.98	30.76
Arkansas	61.07	4.24	5.63	29.05
Delaware	60.82	1.46	5.61	32.11
Florida	55.62	6.05	6.00	32.33
Georgia	63.15	5.05	6.07	25.73
Kentucky	60.27	4.80	5.63	29.30
Louisiana	59.93	4.43	5.41	30.23
Maryland	60.40	5.49	6.63	27.48
Mississippi	59.87	4.13	5.66	30.34
North Carolina	62.63	3.52	6.89	26.97
Oklahoma	54.02	3.46	5.07	37.45
South Carolina	59.07	5.97	5.95	29.01
Tennessee	63.59	5.21	5.16	26.05
Texas	60.19	5.53	5.44	28.84
Virginia	**61.31**	**6.07**	**5.89**	**26.73**
West Virginia	60.32	2.78	5.39	31.51
SREB Average	60.00	5.07	5.82	29.11
National Average	60.68	4.52	5.56	29.24

Note: "Instructional" staff support includes "expenditures for supervision of instruction service improvements, curriculum development, instructional staff training, and media, library, audiovisual, television, and computer-assisted instruction services."

Source: JLARC staff analysis of the U.S. Census Bureau's *Public Education Finances, 2001*, issued March 2003.

Table 6 examines the category of non-instructional services in more detail, by breaking the category down into several component parts. For these components, Virginia's per-pupil expenditures and proportional expenditures are shown in comparison to the average for the SREB states and the national average. (Appendix E of this report also shows Virginia's non-instructional support service expenditures on a per-pupil basis as compared to the various individual states in the SREB.) Virginia's percentages and costs for non-instructional support services appear to be at reasonable and appropriate levels relative to the regional and national average data.

Table 6

Non-Instructional Support Service Expenditures, Virginia Compared to Average for SREB States and Nation
(FY 2001)

	SREB States	Virginia	National Average
	Average Per Pupil Expenditure		
Central Administration	$ 283	$ 228	$ 381
Pupil Services	$ 306	$ 343	$ 362
Operation & Maintenance	$ 636	$ 718	$ 718
Pupil Transportation	$ 250	$ 338	$ 304
Other Functions	$ 418	$ 331	$ 407
Total, Non-Instructional	$1,893	$1,958	$2,171
	Percent of Total Operating Expenditures		
Central Administration	4.36	3.11	5.14
Pupil Services	4.71	4.68	4.87
Operation & Maintenance	9.77	9.80	9.66
Pupil Transportation	3.84	4.61	4.09
Other Functions	6.43	4.52	5.48
Total, Non-Instructional	29.11	26.72	29.24

Note: The central administration category shown in the table consists of the expenditures the Census Bureau designated as "general administration," or expenditures for board of education and executive administration (office of the superintendent services), as well as the expenditures the Bureau designated as "other and non-specified support services" (expenditures for business support, central support, and support services that apply to more than one support service category). The "other functions" category includes school food expenditures and enterprise operations.

Source: JLARC staff analysis of U.S. Census Bureau data in *Public Education Finances, 2001.*

PERSONNEL COSTS

This report focuses on services and costs in six non-instructional support service areas: administration, attendance, health, pupil transportation, operation and maintenance, and school food. Total operating expenditures in these functions in FY 2002 were about $1.915 billion. (This amount does not include expenditures of about $87 million reported in the technology function series of the Annual School Report. These costs are addressed in a recent JLARC report on educational technology funding.)

Across these non-instructional support services, almost two-thirds of the expenditures were for personnel costs. The extent to which expenditures were made for personnel versus other cost items in these service areas is shown in Table 7. The greatest proportions of costs that are for personnel occur in the categories of attendance services, health services, central administrative services, and pupil transportation. In these areas, about 80 percent or more of the costs are for personnel.

Table 7

Percent of Support Costs for Personnel and Non-Personnel Expenditures, FY 2002

Category	Personnel			Non-Personnel
	Salary and Wages	Fringe Benefits	Total	
Attendance	75.6 %	19.3	**94.9 %**	5.1 %
Health	74.7 %	17.3	**92.0 %**	8.0 %
Administration	61.0 %	19.1	**80.2 %**	19.8 %
Transportation	62.6 %	17.2	**79.8 %**	20.2 %
Operation & Maintenance	42.2 %	11.6	**53.8 %**	46.2 %
Food	38.9 %	11.3	**50.2 %**	49.8 %
Average for Total Expenditures	**50.4 %**	**14.0 %**	**64.4 %**	**35.6 %**

Source: JLARC staff analysis of Virginia FY 2002 Annual School Report data. The analysis is based on expenditures reported in the ASR functional series shown above. Expenditures reported in the technology series were not included.

Lesser proportions (about half) of the expenditures for personnel can be seen in the operation and maintenance and food service categories. Although substantial labor is involved in providing these services, there are also some substantial non-personnel costs that are reported in the categories, such as equipment, utilities, and food costs.

The fringe benefit portion of support personnel costs accounts for about 14 percent of the total support cost. Fringe benefits constituted about 28 percent of the expenditures that were made for support personnel salaries and wages in FY 2002.

Personnel costs are a function of staffing levels or ratios and the compensation levels provided to those staff. Between these two categories, the primary driver of higher support personnel costs differs between suburban and rural school divisions in Virginia. For divisions that are rural in character and small in pupil membership (the majority of school divisions in Virginia), staffing levels are a challenge. These divisions tend to be characterized by higher staffing levels relative to the number of pupils served. However, salaries tend to be low.

Suburban divisions – and particularly large suburban divisions – tend to have relatively low staffing ratios. However, these staffing efficiencies can be offset by the fact that there are more competing job opportunities in the area and higher wage expectations. As a result, services may not be provided at the low cost levels that might be suggested by the divisional staffing patterns.

Large city school divisions typically evidence both types of challenges. Their staffing ratios are typically higher than is the case in large suburban divisions, and their compensation rates for support staff are typically higher than rural divisions.

Number of FTEs Per 1,000 Pupils Is Higher in Rural School Divisions with Low Pupil Counts

Table 8 shows some of the differences that exist in support staffing ratios in Virginia. It exemplifies the staffing issue discussed above. The grouping of divisions with the lowest staffing ratios is the large (10,000 or more pupils in membership) suburban divisions, with a ratio of 37.79 FTEs per 1,000 pupils. The grouping with the highest staffing ratio is the grouping of 36 rural divisions with 2,500 or fewer pupils in average daily membership. The mean staffing ratio of this group is 48.64 FTEs per 1,000. These ratios suggest that for approximately each four staff members employed by a large suburban division, small rural divisions are likely to employ an additional staff member.

Table 8

Support Staffing Levels in Virginia, FTEs Per 1,000 Pupils

Categories Based on the ADM of the School Divisions	**Urban:** Large City, Metropolitan Statistical Area (MSA)	**Suburban:** Not a Large City, But Division Is Within a MSA	**Rural:** Outside of MSAs
10,000 +	**45.96** (n = 9)	**37.79** (n = 14)	**40.39** (N = 3)
5,000 to 9,999	**40.38** (n =6)	**41.03** (n = 10)	**45.65** (N = 9)
2,500 to 4,999		**40.60** (n = 12)	**46.58** (N=24)
Less than 2,500		**44.65** (n = 8)	**48.64** (N=36)
Overall Mean	**43.73** (n=15)	**40.54** (n = 44)	**47.24** (N=72)

Note: Ratios are the means of the division-level ratios in each group.

Source: JLARC staff analysis of 2001-02 Annual School Report data.

Factors Associated with the Total Number of Support FTEs Per 1,000 Pupils

Staffing patterns in specific support service categories, like pupil transportation, will be discussed in later chapters of this report. However, JLARC staff did

examine whether there are factors that appear to be associated with the overall variation that can be observed in division FTE ratios. Through quantitative analysis, it is feasible to identify factors that may have a stronger association with these ratios than the number of pupils in student membership.

In the analysis, the divisions were separated into two groups – divisions within MSAs (the urban and suburban divisions) and those divisions outside of MSAs (the rural localities). The analysis indicated that about half of the variation in FTE staffing per 1,000 pupils appears to be explained by several variables that were available for this review.

Table 9 shows the results of this analysis for the urban and suburban school divisions. As indicated in the table, the strongest explanatory variables appear to be: percentage of pupils from poverty backgrounds, the number of square miles per school (more miles served by a school means more bus drivers), and revenue capacity per capita (more revenues mean more staff can be afforded).

Table 9

Factors Associated with Differences Among Urban and Suburban Divisions in Total FTE Support Staffing Ratios

Factor	Association*	Association Suggests
Percentage of Pupils Receiving Free and Reduced Price Meals	Very Strong Positive	Serving schools with higher concentrations of pupils from poverty backgrounds may require greater administrative effort and the provision of more school lunch program meals, and may have an impact on other support services as well.
Miles Per School	Very Strong Positive	Urban and suburban school divisions that have relatively greater distances between their schools are likely to require more bus driver FTEs than divisions where schools serve a relatively small area and bus routes may be short or many students may walk.
Revenue Capacity Per Capita	Very Strong Positive	Localities with a higher ability to collect revenue may be able to afford a higher level of service than the typical locality, and may choose to provide a higher level of staffing.
Average Daily Temperature in May	Positive	Divisions in warmer parts of the State during the spring may have more air conditioners that require repair, may have more filter checks to conduct, and may do more grounds work.

*Technical Note: Comments on the strength of the association are based on the results from a multiple regression model, in which the dependent variable was total FTE support staffing ratios, and the independent variables were the factors listed. The standardized coefficient for each factor was as follows: (1) percentage of pupils receiving free and reduced price meals, .6503; (2) miles per school, .5791; (3) revenue capacity per capita, .4752; and (4) average daily temperature in May, .2321.

Source: JLARC staff analysis of data from the Virginia Department of Education, the United States Census Bureau, and the National Oceanic and Atmospheric Administration (NOAA).

Table 10 shows the results of a similar analysis conducted using data for the rural (non-MSA) divisions in Virginia. For these divisions, the percentage of pupils from poverty backgrounds was also a very strong factor, in terms of its association with support staffing levels. However, for these divisions, the geographic size of the division was a stronger indicator of FTE staffing levels than the average mileage between schools. Divisions outside of the State's MSAs, with a size of 80 or more square miles, tend to have higher total FTE support staffing levels. Another difference in the analysis for the rural divisions is that while revenue capacity continued to show an association, the association was somewhat weaker than what was seen with urban and suburban divisions. Finally, the average daily temperature variables did not show an association with support staffing levels in rural divisions.

Table 10

Factors Associated with Differences Among Rural Divisions in Total FTE Support Staffing Ratios

Factor	Association*	Association Suggests
Percentage of Pupils Receiving Free and Reduced Price Meals	Very Strong Positive	See immediately prior table (Table 9) for discussion of factor.
Geographic Size of the School Division (Is the Division Equal to or Larger Than 80 Square Miles, or Is it Less Than 80 Square Miles?)	Very Strong Positive	Rural divisions that are large in geographic size are likely to require more bus drivers and bus mechanics. Central support staff such as maintenance trades may also have greater travel times to perform the work, reducing work time.
Revenue Capacity Per Capita	Strong Positive	See immediately prior table (Table 9) for discussion of factor.

*Technical Note: Comments on the strength of the association are based on the results from a multiple regression model, in which the dependent variable was total FTE support staffing ratios, and the independent variables were the factors listed. The standardized coefficient for each factor was as follows: (1) percentage of pupils receiving free and reduced price meals, .4728; (2) geographic size of the school division, .4576; and (3) revenue capacity per capita, .3848.

Source: JLARC staff analysis of data from the Virginia Department of Education, the United States Census Bureau, and the National Oceanic and Atmospheric Administration (NOAA).

Salary Levels for Support Staff Are Higher in Urban and Suburban School Divisions

Earlier in this chapter, it was stated that salary levels for support staff tend to offset some of the staffing level economy advantages that suburban divisions may experience compared to rural areas. Table 11 provides a rough illustration of the salary differences that tend to exist in the divisions that are in versus out of metropolitan statistical areas in Virginia.

Table 11

Support Salary Levels in Urban and Suburban Versus Rural School Division Clusters (FY 2002)

	Urban and Suburban (Virginia School Divisions in MSAs)	**Rural** (Virginia School Divisions Outside of MSAs)
10,000 +	$ 22,064	$ 19,377
5,000 to 9,999	$ 19,960	$ 17,771
2,500 to 4,999	$ 18,953	$ 18,244
Less than 2,500	$ 21,785	$ 18,514
Overall Mean	$ 20,910	$ 18,367

Source: JLARC staff analysis of Annual School Report data.

Factors potentially explaining variations within urban/suburban divisions and rural divisions were examined further in a statistical analysis. This analysis showed that three factors appear to explain about three-quarters of the variation that exists among urban and suburban divisions in support service salary levels. These factors and their relative strengths of association are shown in Table 12.

Table 12

Factors Associated with Differences Among Urban and Suburban Divisions in Support Salary / Wage Levels

Factor	**Association***	**Association Suggests**
Divisions in Northern Virginia (PDC 8)	Very Strong Positive	Salaries for private and public sector jobs are higher in the Virginia localities that are near to Washington D.C.
Adult Educational Attainment: Percent of Adults 25 Years or Older With Bachelor's Degree or More (2000 Census)	Strong Positive	Salary expectations may be higher, and alternative job opportunities may be more abundant, in areas where education levels (and possibly disposable income levels) are higher.
Population Density (Logged Form)	Positive	Even within the metropolitan statistical areas, the more urban (or less rural) the locality, the higher the pay.

*Technical Note: Comments on the strength of the association are based on the results from a multiple regression model, in which the dependent variable was total FTE support staffing ratios, and the independent variables were the factors listed. The standardized coefficient for each factor was as follows: (1) divisions in Northern Virginia (PDC 8), .4487; (2) adult education attainment, .3610; and (3) population density (logged form), .2271.

Source: JLARC staff analysis of data from the Virginia Department of Education, and the United States Census Bureau.

In rural school divisions, three factors were found to have a positive association with higher salary levels: adult education attainment, the revenue effort (tax rates) of the locality, and the revenue capacity (the tax base) of the locality. However, the associations that were found between these factors and salary levels were not as strong as the association found between the factors impacting salary levels in the urban and suburban group.

Fringe Benefit Costs for Support Personnel Tend to Constitute a Higher Portion of Salary Costs in the Western Part of the State

Statewide in FY 2002, fringe benefit costs (health insurance benefits, retirement benefits, and other benefits) constituted about one in every seven dollars spent on support services. As a proportion of salary costs, fringe benefits for support personnel constituted an average of about 27.8 percent.

Fringe benefit cost issues are discussed in more detail later in this report. However, it should be noted that policies vary across divisions as to whether support staff that work less than the length of the school day (such as bus drivers and most cafeteria staff) are eligible for various types of benefits. In some divisions, a full package of benefits is offered. In other divisions, such positions are considered eligible for very limited or no benefits. When health insurance benefits are extended to support staff, the costs of the benefits can constitute a relatively high proportion of salary costs, as many support staff do not make substantial salaries in comparison to the size of health insurance premium costs.

There is some regional variation in Virginia regarding the extent to which fringe benefits are provided to support staff. In general, school divisions in the western part of the State tend to be more generous in the provision of fringe benefits, at least in terms of the size of those costs relative to salary costs (see Table 13). Several school divisions in the far southwestern part of the Commonwealth provide some of the most extensive fringe benefit packages. In interviews for this study in that region, it was suggested that this may result in part from the strong historical presence in that region of coal miner unions and the value placed there upon benefit packages. On the other hand, below average benefit costs (as a proportion of salary) can be seen in eastern portions of the State, such as the eastern part of Southside Virginia, the south central area, Northern Neck, and Tidewater regions of the State.

Before making judgments about the appropriateness of division fringe benefit packages for support personnel, it clearly is important to consider the benefit costs in combination with the salary levels offered. For example, within the Tidewater region, Chesapeake's fringe benefit costs as a proportion of support salary costs were relatively high in FY 2002, at 35 percent. However, it also is important to note that in the statistical analyses of salaries done for this study, Chesapeake ranked third from the bottom in the State in its salaries paid to support staff as a proportion of the salary level that is predicted for them based on their presence in a MSA, the educational attainment levels in their community, and their population density. The fringe benefits they offer may help partially offset their salary issues.

Table 13

Fringe Benefit Costs of Support Personnel as Percent of Salary / Wage Costs,
(Divisions Grouped Based on Superintendent Regional Study Groups)

State Superintendent Regional Study Group	Fringe Benefits as Percent of Salary (Mean for the Divisions in the Group)	Divisions With Greatest Fringe Benefit Costs as Percent of Salary (33 Percent or More)
Group # 7, Southwest Virginia (N=19 divisions)	31.20 %	Giles, Russell, Tazewell, Dickenson, Buchanan, Lee, Wise
Group # 5, Charlottesville and Southern Portion of Shenandoah Valley (N=20)	28.80 %	Albemarle, Rockbridge, Highland, Rockingham
Group # 6, Roanoke area and the Western portion of Southside Virginia (N=20)	28.60 %	Covington, Roanoke County
Group # 4, Northern Virginia and the Northern Portion of Shenandoah Valley (N=19)	27.80 %	Alexandria, Loudoun, Arlington, Orange
Group # 2, Tidewater and Eastern Shore (N=15)	27.00 %	Chesapeake
Group # 1, Richmond and surrounding areas (N=15)	26.33 %	(No divisions at 33 percent or more)
Group # 8, Southside Virginia (N=11)	25.09 %	(No divisions at 33 percent or more)
Group # 3, Northern Neck, plus Fredericksburg and surrounding areas	24.20 %	(No divisions at 33 percent or more)

Source: JLARC staff analysis of Annual School Report data for FY 2002.

NON-PERSONNEL COSTS

Across the various support services studied, non-personnel operating costs accounted for an average of just over one-third of total operating costs for support services. In FY 2002, non-personnel costs for non-instructional support services accounted for about $680 million in expenditures.

The major components of non-personnel costs are utilities, "purchased services," and costs for food purchases for school breakfasts and lunches (see Table 14). Purchased services are defined on the Annual School Report as "services acquired from outside sources (i.e., private vendors, public authorities, or other governmental entities)," with the purchase of the service being made "on a fee basis or fixed time contract basis."

Table 14

FY 2002 Support Service Expenditures for Non-Personnel Costs

	FY 2002 Expenditure	Expenditure as Percent of Operating Costs for Support Services	Expenditure as Percent of Non-Personnel Support Costs
Utilities	$ 183.8 million	9.6 %	27.0 %
Purchased Services	$ 136.0 million	7.1 %	20.0 %
Food	$ 135.6 million	7.1 %	19.9 %
Other Materials & Supplies	$ 128.6 million	6.7 %	18.9 %
Other Costs	$ 97.7 million	5.1 %	14.3 %
Total Costs	$ 681.6 million	35.6 %	100.0 %

Source: JLARC staff analysis of Annual School Report data for FY 2002.

Per-pupil expenditures for non-personnel costs in the service areas addressed by the study range from a low of $327 per pupil in Smyth County to a high of $1,469 per pupil in the City of Charlottesville. Table 15 shows the upper quartile, lower quartile, and median per-pupil expenditures made by school divisions for these services in FY 2002.

Table 15

FY 2002 Support Service Expenditures on a Per-Pupil Basis for Non-Personnel Costs

Per-Pupil Expenditure at 25th Percentile of Divisions	Median Per-Pupil Expenditure (50th percentile)	Per-Pupil Expenditure at 75th Percentile of Divisions
$558	$620	$759

Source: JLARC staff analysis of Annual School Report data for FY 2002.

Statistical analysis for this review indicated that without going into a more detailed analysis for each support component, about 30 percent of the variation that can be observed in per-pupil costs for non-personnel items appears to be explained by three factors. These factors include the revenue capacity of the locality, the percentage of pupils eligible for free and reduced lunches, and the size of student populations in each school building. Revenue capacity and the proportion of free and reduced lunch pupils are positively associated with non-personnel costs. That is, localities with higher revenue capacities and greater proportions of students from poverty backgrounds tend to spend more per-pupil on non-personnel services. The association between non-personnel costs and the number of students per school is negative. The larger the size of the student populations in each school, the less that is spent per-pupil in non-personnel service purchases. Thus, there appears to be a school-level economy of scale effect.

III. Virginia School Division Practices for Administrative, Attendance, and Health Services

The administrative activities of the public school systems at the local level include both school-based administration (the principal's office) and central division administration. In the administrative area, this report specifically addresses central administrative functions, which are considered support services. Central administrative personnel include positions such as the school superintendent, assistant superintendents, other professional staff, and various clerical and technical staff. The central administrative function addresses tasks such as providing executive leadership, planning, fiscal services, and human resources.

The attendance function includes various activities that are involved with making daily attendance counts, notifying parents of attendance issues, making home visits as necessary, and, if need be, making court appearances or conducting other work intended to compel student attendance. Health services include the work activities of staff such as school nurses, psychologists, and health clerical staff.

National data consulted for this review indicate that Virginia's divisions, on average, provide central administrative activities at low costs relative to the national average, and relative to all states in the southern region of the country except Tennessee. In the data reviewed, attendance and health services are classified as part of a broader group of services that are categorized as "pupil support services" (the broader grouping includes services such as guidance counseling, record maintenance, and placement services). In the broad category of pupil support services, Virginia's per-pupil cost ranked 6th among the 16 states in the southern region, and was below the national average but above the southern region average.

Table 16 shows Virginia's per-pupil costs compared to other states for central administration (left column), pupil support services (middle column), and the combined costs for administrative and pupil support services. Virginia's cost for the combined functions covered by central administration and pupil services ranked 11th among the 16 states of the southern region.

While Virginia's per-pupil costs appear to be relatively low, this does not preclude the possibility of making improvements in the efficiency, effectiveness, or quality of staffing practices and service delivery. This chapter considers the staffing and service delivery practices of Virginia school divisions in the central administration, attendance, and health service functions. In administrative services, issue areas identified during the review include: variability in staffing ratios, actions to achieve economies of scale in administrative operations, construction planning, and obtaining low prices on purchases.

Table 16

Virginia's Per-Pupil Cost for Administration and Pupil Support Services Compared to Other Southern Region States and National Average (FY 2001 Data)

Central Administrative Cost Per Pupil		Pupil Support Services (Includes attendance, health, and other pupil support services)		Total Per-Pupil Cost, Central Administration Plus Pupil Support	
$ 570	Delaware	$ 403	South Carolina	$ 970	Delaware
$ 381	***U.S. Average***	$ 400	Delaware	$ 766	Oklahoma
$ 380	Oklahoma	$ 386	Oklahoma	***$ 743***	***U.S. Average***
$ 349	Kentucky	***$ 362***	***U.S. Average***	$ 676	South Carolina
$ 317	Arkansas	$ 353	Maryland	$ 642	Maryland
$ 309	Texas	$ 344	North Carolina	$ 624	Texas
$ 304	West Virginia	**$ 343**	**VIRGINIA**	$ 611	North Carolina
$ 289	Maryland	$ 315	Georgia	***$ 589***	***SREB Average***
$ 283	***SREB Average***	$ 315	Texas	$ 587	Georgia
$ 273	Florida	$ 312	Florida	$ 585	Florida
$ 273	South Carolina	***$ 306***	***SREB Average***	$ 581	Kentucky
$ 272	Georgia	$ 263	Alabama	$ 579	Arkansas
$ 267	North Carolina	$ 262	Arkansas	**$ 571**	**VIRGINIA**
$ 261	Louisiana	$ 250	West Virginia	$ 554	West Virginia
$ 256	Alabama	$ 241	Louisiana	$ 519	Alabama
$ 252	Mississippi	$ 232	Kentucky	$ 502	Louisiana
$ 228	**VIRGINIA**	$ 215	Mississippi	$ 467	Mississippi
$ 196	Tennessee	$ 184	Tennessee	$ 380	Tennessee

Source: JLARC staff analysis of data from *Public Education Finances, 2001*, a document of the U.S. Census Bureau, issued March 2003.

In attendance services, school divisions are finding and using techniques to promote attendance that they think work well for them. However, making intensive efforts to promote attendance that go beyond the monitoring and parental notification functions involve the substantial use of employee time, and therefore can increase costs.

With regard to health services, some divisions have been reducing locality costs for these services by billing eligible services to Medicaid. For example, Wise County indicates that it has achieved savings by billing part of the cost of its nurses. The division is beginning to pursue Medicaid funds for psychologist, speech therapy, OT/PT, and audiology as services billable under Medicaid. Norfolk City school division staff indicate that they (as well as some other divisions) have begun billing for administrative services for Medicaid, and that working with DMAS, the division received its first check for $42,000 for two quarters of 2003.

Many of the school divisions consider the availability of a nurse at each of the schools to be a best practice. Other divisions have chosen to economize in this area, by not providing a full-time nurse in each school, or by not even providing part-time coverage on a regular basis. The lack of nursing positions at many schools appears to be one of the most central concerns that many school divisions have about the overall adequacy of their support resources. Several divisions visited for this review expressed some concern with the appropriateness of alternative arrangements and the potential liability involved. (A common alternative arrangement is to have services such as the delivery of medications handled by a clerical staff member in the principal's office.) However, some divisions also stated that in the scheme of things, satisfying instructional program needs have a higher priority.

CENTRAL ADMINISTRATIVE SERVICES

Like any other governmental or private sector entity, school divisions must perform several types of administrative activities to keep the schools and the overall system running smoothly. Employees must be paid, materials and supplies must be purchased, and new schools must be planned, designed, and constructed. Specific administrative services performed by school divisions include executive administration services, information services, personnel services, planning services, fiscal services, purchasing services, reprographics, data processing services, administrative clerical services, and facility construction services.

In most divisions, these administrative activities are performed by the division itself. There are exceptions, however. Some divisions operate certain administrative services in conjunction with their local government (discussed in more detail below). Clarke County, for example, has combined finance, procurement, budget development, and information systems with the school division to eliminate redundant personnel and systems, facilitate joint procurement and shared systems, and create a single source of financial data for use in budget discussions. Another alternative is to outsource certain administrative functions, such as data processing.

The use of automation in the administrative services area is an important aid in school divisions to achieving efficient and effective operations. The automated systems most commonly used by school divisions are financial management systems (for activities such as processing payroll, paying bills, and preparing the budget) and student information systems (with grade reporting, course schedules, attendance, and discipline data). (Many divisions also have automated systems for student health information, school bus routing, and maintenance work orders. These systems are discussed in the sections of chapters that deal with these support services areas.)

Many divisions have taken advantage of technology to increase their efficiency in the administrative area. The Chesapeake City school division, for example, is developing the capability for on-line budget submission, which allows administrators and principals to develop and submit their budgets to the budget office on-line. The division states that this will save time, and will result in increased efficiency through fewer data entry and calculation errors. The Fairfax County

school division has implemented UConnect, an employee self-service system to give all employees access to their human resources and payroll information. The system allows school-based managers to update and view recruitment/hiring information, and allows employees to update and/or view information on personnel information such as health benefits and leave balances.

Technology has also helped divisions improve their response to administrative information requests from the public. For example, the Chesapeake City school division posts information regarding attendance zones and capital improvement plans on its web site so that interested members of the community can view the information over the internet rather than receiving copies of these documents from the division. The Norfolk City school division posts attendance zones on the web, and the Henrico County school division also provides attendance boundary information via the internet.

Staffing Practices

Including school superintendents, there were 2,745 full-time equivalent (FTE) positions reported on the Annual School Report for FY 2001-02 in the central administration functional series (see Table 17). (The positions addressed here do not include school board members and staffing reported under the technology functional series that is part of the scope of another JLARC report on educational technology funding.) The positions reported constitute a statewide average of 2.36 FTEs per 1,000 pupils in fall membership (or one FTE per 424 pupils).

Typically, staffing on a per-pupil basis for these positions is least (on a per-pupil basis) in suburban school divisions. This is revealed in the bottom portion of the table. The median division in the suburban grouping had 2.07 FTEs per 1,000 pupils, or about one FTE per 483 pupils. On the other hand, median staffing was highest in the rural city and town division category, at 4.40 FTEs per 1,000, or about one FTE per 227 pupils.

More than half of the administrative FTEs in 2001-02 were clerical FTEs. The magnitude of clerical staffing may in part reflect the intentional assignment by some school divisions of one secretary per professional staff person, irrespective of workload levels. This is one of the areas that some school divisions may be able to look at to achieve some staffing economies. It may be feasible for school divisions to make greater use of clerical pools to accomplish the work. The Norfolk City school division reported during this review that the division is eliminating ten clerical positions from its budget by going to a pooled staffing approach (although each departmental area still has at least one clerical position).

Recommendation (1). **School divisions should consider whether there is the potential to achieve staffing efficiencies through the use of pooled rather than one-to-one clerical staffing assignments.**

Table 17

Central Administrative Staffing Practices

Administrative Positions: Total FTEs Statewide

Position Category	ASR Object	Statewide FTEs	FTEs Per 1,000 Pupils
Superintendent	1112	134	0.12
Administrative	1110	302	0.26
Assist. Super.	1113	113	0.10
Other Professional	1130	461	0.40
Technical Staff	1140	273	0.24
Clerical Staff	1150	1,462	1.28
Overall		**2,745**	**2.36**

Administrative FTEs: Spread in FTEs (Per 1,000 Pupils)

Locality Category	Median	25th Percentile	75th Percentile
Urban	3.13	2.51	4.65
Suburban	2.07	1.62	2.81
Rural Cities, Towns	4.40	3.37	4.62
Rural Counties	2.85	2.04	3.81
Overall	2.80	1.99	3.81

Note: Positions shown do not include school board members and technology support staff.

Source: JLARC staff analysis of DOE Annual School Report data.

Delivering Administrative Services

Table 18 outlines some of the challenges that school divisions are facing in delivering administrative services. The remainder of this section of the chapter on administrative activities discusses some of these challenges, and potential ways of addressing these challenges that have been used by Virginia school divisions, or reported by other sources consulted during this review.

Challenge: Achieving Economies of Scale in Administrative Operations. Large divisions often have an advantage over smaller divisions in terms of administrative costs because their large size allows them to achieve economies of scale and thereby reduce certain administrative costs. While the size of a school division is beyond the control of the division, there are things that small school divisions can do to achieve economies of scale and thereby lower their administrative costs. Many school divisions have found that they can operate more efficiently if services are performed together with the local government. This is especially feasible in the area of central administrative services since most of the administrative functions that the school division must perform are also performed by the local government.

Table 18

Administrative Services Challenges and Solutions

Administrative Services Challenges	Examples of Potential Solutions
Achieving economies of scale in administrative operations	Implement cooperative arrangements with the local government Work cooperatively with other school divisions (for example, co-operative purchasing arrangements)
Reducing school construction costs	Use prototype designs Use standardized specifications for the layout of school spaces Use independent consultants to help manage and provide cost-cutting advice for major capital improvement projects Develop long-range facility master plans Request that DOE maintain prototype designs on its web site*
Obtaining the lowest prices on purchases	Participate in purchasing consortia or purchase items cooperatively with other school divisions Purchase items off the state contract Purchase items from the Virginia Distribution Center Internet purchasing
Streamlining the purchasing process	Eliminate the need for purchase orders for small dollar purchases Use purchase/procurement cards for certain purchases and monitor use of cards
Openness to fresh approaches	Pursue top-notch management principles, such as Malcolm Baldrige Award principles. Expect administrative staff to go out at least once per year to see an innovative approach not currently used by the division.
Fingerprinting scans for new employee background checks	Use a "Live Scan" computerized fingerprint identification technology system.

Note: This table includes examples of solutions reported by Virginia school divisions (from site visits or best practice submissions), unless otherwise noted.
*This potential solution has been implemented in other states, including North Carolina and California.

Source: JLARC staff analysis.

Several Virginia school divisions operate administrative services in conjunction with their local governments. The Staunton City school division's finance system is completely tied in with the city government's mainframe system. The division pays the city $30,000 per year for support services for the system. In Chesapeake City, the city government runs the mainframe and cuts the division's checks. The City of Martinsville also cuts the checks for the Martinsville City school division, and division staff indicate that this practice saves them two FTE positions.

In the Roanoke City school division, the financial and payroll records for the city government and school division have been consolidated. The city maintains all financial records and accounting records for the school division. Annual dollar savings from three FTE positions (two in finance and one in payroll) are estimated to be $94,000. The County of Roanoke and the Roanoke County Public School Board operate joint software systems, including both a finance/budget/procurement system and a personnel/payroll system.

Even larger divisions can benefit from working cooperatively with the local government. Both the Chesterfield County school division and the York County school division, for example, have centralized purchasing operations with their county governments. The county governments' purchasing departments provide all of the school divisions' purchasing services, which avoids duplication of services and personnel. The Loudoun County school division has several cooperative arrangements with the county government. With regard to administrative services, the county's division of information technology provides the division with administrative mainframe support. The division does not pay for these costs, other than the hubs and routers that connect them to the mainframe. Also, the school division has a joint health care plan with the county. (In addition, the school division performs some services for the county, in the areas of vehicle maintenance and refuse hauling.)

These cooperative arrangements appear to work well for these divisions, although they indicated that a good relationship with the local government is necessary for these arrangements to be successful. Divisions with cooperative relationships also indicated that it helps to have guidelines in place so that one entity does not get priority over the other on a consistent basis.

Divisions can also achieve economies of scale by working with other school divisions. Several divisions participate in purchasing consortia to obtain bulk discounts on purchases. The Harrisonburg City school division holds an annual teacher recruitment fair with several other divisions, which they indicate saves the division money.

Recommendation (2). **Where feasible, divisions should work closely with their local government to eliminate redundancies, and should consider consolidating or sharing administrative services if it appears economical and effective. Divisions should also seek opportunities to work cooperatively with other school divisions in defining areas where it may be feasible to eliminate redundancy of effort and enhance economy and efficiency.**

Challenge: Reducing School Construction Costs. The construction of new schools is a high cost activity for most school divisions, and these high costs can deter divisions from building new schools. According to DOE, the total construction cost for new schools put under contract in FY 2002 was $420 million, with individual school construction costs ranging from $6.6 million for one elementary school to $40.1 million for one high school (total construction cost includes construction, site

development, water system, sewage disposal, built-in equipment, and demolition, but excludes architecture and engineering fees, value engineering, construction management fees, the cost of the site, unattached equipment, and furniture). Individual school construction costs can vary widely. For example, costs for two similarly sized high schools were $28 million and $37 million.

JLARC's 2002 report entitled *Review of Elementary and Secondary School Funding* found that more than half of schools (53 percent) responding to a Commission on Educational Infrastructure survey were built before 1970, and 27 percent were built before 1960. These older schools may not be the optimal design for today's educational programs, and they can increase a division's building maintenance costs substantially. Schools often use mobile units, or trailers, to house students when they cannot afford to make additions to current schools or build new schools. Although they are typically used as a temporary solution to house students, they often become permanent fixtures. There are concerns that these units do not provide the optimal educational environment for children. In addition, they can pose safety problems during severe weather situations.

There are several key practices that divisions are employing to reduce the costs associated with school construction. Some divisions, such as Hanover, Loudoun and Prince William, use prototype school designs for new schools, which means that all new elementary schools, for example, are basically constructed from the same design (prototype designs are modified periodically as warranted). Loudoun reports substantial savings on each school constructed.

In North Carolina, the state department of education maintains information on prototype designs on its web site. The 1996 North Carolina General Assembly directed the state board of education to establish a central clearinghouse for access by local boards of education that may want to use a prototype design in the construction of school facilities. The goal of this system is to achieve cost and time savings in school design; provide broader access to architects that specialize in school design; and increase awareness of current trends in school design. The web site contains several designs for elementary, middle, and high schools, and includes information for each school such as floor plans, site plans, photographs, designer information, construction costs, and other construction information.

The Chesapeake City school division has prepared detailed standardized layouts of elementary and middle school spaces to achieve efficiencies. Layouts are based on the educational needs of the instructional program and the supporting technology infrastructure. Layouts include the location of the space and detailed descriptions of all related items (for example, furniture, pencil sharpeners, flags, marker boards, and computer equipment). These standardized layouts help achieve consistency, and improve efficiency by eliminating the need to develop new specifications for each new project.

Divisions can also use consultants to help manage and provide cost-cutting advice for major construction projects. The Norfolk City school division has utilized the services of an independent construction consultant for the past eight years. The consultant serves as mediator and guide when a project appears to be veering off

track or when difficulties arise in coming to consensus over key decisions. The division indicated that the consultant has supervised three projects to date, and all three projects have been completed on time and on budget. The division estimates that the cost of the consultant has been returned to the division many times over.

The development of long-range facility master plans is another practice that can help reduce construction and renovation costs by helping divisions make wise decisions about renovation and construction issues. A long-range facility master plan compiles information and statistical data about a school division and provides a continuous basis for planning facilities that will meet the changing needs of the community. Facility master plans help a division think through the most effective use of its school construction resources. For example, a division should not spend substantial funds renovating a school that will need to be replaced in a couple years. The Portsmouth City school division has a facility master plan that was developed in house and is updated on an annual basis.

Challenge: Obtaining the Lowest Prices on Purchases. There are several practices that Virginia school divisions are using to obtain lower prices on purchased items. As mentioned above, several divisions throughout the State have used purchasing consortia or cooperative purchasing arrangements to obtain better prices. Purchasing consortia and cooperative purchasing arrangements allow divisions to pool the purchasing power of school divisions and achieve bulk volume discounts on purchased items. Also, some divisions report that they are using the internet to obtain lower prices on purchases. For example, staff in the Norfolk City school division report that they and several other Tidewater divisions are using DemandStar to make these purchases. The other divisions include Chesapeake, Newport News, Portsmouth, and Virginia Beach.

Portsmouth City school division staff noted that they do cooperative purchasing with several other Hampton Roads school divisions, including Virginia Beach, Norfolk, Suffolk, and Newport News. Among the items purchased are audiovisual equipment, computers, and buses. The Portsmouth City school division also purchases fuel with the city of Portsmouth. The Norfolk City school division noted that in working with Portsmouth on school bus procurements in the spring of 2003, savings of up to $5,000 per bus were achieved by the divisions over various state contracts. The Loudoun County school division has a cooperative purchasing relationship with several of the divisions in Region 4. All of the divisions in this region have riders in their contracts that allow other divisions to use them, which allows for volume purchasing.

The Roanoke City school division participates in a joint purchasing consortium for common use office and paper supplies with the Roanoke County, Salem City, and Botetourt County school divisions. The consortium develops a standard set of bid specifications, requests bids from vendors, and recommends products for bid award to each locality. Departments/schools in each participating division submit bids online directly to the vendor receiving the bid award. Schools in Roanoke City try to order 80 percent of their supplies this way.

In addition to using purchasing consortia, divisions can purchase items off the State contract, although some divisions felt that they could get better prices on certain items than the State contract price. Divisions can also purchase items from the Virginia Distribution Center (VDC). Items can be purchased through a catalog or on-line. Over 950 line items are available, including staple foods, frozen foods, janitorial supplies, and paper and plastic products. Several divisions stated that they do not have a way to transport items from the VDC warehouse, but the VDC website says that products are shipped from VDC's Richmond-based facility within five to eight days from receipt of orders. Other divisions said they do not use the VDC because they can achieve better prices than the VDC.

Challenge: Streamlining the Purchasing Process. Government agencies have traditionally had rather cumbersome purchasing processes to help prevent abuse and fraud. These processes often add to the cost of purchased items. In recent years, however, the trend has been to streamline the purchasing process and reduce the costs associated with governmental purchasing.

Several of the divisions visited have implemented practices to streamline the purchasing process. For example, some divisions use purchase cards for certain items (usually under a certain dollar threshold), which eliminates purchase order processing costs. Some use "just-in-time" purchasing for certain items, rather than storing these items in a warehouse, which can tie up funds in inventory. And some divisions have eliminated the need for purchase orders for small dollar purchases.

The trend in purchasing is to reduce the number of items that require purchase orders. Division staff in Mathews County stated that, until last year, "every nut and every bolt" purchased had to have a purchase order. However, the division is in the process of acquiring a new financial system, which will allow them to do electronic requisitions. With the new system, a purchase order will not be required for purchases under $150, which equates to about 25 percent of the division's purchase orders.

The Norfolk City school division began its purchasing card program over three years ago, and staff indicate that current annual purchases are about $4.3 million. The division also negotiated a rebate from the bank, which the division expects will be about $50,000 this year. The division is also looking at an electronic management system, offered through the bank. This is an electronic workflow system that allows real time visibility for transactions and electronic posting to the general ledger following electronic approvals. The division anticipates acquiring the system in November 2003.

The York County school division also uses procurement cards to streamline the purchasing process. The division indicated that the vast majority of purchases in the division are related to small purchases under the value of $1,000. To facilitate the efficient and timely purchasing of small purchases, the school division issued procurement cards to principals, bookkeepers, secretaries, and various maintenance and technical staff. The procurement card has a limit of $1,000 per purchase and a $5,000 monthly limit. The procurement card works just like a credit card; it eliminates the need for purchase requisitions and purchase orders for small

purchases. The holder of a procurement card can make immediate purchases as long as they have sufficient funds remaining in their budget. The division estimates that its saves $20,000 annually because it processes fewer purchase orders. In addition, purchases can be made immediately, rather than waiting three days (on average) until the purchase order is processed.

The Fairfax County school division has used procurement cards since 1995, and they participate in a rebate incentive reward program with the credit card provider. The division receives an annual rebate based on dollar volumes, average transactions, and frequency of payments. The division indicated that expenditures via the credit card program are estimated at approximately $18,000,000 annually. A rebate check for $104,631 was received for FY 2001. The Portsmouth City school division also uses purchase cards for items less than $1,000, although only a limited number of employees have the cards. The division estimates that 50 percent of purchases under $1,000 are done using purchase cards.

Challenge: Fingerprinting Scans for New Employee Background Checks. The *Code of Virginia* requires school boards to "require any applicant who is offered or accepts employment…whether full-time or part-time, permanent, or temporary, to submit to fingerprinting and to provide other descriptive information…for the purpose of obtaining criminal history record information regarding such applicant." Several divisions visited during the site visit process have security or human resources personnel take the applicants' fingerprints, and many indicated that it could take several weeks to get results back. The Norfolk City school division, however, uses a "Live Scan" computerized fingerprint identification technology system. The system electronically scans fingerprints and transmits this information to the State Police. Background information on job applicants is then typically available within one hour, allowing the division to confirm the identity of applicants and determine if the applicant has a criminal record. This enables the division to quickly determine whether the applicant should be hired, instead of having to wait days or weeks for the results from traditional fingerprint identification methods.

ATTENDANCE SERVICES

Attendance services generally involve enforcing the State's statutory provisions regarding compulsory school attendance (§22.1-254 to §22.1-269.1 of the *Code of Virginia*). Section 22.1-254 states that:

> Except as otherwise provided in this article, every parent, guardian, or other person in the Commonwealth having control or charge of any child who will have reached the fifth birthday on or before September 30 of any school year and who has not passed the eighteenth birthday shall, during the period of each year the public schools are in session and for the same number of days and hours per day as the public schools, send such child to a public school or to a private, denominational or parochial school or have such child taught by a tutor or teacher of qualifications prescribed

> by the Board of Education and approved by the division superintendent or provide for home instruction of such child as described in § 22.1-254.1.

In addition, Section 22.1-258 of the *Code of Virginia* provides school boards with the power to appoint attendance officers, and identifies a schedule of actions that need to be taken when pupils fail to report to school on regularly scheduled school days.

Enforcing the attendance statute is an important school division activity. According to a study conducted by the Virginia Commission on Youth, chronic absenteeism is the most dominant predictor of future criminal activity.

Virginia currently collects data by division on daily attendance. Attendance rates are calculated based on comparing average daily attendance across the year against pupil enrollment and pupil membership. In 1997-98, Virginia's statewide average daily attendance as a percent of fall membership was 93.4. As a percent of end-of-year membership, it was 94.8. In 2001-02, the corresponding figures were 94.5 and 95.0 percent. The average percent attendance among Virginia school divisions in 2001-02, as a percent of end-of-year membership, ranged from 91 percent to 98 percent. (Only one division had 98 percent attendance and only two divisions had 91 percent attendance.) Most school divisions had average daily attendance among enrolled students in the 94 percent to 96 percent range.

School attendance activity in the divisions focuses on monitoring attendance across the school year among students that are enrolled in the division, following up with parents when students have been absent a certain number of days, and taking legal action when necessary. The *Code of Virginia* outlines the steps to be taken after a student has had a certain number of unexcused absences. Table 19 summarizes the steps a division is to take.

Many divisions have streamlined the attendance function through the use of technology. In the Hanover County school division, for example, teachers enter attendance information in the computer, and submit this information on-line to a centralized system at the central office. (Prior to this system, teachers manually recorded attendance on paper, and a central office administrator had to enter each school's attendance information in the computer manually.) The Hanover County and West Point school divisions have attendance phone dialer systems, which connect schools with parents and deliver absentee notifications using up-to-the-minute data from the student information system. The Norfolk City school division also has an automated system that calls guardians when the students are absent. The system is used for secondary schools. Other divisions have automated systems that automatically generate letters to parents after a certain number of unexcused absences.

Table 19

Actions to Be Taken After Unexcused Absences

Number of Unexcused Absences[1]	Action to Be Taken
1	The attendance officer[2] shall make a reasonable effort to notify the parent by telephone to obtain an explanation for the student's absence
5	If a reasonable effort to notify the parent has failed, the attendance officer shall make a reasonable effort to ensure that direct contact is made with the parent, either in person or by telephone, to obtain an explanation for the student's absence and to explain the consequences of continued nonattendance. The attendance officer, student, and student's parent shall jointly develop a plan to resolve the student's nonattendance.
6	The attendance officer shall schedule a conference within 10 school days with services providers to resolve issues related to the student's nonattendance.
7	The attendance officer shall do either or both of the following: (i) file a complaint with the juvenile and domestic relations court alleging the student is a child in need of supervision (as defined in §16.1-228), or (ii) institute proceedings against the parent (pursuant to §18.2-371 or §22.1-262).

[1]An unexcused absence is defined as an absence in which the division has no indication that the student's parent is aware of and supports the student's absence.
[2]If the division does not have an attendance officer, the division superintendent shall act as the attendance officer.
Source: *Code of Virginia*, § 22.1-258.

Staffing Data

The Annual School Report (ASR) data collected by DOE does not systematically distinguish between staffing for attendance services and staffing for health services. Both types of positions are reported under function code 62200, for "attendance and health services." The ASR does provide for the separate identification of school nurse and psychologists positions within the overall attendance and health service category, but the remainder of the positions cannot be identified by service type. Since school nurses are the largest single FTE category in this group, and school nurse staffing has been an issue, data on staffing practices for the attendance and health function are shown under health services, later in this chapter.

Delivering Attendance Services

Table 20 outlines two major challenges in the attendance services area. One of these challenges relates to the need to develop effective and efficient implementation strategies to address the need to track the status of students who do not re-enroll or stay enrolled with the school division. This is an area that has not been a focus of attention in the past. However, partly in response to requirements under

Table 20

Attendance Services Challenges and Solutions

Attendance Services Challenges	Examples of Potential Solutions
Tracking the status of students who do not re-enroll or do not stay enrolled with the school system.	Work with DOE (and/or consultants hired by DOE) in providing school division input regarding the development of a new system that will allow for better tracking of students. Also work with DOE on issues regarding the implementation and use of the system.
Encouraging truant students to attend school	Employ attendance officers to work with students and parents Use a multi-agency collaborative approach to reduce truancy, which involves several other community agencies in addition to the schools Have a good working relationship with the court system

Note: With regard to new requirements for tracking students, staff in some school divisions indicated that DOE has begun meeting with some divisions on the implications of the requirements. The potential solution to the challenge is derived from division comments about the current situation. With regard to encouraging truant students to attend schools, the potential solutions are examples of solutions reported by Virginia school divisions in best practice submissions and/or the site visits.

Source: JLARC staff analysis.

the federal No Child Left Behind Act, the Department of Education has new expectations for the collection of data by school divisions in this area. The second challenge regards the need to encourage division students who are truant to attend school.

Challenge: Tracking the Status of Students Who Do Not Stay Enrolled With the School System. One of the attendance challenges that was noted by Hanover County school division staff is that divisions generally lack information about what happens educationally to students who do not re-enroll or do not stay enrolled with the school system. The division indicated that under the No Child Left Behind Act, DOE is going to require divisions to collect more data that addresses the status of the child's education. Divisions will need to focus more on tracking the status of these pupils, such as whether they are being home schooled, going to private school placements, going to a Governor's school, going to another division, or dropping out.

DOE has issued an RFP for a "state-level education information management system that will enable the Virginia Department of Education to meet increasing state and federal reporting requirements and enable stakeholders at all levels of education to make informed educational decisions based on accurate and timely information." The system is not intended to be a school or district-level information management system, so school divisions will continue to maintain their individual

information systems. However, the system will allow for a statewide identification number for each student, to allow for better tracking of students. Hanover County school division staff indicated that the new system will have a lot of ramifications for school divisions. For example, division staff indicated that tracking home school and private school placements will present a challenge. School division staff will need to work closely with DOE staff to ensure effective and efficient implementation of the requirements. One of the concerns of division staff is that DOE needs to recognize the substantial limitations that exist in the ability of divisions to report data from prior years that meets greater reporting expectations.

Recommendation (3). **DOE should involve school divisions in the development of the new system for tracking students, and in student tracking implementation issues, in a timely manner.**

Challenge: Encouraging Truant Students to Attend School. Encouraging truant students to attend school can be a real challenge, especially in poor or rural areas where graduating from school is not viewed as a necessity, or in families where parents did not graduate from school. Divisions employ a variety of means to make truant students attend school, including the employment of attendance officers who make home visits, and the use of comprehensive, multi-agency collaborative approaches.

The level of effort for attendance services varies among the divisions. Under the *Code of Virginia*, every school board is given the power to appoint one or more attendance officers, to enforce the provisions of the attendance article, but the *Code* also provides that "where no attendance officer is appointed by the school board, the division superintendent shall act as attendance officer." Some divisions have a single person in the division responsible for attendance, and other divisions have a higher level of staffing. The Greensville County school division, for example, has one attendance officer who makes home visits and coordinates court appearances. The Chesapeake City school division indicated that the division has one truancy person, and could benefit from having more. The Roanoke City school division has six full-time attendance specialists, who are each assigned a number of schools. These specialists make home visits after a student has had five unexcused absences. The Bedford County school division has three visiting teachers who handle attendance, and they also have school resource officers (SROs) who get involved with attendance and truancy issues.

The Norfolk City school division has 15 attendance technicians. In collaboration with Portsmouth, the division applied for a school attendance federal grant three to four years ago. The grant was received, division staff indicate, because the federal government "recognized that we had a problem with attendance." With the positions first hired with the grant, the division reports that it has been able to focus on attendance issues, and the attendance technicians provide them with a "hands-on" aspect to their effort – "a knock on the door" at the home of the truant student. The positions pay about $15,000 per year for full-time (7.5 hours per day) work. The federal grant for these positions expired on June 30, 2003, but the division values the results obtained from the program, and therefore the positions are being continued in the division's operating budget for FY 2004. It should be noted that this ef-

fort is directed toward promoting daily attendance among the students who are enrolled.

Other divisions report having comprehensive programs. For example, the Prince William County school division has an attendance officer in each high school, and they also use a multi-agency collaborative approach to reducing truancy. The school division and several community agencies participate in the Inter-Agency Truancy Prevention/Intervention Task Force to examine the underlying causes of truancy, to secure the assistance of community agencies in providing services, and to provide schools with a plan that is both responsive to the attendance legislation and that defines how schools can offer services to truant children and their families. The Pittsylvania County school division also uses a multi-disciplinary approach to truancy reduction. The county's Truancy Multidisciplinary Team is made up of representatives from county service agencies and school personnel who work collaboratively to offer services for truant students and their families. The Rockingham County school division has established multi-level services to address prevention, intervention, and enforcement of the mandatory attendance laws.

The Lancaster County school division works closely with the courts to enforce attendance statutes. When necessary, the school will file petitions for a child in need of supervision or a child in need of services and may bring adult charges for contributing to the delinquency of a minor. The division indicated that the Lancaster County court system and Commonwealth's Attorney are very supportive in enforcing attendance statues. The division's School Support Officer, a central office position that interfaces with school attendance officers and school curses, is very visible in court.

The cooperation of the court system appears to be a critical aspect to enforcing attendance. One division indicated that their judge does not aggressively enforce the attendance statutes, which hampers their ability to deal with truants.

Recommendation (4). **Divisions should consider employing attendance officers / technicians if they have chronic attendance problems requiring personal attention.**

SCHOOL HEALTH SERVICES

School health services are generally provided by school nurses employed by the school division. The National Association of School Nurses defines school nursing as:

> a specialized practice of professional nursing that advances the well being, academic success, and life-long achievement of students. To that end, school nurses facilitate positive student responses to normal development; promote health and safety; intervene with actual and potential health problems; provide case management services; and actively collaborate with others to build

student and family capacity for adaptation, self management, self advocacy, and learning.

School nurses provide care to students who become injured or ill during the school day, administer prescription and over-the-counter medications to students, and conduct medical screenings required by the *Code of Virginia*, including vision, hearing, and scoliosis screenings. (The Virginia Administrative Code requires that vision and hearing screenings be conducted for all new students and all students in grades K, 3, 7, and 10.) Speech-language pathologists and audiologists also perform hearing screenings in some divisions. If time is available, school nurses may also go into the classrooms and discuss health issues such as drug/alcohol prevention, eating disorders, first aid, nutrition, and chronic disease education (asthma). School nurses also participate in the development of individualized education plans for special education students and in the development of individualized health care plans for students with chronic illnesses.

Given the age of the student population, it may be assumed that students are in good health, but this is not necessarily true in a number of divisions, especially in areas of poverty where students may not have access to adequate medical care. For example, Brunswick County school staff indicate that there is a high level of need in the community for health services, but few physicians. Division students have some difficult health needs, which the division seeks to meet with two full-time nurses and one part-time itinerant nurse. The nurses do "chest PT" on some students, which involves 45 minutes of therapy per session to stimulate the lungs. The division also has a few students who are tube fed. With a student population of about 2,350, the division has 45 pupils on psychotropic medications, ten children with sickle cell anemia, and eight children with diabetes. Also in the student population, there are cases of cystic fibrosis, hemophilia, cancer, asthma, and epilepsy.

King and Queen County staff reported that there are no pediatricians in the county, and until recently, not a single doctor. The children in their schools do not get routine medical exams, and untreated ear infections and a lack of health insurance coverage are prevalent. DOE staff also indicate that many communities may increasingly rely on school nurses for children's primary health care after plant closings and other employment downturns.

Wise County was also visited for this review, and division staff indicated there are numerous medical conditions among the students. Division staff compiled a comprehensive listing of the health conditions of their students for the 1999-2000 school year. Table 21 lists these various conditions.

According to the Virginia Department of Education, about 84 percent of the nurses that practice in Virginia schools are registered nurses, and about 16 percent of the nurses are licensed practical nurses. According to the *Code of Virginia*, licensed practical nurses cannot practice without registered nurse supervision. Local health departments provide nursing services on a daily basis pursuant to contracts

Table 21

Medical Conditions Among Wise County Students, 1999-2000 School Year

(Student population 7,121)

Health Condition	No. of Regular Education Students With Each Condition	No. of Special Education Students With Each Condition	Total Number of Students With Each Condition	Number of Conditions Per 1,000 Students
Attention-Deficit/Hyperactivity Disorder (ADHD)	65	294	359	50.41
Asthma	244	43	287	40.30
Heart*	75	5	80	11.23
Seizures	37	27	64	8.99
Syndromes*	9	43	52	7.30
Kidney*	25	9	34	4.77
Diabetes	25	8	33	4.63
Cerebral Palsy	5	18	23	3.23
Lung*	17	2	19	2.67
Cancer*	3	2	5	0.70
Juvenile Rheumatoid Arthritis	3	2	5	0.70
Muscular Dystrophy	1	3	4	0.56
Neurofibromatosis	1	2	3	0.42
Spina Bifida	1	1	2	0.28
Cystic Fibrosis	2	0	2	0.28
Hemophilia	0	1	1	0.14
Other	160	20	180	25.28

Total Number of Conditions Reported = 1,153

*Heart conditions include mitral valve prolapse and heart murmurs. Kidney conditions can include any type of renal issues, such as renal failure. Lung conditions can include any type of breathing disorder. Syndromes can include Dandy Walker Syndrome and Marfan Syndrome.

Source: Wise County Public Schools.

in seven school divisions (Arlington, Bath, Chesterfield, Fairfax, Highland, Norfolk, and Russell), and on a weekly or monthly basis to four divisions. Three school divisions have no nursing services, one school division contracts nursing services from an agency, one school division funds their nurses through a rural health grant, and the remaining school divisions have nurses employed through local school boards.

Most divisions have at least some type of relationship with their local health departments. Local health departments often provide help with immunizations, and doctors are sometimes on call for consultation with school nurses. The

Hampton City school division indicates that their nurses have a close working relationship with the Hampton Health Department. The Hampton Health Department provides Hepatitis B vaccines on site at elementary schools and provides on-site flu shots for staff. The division's close relationship with the Health Department also facilitates communication regarding communicable diseases.

Some divisions provide health services to employees as well as students. The Roanoke City school division, for example, has established an employee health clinic at one of its high schools that is staffed by an occupational nurse. Employees may use the clinic for treatment of minor injuries and illnesses; the clinic also performs health screenings for employees and physicals for bus drivers and aides. The clinic also conducts workers compensation screenings; all employees experiencing non-emergency work-related injuries are required to be screened by the health clinic before seeking any other treatment. The Greene County school division also provides health services to employees. The division operates a school-based clinic called the "health cottage" which provides free health care services to students and employees.

Staffing Practices for Attendance and Health Services

There were 3,301 FTEs reported on the Annual School Report for FY 2001-02 in the attendance and health functional series (see Table 22). This represented a statewide average of 2.88 FTEs per 1,000 pupils in fall membership (or one FTE per 347 pupils). Across the different locality categories, there was not a great difference in the median FTEs per 1,000 pupils. However, within each locality category, there is considerable variation in the staffing ratios between the 25th and 75th percentile level.

The largest group of positions in the attendance and health category are school nurses. The statewide average was one nurse per 1,104 pupils (0.92 FTEs per 1,000 positions). In addition to the nursing staff reported as school division staff on the Annual School Report, approximately 150 nurse FTEs are provided by local health departments to the seven divisions with contracts for school nurse services.

The number of nurses in each division in relation to the number of schools varies considerably throughout the State. Some divisions have a nurse in every school, and some may have one or two nurses who serve all schools in the division. Some divisions also work with the local department of health and receive nursing services through them. The *Code of Virginia* does not mandate the number of school nurses in each division, but it does provide some guidance. The *Code* states that "each school board may strive to employ, or contract with local health departments for, nursing services consistent with a ratio of at least one nurse...per 1,000 students by July 1, 1999." The position of the National Association of School Nurses is that the maximum ratio of school health nurses to students should be one nurse to no more than 750 students in the general school population.

Table 22

Attendance and Health Staffing Practices

All Attendance and Health FTEs: Total FTEs Statewide

Position Category	ASR Object	Statewide FTEs	FTEs Per 1,000 Pupils
Administrative	1110	34	0.03
Other Professional	1130	635	0.55
School Nurse	1131	1,054	0.92
Psychologists	1132	66	0.58
Technical Staff	1140	755	0.66
Clerical Staff	1150	157	0.14
Overall		**3,301**	**2.88**

All Attendance and Health FTEs: Spread in FTEs (Per 1,000 Pupils)

Locality Category	Median	25th Percentile	75th Percentile
Urban	2.70	2.04	4.15
Suburban	2.53	2.26	3.26
Rural cities, towns	2.63	1.57	3.27
Rural counties	2.40	1.78	3.30
Overall	**2.56**	**1.94**	**3.48**

Source: JLARC staff analysis of DOE Annual School Report data.

Several school divisions submitted the use of a full-time nurse in every school is a best practice. Although this practice is expensive to implement, divisions who have a nurse in each school argue that the benefits outweigh the costs. Benefits cited include reduced legal liability and better care for students.

Several divisions in the State do not have a full-time nurse in every school. These divisions typically have nurses who work part-time in each school. In most cases, the nurses are full-time positions, but they serve more than one school. Therefore, they spend one to two days per week in each of the schools they serve. If a situation arose in which a school needed a nurse on a day in which the nurse was at another school, schools indicated that they could call 911 if it was an emergency, or they could call the nurse at the other school and the nurse could be there very quickly. In divisions where nurse staffing may be short of needs, or in schools that do not have full-time nurses, school administrators or secretaries generally administer medications to students. In Brunswick County, which has 2.5 nurse FTEs for six schools, school division staff estimate that about two-thirds of medications are administered by clerical staff.

Some school division or school staff indicated that they are not comfortable with the practice of clerical staff administering medications, and think that this is a potentially risky situation. DOE staff indicated that this practice is not considered

acceptable in health care facilities. Others said that they have been doing this for years and they did not see a problem with it.

Individual schools had differing views on the need for a full-time nurse in every school. The principal at one school that does not have a full-time nurse stated that the school secretary spends a substantial amount of time dispensing medications. The principal indicated that a full-time nurse would help the school to avoid calling 911 unnecessarily, and would help address concerns they have about the potential for lawsuits. Other schools visited indicated that while it would be nice to have a full-time nurse, they felt that their school had more pressing needs in instructional areas.

In the Loudoun County school division, the middle and high schools have full-time nurses, but the elementary schools have health clinic assistants instead of nurses. The division indicated that the health clinic assistants are less costly than nurses, and still provide a good level of care. Their level of formal training varies – some have LPN or RN training, and some are Emergency Medical Technicians. The division has looked at having LPNs at the elementary schools, but they do not feel that this is a more cost-effective option than the use of health clinic assistants because LPNs cannot do much more than a health clinic assistant without RN supervision. The Hanover County school division also has a similar type of position in some of its schools (clinic attendants), although they indicated that they are attempting to phase out these positions through attrition and eventually would like to have a registered nurse in every school.

School Health Service Delivery

Table 23 provides three examples of challenges in the health services area, and ways that Virginia school divisions are dealing with these challenges.

Challenge: Obtaining Funding Support to Pay for Services. To provide nursing services, Wise County employs nine LPNs, five RNs, and three nurse practitioners on a contract basis. Part of the cost of the nurses is billed to Medicaid. The division uses the nurses as dual duty EPSDTs (Early and Periodic Screening, Diagnosis and Treatment program) for which they can bill Medicaid. On a per-capita basis, the division is among the top ten percent of Virginia school divisions in the amount it bills to Medicaid.

The practice of increasing the utilization of Medicaid funds for school health services appears to have broader possibilities in Virginia. The Department of Medical Assistance Services (DMAS) and DOE have been working to expand the special education services that can be billed to Medicaid, as part of an effort to increase federal funding. Several approaches designed to capture more Medicaid funding have been identified, including: adding coverable services, increasing payments to providers, creating an easier billing process, and making it easier for divisions to determine Medicaid eligibility.

Table 23

School Health Services Challenges and Solutions

School Health Services Challenges	Examples of Potential Solutions
Obtaining funding support to pay for services	Medicaid billing for eligible services.
Keeping up with student health documentation and filing	Use a customized health services data base.
Clinic area space	Consider needs for clinic area space in building renovations and in plans for new facilities.

Note: This table includes examples of solutions reported by Virginia school divisions (from site visits or best practice submissions).

Source: JLARC staff analysis.

However, efforts by school divisions to seek reimbursement will be needed. According to DOE and DMAS staff, in the past, some Virginia school divisions chose not to bill for reimbursable services because the administrative requirements were considered too cumbersome or required too much staff time for completion. A DMAS report indicated that "only 53" Virginia school divisions "billed for a little over $3 million in the 2001-2002 school year and received $1.6 million in revenue," and that "school divisions in other states of similar size bill considerably more." In 2002-03, efforts directed toward making improvements in this area led to 68 of 134 divisions (DMAS counts the schools for the deaf and blind as divisions) billing Medicaid for about $5 million, and the divisions received $2.3 million in revenue from direct services. (In addition, divisions received $577,571 in federal Medicaid funds for their administrative claims, as did the State). DMAS and DOE staff indicate that they have been working together to try to make it easier for school divisions to overcome some of the obstacles that seem to have deterred wider use of this approach to obtain funds in the past.

Recommendation (5). **School divisions should consider whether they are potentially eligible for Medicaid reimbursements for health services they deliver, such as EPSDTs or certain services for special education children. School divisions should pursue the Medicaid funding if it is justified by the size of the potential reimbursements.**

Challenge: Keeping Up with Student Health Documentation and Filing. Nurses with whom the team spoke during site visits indicated that they spend a substantial proportion of time dealing with paperwork. All contacts with students must be documented and filed, as do the results of health screenings. Documents such as immunization records must also be kept for each student. In addition, individualized health care plans must be maintained for special education students and students with chronic illnesses. Some nurses indicated that they often work after school, on weekends, or over spring break to get caught up with their documentation and filing.

To assist its school nurses, the Hampton City school division has a Customized Health Service Data Base, which allows for the tracking of student visits, medications, and treatments on-line. The data base also allows the school nurses to have all current student demographic and immunization data at their fingertips. Hanover County Public Schools also has a health management system, which allows nurses to keep nurses notes and other information, such as plans of care, on line. However, nurses are still required by the State to maintain a paper file for each child, for documents such as immunization records.

A school nurse data system was developed by the Virginia Department of Health Child and Adolescent Division, the Virginia Department of Education, school nurses, and others. Funding was provided by the Department of Health. According to DOE, the system was piloted in several school divisions with very favorable results. The system was contracted to the Center for Pediatric Research Division of Eastern Virginia Medical Center for production, but the installed cost was too expensive for most school divisions. Currently four school divisions are using the Welligent data base.

Recommendation (6). **School divisions in which nurses have needed to spend inordinate amounts of time on record-keeping may wish to obtain health services software.**

Challenge: Clinic Area Space. Based on site visit observations, it appears that spaces used as clinic areas are cramped in many schools, especially older buildings. In a few of the schools visited, there was no cot in the clinic area or appropriate space for an ill student to lie down.

Relatively little space is required to make a major improvement in the currently cramped quarters that are seen in some divisions. This is a need that can be addressed in the planning of building renovations or plans for building facilities. Some school divisions indicate that they include line staff, such as nursing staff, in the process of developing plans for buildings that will meet space needs, such as clinic space. The *Virginia School Health Guidelines* (discussed below) include research-based information on the amount of space and equipment that should be included for a school health office.

Recommendation (7). **School divisions should consider clinic area space needs in the renovation of existing buildings and in the design of new facilities.**

A School Health Guidelines Document Serves as a Potential Resource for Use in Delivering School Health Services in Virginia

Obtaining knowledge of appropriate practices in school health services may be a challenge for some divisions, especially divisions that may have limited access to health services expertise. The Virginia Department of Health, in collaboration with the Virginia Department of Education, has developed the *Virginia School*

Health Guidelines to provide assistance to school divisions. The *Guidelines* were developed and reviewed by Virginia Commonwealth University School of Nursing faculty, the Virginia Chapter of the American Academy of Pediatrics School Health Committee, professionals in the Virginia Department of Education, professionals in the Virginia Department of Health, school nurses, and others. The development of the *Guidelines* was funded by the U.S. Department of Health and Human Services.

The *Guidelines* are intended to serve as a manual for appropriate practices in school health services. The manual primarily addresses health services, health education, healthful school environment, and parent and community involvement, with health services guidelines receiving the most attention. The manual itself (with appendices) is over 700 pages long, and the longest chapter (approximately 200 pages) addresses health services. Health services include: conducting health assessments; population-based screening programs (such as blood pressure screening and vision screening); implementing requirements for special education pupils; administering medication; infectious disease control; and emergency services, such as first aid. For each area of health service practice, the manual generally contains a discussion of the minimum requirements specified in the *Code of Virginia*, followed by a discussion of recommended practices.

IV. Virginia School Division Practices for Operation and Maintenance Services

The category of "operation and maintenance services" spans several major types of activities in Virginia's school divisions, including custodial services, maintenance services (building maintenance and grounds maintenance), and security services. In Virginia, these services accounted for $826 million in FY 2002 expenditures, or 43 percent of total division expenditures for non-instructional operating support services (including school food expenditures).

National data indicate that Virginia's operation and maintenance expenditures per pupil are very close to the national average, but are above the average for the southern region and most states in the region (see Table 24). There may be opportunities for economies and efficiencies in this service area. However, due to the importance of functions such as preventive maintenance in the net life cycle cost of buildings, as well as concerns about having clean and safe environments for pupils, it is also important to not unduly skimp on some operation and maintenance activities.

Table 24

Virginia's Per-Pupil Cost for Operation and Maintenance Compared to Other States in Southern Region and National Average

	FY 2001 Per-Pupil Cost
Delaware	$ 975.32
West Virginia	$ 782.53
Maryland	$ 749.97
Texas	$ 720.08
Oklahoma	$ 718.22
VIRGINIA	**$ 718.17**
U.S. Average	***$ 717.53***
Florida	$ 668.31
SREB Average	***$ 635.51***
South Carolina	$ 575.19
Arkansas	$ 561.47
Louisiana	$ 555.23
Tennessee	$ 546.13
Georgia	$ 545.56
Kentucky	$ 525.03
Alabama	$ 508.50
North Carolina	$ 504.78
Mississippi	$ 502.22

Source: JLARC staff analysis of data from *Public Education Finances, 2001*, (U.S. Census Bureau).

This chapter discusses staffing and service delivery practices for school division operation and maintenance services. It identifies some of the challenges that divisions report facing in this area, and provides examples of some of the potential solutions that are used to address these challenges. The chapter focuses most upon the challenges and practices that emerged from the site visit process. The chapter concludes by noting the importance that some of the literature on school maintenance gives to the need for good planning.

OVERVIEW OF OPERATION AND MAINTENANCE SERVICES

Operation and maintenance services include various activities necessary to keep a division's school buildings clean, safe, comfortable, and in good repair. Services provided to the schools include custodial services, building maintenance services, grounds maintenance services, and security services. Energy management issues are also discussed in this section.

Custodial Services Overview

Custodial services include all activities necessary to keep school buildings – including classrooms, bathrooms, cafeterias, and administrative areas – clean. Custodians in some divisions also maintain the grounds directly around the building and perform light maintenance work, such as changing light bulbs.

Custodial services generally appear to be provided in a similar manner in the school divisions visited during the site visit process. Custodians typically are hired and trained by a central office administrator, but report to the principal of the school in which they are assigned, although sometimes they have a dual reporting relationship in which they report to both the principal and a central office administrator. The central office determines the number of custodians in each school. (One exception to this is the Prince William County school division, which uses a site-based management approach. Custodians are hired by individual principals. Each school receives funding for 1.5 custodians as a base, and then the school receives additional funding for custodians based on the number of students. Principals are given the latitude to decide how much of their funding to use for custodians, and how much, if any, they might wish to shift to other areas.) In general, most custodial staff work in the afternoons and evenings, when students are not in the building and it is easier to clean; and there is at least one custodian on duty during the morning and early afternoon hours to clean the cafeteria and respond to cleaning emergencies during the day.

Some differences in custodial services were noted among the divisions visited, however. For example, the Loudoun County school division has begun to pilot a team cleaning approach, and the Norfolk City school division uses a contractor to manage custodial staff. In addition, there appear to be differences in staffing levels and different methods for allocating staff. These issues are discussed in more detail below.

Building Maintenance Overview

Building maintenance work includes all activities needed to keep a school in good repair, such as electrical work, plumbing, carpentry, and heating, ventilation, and air conditioning (HVAC) work. Building maintenance is generally handled by two types of staff: generalized maintenance workers who can handle several types of maintenance jobs, or specialized maintenance workers who are trained in a specific trade and generally focus in that area, such as electricians or plumbers. Maintenance staff are typically not assigned to specific schools, although some school divisions do have one or more building maintenance staff assigned to their high schools. (The Prince William County school division, for example, has 1.5 building maintenance staff at each high school.)

In terms of organizational structure, divisions appear to fall into two groups: (1) maintenance workers are centralized and work wherever they are needed in the division, or (2) workers are assigned to zones and only work at the schools in that zone. The organizational arrangement used appears to depend on the size and unique needs of the division, with larger divisions tending to use the zone approach more than smaller divisions, to help reduce travel time and improve efficiency. The Loudoun County school division, for example, has maintenance workers assigned to one of four zones. The Hanover County school division also uses the zone approach.

Divisions have found that contracting out for specialized maintenance work, or maintenance that is performed infrequently, is more efficient than employing full-time staff to perform this type of work. The Staunton City school division, for example, contracts out for some HVAC work, all elevator work, some pest control work, and some specialized kitchen repairs. The Prince William County school division contracts out for hood system repair, certain engineering work, sewer and grease trap maintenance, and chiller maintenance. The Dickenson County school division contracts out for major roofing work, large painting jobs, and boiler welding.

Contracting is not always the least expensive option, however, when the work that needs to be done is not infrequent. For example, King and Queen County school division staff indicated that they found that contracting for HVAC maintenance was about twice as expensive for them as performing the work in house.

Grounds Maintenance Overview

Grounds maintenance generally involves mowing large athletic fields, and maintaining the flowerbeds and other landscaping around a school. The staffing arrangement for grounds maintenance varies among the divisions. Many of the divisions visited during the site visit process had a small grounds crew that handled the mowing of the large athletic fields, and then custodians were responsible for the grounds in close proximity to the schools. In the Prince William County school division, for example, school custodians are responsible for the area 50 feet around their building, and a crew of six grass cutters handles the rest.

Many smaller divisions do not have full-time grounds crews. For example, the Mathews County school division hires staff in the summer to cut grass and perform other grounds maintenance activities, or they have the custodians perform these functions. In the Staunton City school division, a maintenance worker cuts the grass, and other maintenance workers help out during the summer. In the Dickenson County school division, custodians are responsible for mowing.

In Portsmouth, the city's Parks and Recreation Department is responsible for the school division's grounds maintenance. The city does not charge the division directly for these services, but the city did reallocate the division's grounds maintenance budget to the Parks and Recreation Department when the department initially began performing this service for the division. In Norfolk, the city also handles the division's ground maintenance, as an "in-kind service," since the costs are part of the city's budget and the school division is not charged. The Parks and Recreation Department in Hanover County also handles the school division's grounds.

Safety and Security Services Overview

Safety and security services involve providing for the safety and security of students, school staff, and visitors, and ensuring the security of school property. School divisions typically use School Resource Officers (SROs) from the local police or sheriff's office to provide safety and security services. SROs are uniformed law enforcement officers who act as a liaison between law enforcement and the schools. SROs assist students in dealing with conflicts, resolving problems, handling peer pressure, and avoiding criminal activity. As law enforcement officers, they can take police action related to incidents on or around schools, but generally are not responsible for security. SROs also provide classroom instruction on law enforcement to students. Some divisions have SROs in the middle and high schools only, and some divisions have SROs who spend a portion of their time in the elementary schools.

Many divisions supplement their SRO staffing with security guards, security systems, and cameras. The Salem City school division, for example, uses security guards at certain schools to control parking lot areas and provide other types of security services. The Danville City school division has 48 cameras in the high schools, in addition to security guards and five SROs. The division has full-time and part-time night watchmen, plus seven part-time lunch guards/hall monitors.

The Fairfax County school division has implemented a pilot program to examine the use of various door access technologies to provide for exterior security while maintaining operational functioning of facilities. These technologies include the use of keypads, video intercoms, and proximity card readers. The division also has site-specific crisis plans that are submitted, reviewed, and stored electronically through a web-based program. CAD-generated drawings with relevant security information are automatically attached to each plan. The division has also implemented an exit door numbering project, which involves installing exit door number signs in a systematic manner to both the exterior and interior main corridors of all

schools. The intent is to enhance public safety response, and facilitate transportation needs, deliveries, and other administrative functions.

The Prince William County school division has a security resident program, which allows residents to live on school property (usually in an apartment) and provide security after hours in lieu of paying rent. The division indicated that many of the program participants are police officers, and that the program has resulted in a marked decrease in vandalism. The division has added an apartment to every new school built in the last ten years to accommodate this program.

The *Code of Virginia* (§ 22.1-279.8) requires schools to conduct school safety audits every three years. A school safety audit is a "written assessment of the safety conditions in each public school to (i) identify and, if necessary, develop solutions for physical safety concerns, including building security issues, and (ii) identify and evaluate any patterns of student safety concerns occurring on school property or at school-sponsored events." Audits are to be conducted by audit teams composed of a variety of stakeholders, including central office administrators, teachers, parents, and law enforcement personnel. Each school must submit a signed certificate to the superintendent of public instruction to document that an audit has been completed.

DOE has developed a School Safety Audit Protocol to help guide schools through the audit process. This document is organized in a user-friendly checklist format, and it covers areas such as safety and security of buildings and grounds, level of parent and community involvement, the role of law enforcement, and development of crisis management plans. It also includes several "best practice tips" for safety and security.

OPERATION AND MAINTENANCE STAFFING PRACTICES AND SERVICE DELIVERY

Operation and maintenance employees of the school divisions include custodians, maintenance staff, groundskeepers, and other staff. To a greater extent than in most support service categories, there are a number of staffing standards or guidelines available for assessing the need for custodial staffing. Some of these standards are described in this section.

School divisions also have a number of ideas for promoting efficiency and effectiveness in delivering these services. There also is a substantial body of material available on-line and from magazines addressed to these trades that seeks to identify and promote particular practices. Some operation and maintenance supervisors in the site visits indicated, however, that more so perhaps than in other support areas, there is not a great deal of communication that goes across the State in terms of operations and maintenance staff supervisors discussing issues of mutual concern and potential solutions to problem areas.

Staffing Practices

There were 14,801 operation and maintenance FTE positions reported on the Annual School Report for FY 2001-02 (see Table 25). This represented a statewide average of 12.31 FTEs per 1,000 pupils in fall membership (or one FTE per 81 pupils). The largest group of employees were "service" positions. This is typically the category on the Annual School Report where custodians are reported. Service FTEs accounted for about 62 percent of all operation and maintenance FTEs. The average ratio of pupils in fall membership per "service" FTE was 130.

Table 25

Operation and Maintenance Staffing Practices

Total FTEs Statewide

Position Category	ASR Object Code	Statewide FTEs	FTEs Per 1,000 Pupils
Administrative	1110	168	0.15
Other Professionals	1130	130	0.11
Technical	1140	258	0.23
Security Guard	1142	511	0.45
Clerical	1150	336	0.29
Trades	1160	2,619	2.29
Laborer	1180	1,301	1.14
Service	1190	8,759	7.65
Overall		**14,081**	**12.31**

Spread in Total FTEs (Per 1,000 Pupils)

Locality Category	Median	25th Percentile	75th Percentile
Urban	13.71	12.05	15.69
Suburban	10.72	9.37	12.29
Rural Cities, Towns	10.17	9.02	13.32
Rural counties	10.94	9.54	12.65
Overall	*11.01*	*9.54*	*13.32*

Source: JLARC staff analysis of DOE Annual School Report data.

The second largest grouping of positions are the "trades" FTEs. In this category of the Annual School Report, school divisions mostly report maintenance trades staff, such as HVAC mechanics, electricians, plumbers, carpenters, and other staff. The average ratio of these FTEs per 1,000 pupils was 2.29, or 437 pupils per FTE.

The one additional category with more than 1,000 FTEs in it is designated as "laborer." In this category, school divisions report groundskeepers, but may report other staff as well. On average, divisions reported about one laborer FTE per 877 pupils.

With the exception of the "urban" category, there is not a great deal of variation in the median FTE levels across the locality categories used in this review. The median staffing level for the urban divisions was about 1.25 times the size of the median across all locality categories.

Staffing Standards for Custodians. Allocating custodial staff among schools based on square footage of the buildings maintained is a common method for determining custodial staffing levels in school divisions across the nation. The range in square footage per custodian that is typically accepted as the industry standard is one custodian for every 18,000 to 20,000 square feet, depending on the age and condition of the buildings.

However, there are a number of staffing standards available that take into account the number of pupils served, and in some cases, additional factors that go beyond the square footage measure. Examples of these standards are shown in Exhibit 2. The standards are listed in general order of complexity.

One of the standards shown in the exhibit is used by the Hanover County school division. This standard goes beyond the simple use of square footage, and takes into account the number of pupils and teachers. While the standard begins with a square footage factor that may appear to be generous relative to the "industry" range (15,000 versus 18,000 to 20,000), it yields staffing ratios for itself (and it appears, for most school divisions that might use it) that is more lean. When applied to the Hanover County school division, for example, the end result of the calculations at the school level produces a division-wide ratio of about one custodian per 21,000 square feet to be maintained.

Staffing standards that include a variable or variables that reflect the number of students, teachers, or classrooms in a school appear to be useful in yielding staffing ratios that are more consistently applicable across schools of varying student population levels. The following case example illustrates this point.

> *In June 2003, the Martinsville school division had 588,944 square feet to maintain in six school buildings housing 2,673 students. Based on the mid-point of the typical industry standard, or 19,000 square feet per custodian, the division might have been expected to employ 31 FTEs. Using the Florida DOE standard (see Exhibit 2), which provides modifier factors in addition to the one per 19,000 square foot standard, the division might have been expected to employ 33.25 FTEs. However, the division actually employed 21 FTEs, or a ratio of one custodian per 28,045. On this basis alone, it appeared that the division is understaffed. However, the division's assistant superintendent indicated in an interview with JLARC staff that "the way it [custodial staffing] is supplemented, it works out alright."*

Exhibit 2

Examples of Staffing Standards for School Custodians

Florida Department of Education Standard

For each facility, FTEs are equal to: (Total gross floor area / 19,000) + "Modifier"

Modifier factors include:
Add 0.5 FTEs to total FTEs at each elementary school
Add 0.75 FTEs to total FTEs at each middle school
Add 1.0 FTEs to total FTEs at each high school

The Florida DOE states that the modifiers were "derived from numerous discussions with educational facility administrators throughout the state. They are intended to provide a more accurate indication of the labor force needed at various types of school facilities. When used in this manner, the differences in facility type, size, complexity, and general housekeeping requirements are taken into account and reflected in the total number of custodians..."

Standard Used by Hanover County Public Schools in Virginia

For each facility, FTEs are equal to:

Step One: Square footage divided by 15,000.
Step Two: Number of pupils divided by 250.
Step Three: Number of regular teachers divided by 10.
Step Four: Sum the results of the first three steps, and divide by 3.
If there is a remainder, remainders of 0.25 plus are rounded up.
Remainders of less than 0.25 are rounded down.

The Hanover County Public Schools custodial supervisor indicates that this formula has worked well for the division in accurately estimating staffing needs.

CASBO (California Association of School Business Officials) Workload Formula

Step One: Square footage divided by 15,000.
Step Two: Number of pupils divided by 225.
Step Three: Number of teachers divided by 8.
Step Four: Number of rooms to be cleaned divided by 11.
Step Five: Sum the results of the first four steps, and divide by 4.

Note: CASBO also has a more complicated method called the "Area Allotment Per Person-Hour Formula."

Planning Guide for Maintaining School Facilities (School Facilities Maintenance Task Force)

Contains a general guide for the square footage that can be cleaned during an eight-hour shift to obtain five different levels of cleanliness. It suggests that more square footage is acceptable than some other sources consulted, but also indicates that the actual amount that can be cleaned depends on multiple factors.

Denver Formula

Assigns a weighted number of points to various tasks in nine categories, and has a suggested calculation for equating the points to the number of custodians required.

Custodial Staffing Guidelines for Educational Facilities

Considered to be one of the most in-depth approaches to assessing staffing, these staffing guidelines are published by the APPA / Association of Higher Education Facilities Officers.

Sources: *Maintenance and Operations Administrative Guidelines for School Districts and Community Colleges* (Florida DOE), and a JLARC staff interview with the Hanover County custodial services director.

> *Further review of the situation indicated the following. First, the use of Hanover County's suggested staffing guidelines indicated that Martinsville needed 24 FTEs, not 31 or 33.25 as was indicated by the other standards. Still, Hanover County's staffing guidelines awarded three more FTEs than the division actually employed. However, what Martinsville's assistant superintendent meant in referring to "the way staffing is supplemented" is that the division also was paying about $82,000 per year for contract janitorial services. This amount was likely adequate to pay for sufficient services to offset the shortage of three FTEs indicated by the Hanover County guideline.*

One point to note about the Hanover County school division guideline for custodians is the feature it has for rounding the number of FTEs required at a school. One of the dilemmas that is faced in making custodial assignments (at a small school, for example) is that the square footage (and number of pupils) may be such that one custodian is too few, and yet two custodians are too many. One obvious solution to this situation is to hire a part-time custodian. Another option that some divisions have used or considered is to hire a floating custodial position that provides an extra bit of staffing support at two or more schools. For example, the Harrisonburg school division has used this type of position in the past, and indicates that it worked well for them.

Ensuring that each school has an adequate and appropriate number of custodial staff (not too few, not too many) is a challenge for many school divisions. Current methods for determining the number of custodians needed in each school vary. The Staunton City school division, for example, indicated that its current custodial staffing levels are based on the way the schools have been staffed in the past. Staff of the Harrisonburg City school division stated that custodial staffing levels are based on what the division can afford. The Loudoun County school division said they use 19,000 square feet per custodian. The Chesapeake City school division reported using square footage and number of bathrooms in each school, as well as some additional factors, in determining custodian staffing levels.

Custodial staffing guidelines need to be realistic in relation to the challenges that are presented by the building condition and the student population. It should not be anticipated that any formula can be equally appropriate in all situations. Data analysis for this study has suggested, for example, that actual staffing levels in urban school divisions and in divisions with high proportions of students on free and reduced lunch tend to have higher ratios of operation and maintenance staff per pupil. Whether this is due to a higher level of need, or a level of inefficiency in service provision, may need to be explored further.

However, central administrative staff at several divisions indicated during site visits that they face pressures from principals for additional custodial positions at their schools. And, most principals interviewed during site visits indicated that they would like to have more custodial staff in their schools, even in schools that appeared to have an adequate number of custodians based on square footage. It appears that fairly subjective decisions are sometimes made by administrative staff in

response to principal requests. In fact, staff of one school division made comments that suggested that their current use of a contract for custodial management services in part stems from their inability to deal firmly with principal requests for more staff.

The use of a staffing standard, and particularly one that takes into account pupil and/or teacher classroom counts as well as square footage, can provide guidance to division staff as to the general quantity of positions that might be expected at a school. Further, a number of standards that are available, including the Florida standard, the Hanover County standard, and the CASBO workload formula, are based on factors that are readily available to school divisions and are simple to calculate. The Florida standard appears to produce high estimates of staffing need relative to the Hanover County standard. Divisions with positions in excess of those calculated by each of the three standards should give serious consideration to the feasibility of reducing staffing levels.

Recommendation (8). **School divisions may wish to consider basing custodial staffing decisions on more factors than just square footage. It appears that at a minimum, the number of students should also be taken into account. In addition, other factors, such as the number of teachers, classrooms, bathrooms, or other salient features influencing custodial workloads in a division's schools, could also be taken into account.**

Recommendation (9). **School divisions with FTEs in excess of those calculated by the Florida, Hanover County, and CASBO workload formulas should give particular consideration to the feasibility of reducing custodial staffing to levels more in line with what the models suggest.**

Recommendation (10). **School divisions that have more than one school where additional custodial staff support appears needed, but not full FTEs, should consider the possibility of hiring a floating custodian position.**

Delivery of Services

In addition to the challenge of determining appropriate custodial staffing levels, Table 26 outlines some of the challenges in the operation and maintenance area. It also provides some examples of potential solutions to these challenges that are used in the State or are noted in the literature. The section takes selected challenges from the table and provides a discussion of some of the proposed responses to these challenges.

Challenge: Improving the Productivity of Custodians. Some divisions have looked for ways to increase the productivity of their custodial staffs, instead of increasing custodial staffing levels. The Loudoun County school division, for example, has implemented a pilot program to test the effectiveness of a team cleaning approach to cleaning schools. The more traditional approach to cleaning schools has

Table 26

Operation and Maintenance Services Challenges and Solutions

Challenges	Examples of Potential Solutions
Ensuring adequate and appropriate custodial staffing levels in schools	• Use staffing ratios or a formula to allocate custodial staff • Hire a contractor to manage custodial staffing levels and work performance, if activity is a recurring problem area • Hire one or more floating custodian position(s)
Improving the productivity of custodians	• Use a team cleaning approach • Provide custodians with adequate equipment (such as propane burnishers and automatic buffers) • Provide periodic training to custodial staff • Provide good oversight of work, particularly evening shifts, and hold staff accountable to quality control standards
Keeping utility costs manageable	• Provide energy management education to staff • Install automated energy management systems • Contract with an energy management company • Install energy efficient lighting and equipment • Negotiate energy prices • Install thermal pane windows
Monitoring and improving the productivity of maintenance staff	• Use automated work order systems to keep track of work orders, time spent on jobs, and other issues • Give school principals copies of monthly work order tracking report • Provide radios in maintenance trucks for better communication, and/or give qualified staff the authority to make more on-the-job decisions • In divisions where travel times are an issue, allow maintenance staff to take trucks home if they are responsible, and if this can decrease travel down time • Have flexible staffing, by recruiting or training staff such that they are able to cross over and handle various types of maintenance work, if needed
Handling employee turnover and problems recruiting quality staff	• Particularly for custodians, consider use of an employment service, with an understanding that employees who work well can be hired by the division after a set period of time
Prolonging the lifespan of school facilities	• Perform preventive maintenance on a regular basis • Set aside funds annually to renovate and maintain schools
Keeping up to date with the latest developments and evidence on most efficient and effective practices	• Increase the extent to which maintenance supervisors around the State interact and share ideas • Promote awareness and use of various web sites and publications addressing operation and maintenance issues
Making informed decisions using data on actual school building performance	• Maintain data by school building on energy costs per square foot, staffing levels, and other factors to enable accurate comparisons and promote informed decisions

Note: This table includes examples of solutions that are used by Virginia school divisions (from site visits or best practice submissions) or are noted in the literature.

Source: JLARC staff analysis.

each custodian on the afternoon/evening shift responsible for a specific area of the school. With team cleaning, a team of custodians moves throughout the school together, with each custodian responsible for a single function. For example, one custodian vacuums, one dusts, and one empties the trash. Loudoun has found that this approach enables the custodians to clean faster, and leaves from one to one and one-half hours at the end of the shift to do other types of custodial work, such as re-scrubbing and recoating the floors or working on the grounds.

Another way to increase the productivity of custodians is to provide them with efficient and modern equipment and adequate supplies. *Cleaning and Maintenance Management* magazine recently published a list of the ten greatest cleaning innovations, and two of them involved equipment. They singled out backpack vacuums and propane burnishers as two pieces of equipment that increased worker productivity. The backpack vacuum improves productivity by increasing a custodian's maneuverability, and propane burnishers are said to be up to six times faster than electric burnishers. They also improve floor appearance and require little maintenance. The Hanover County school division uses propane burnishers, which they say cut down burnishing time by more than half. They also use automatic scrubbers (instead of wet mops), which they said increases productivity significantly. The Loudoun County school division uses backpack vacuums.

Having inadequate or improper equipment can have a serious effect on a custodian's effectiveness. Custodians in one school reported that their scrub-buffer (a combination scrubber and buffer) is too large, and it does not fit in certain areas of the school. They also said that it is too noisy to use during the day when the students are in class. They felt they could be more efficient if they had a new buffer that had more power, but was smaller than the scrub-buffer.

Providing custodians with periodic training is another way to increase their productivity. *Cleaning and Maintenance Management* magazine lists training as one of the ten greatest cleaning innovations. According to the magazine:

> The days of walking in, picking up a mop and starting your first day at a new cleaning job are over....The growing focus on adequately training cleaning professionals has greatly advanced the cleaning industry and led to:
>
> - Increased productivity
> - Increased worker and building occupant safety
> - Advances in the public perception of cleaning professionals

Training topics can include the use of specific equipment, or how to mix chemicals. The Prince William County school division has a formal training program for new custodians that includes training on the use of cleaning chemicals and equipment, and cleaning procedures for specific areas of the school such as classrooms, bathrooms, and corridors. The division also provides refresher training and custodial manager training. In the Loudoun County school division, head custodians are sent to a two-day class on team cleaning that is provided by a vacuum manufacturer.

Challenge: Keeping Utility Costs Manageable. School divisions across the nation are finding that conserving energy and making up-front investments in energy management can result in substantial cost savings. Best practices for conserving energy include updating mechanical systems and controls, and modifying the behavior of students and school staff. Both of these practices are in use in Virginia school divisions. Updating mechanical systems and controls can include installation of automated energy management systems, which monitor building temperatures and can be controlled remotely, or installing energy efficient lighting and equipment. Behavior modification can include providing energy education to building staff and students.

The Prince William County school division has had an energy management program in place since 1994. Their program involves providing energy education and upgrading lighting and equipment, and it provides an incentive to schools by providing them with half of any annual savings that they achieve. Baseline energy usage is established for each utility at each location, and principals are promised one half of any annual savings as determined by subtracting current usage from the established baseline. (Energy usage is monitored with commercially available utility tracking software.) Principals are encouraged to appoint a building energy coordinator with whom Plant Operations energy management personnel interact.

In addition, energy conservation presentations are made to principals, faculty, custodians, and kitchen staff at each school. As lighting was determined to represent approximately one half of the division's electricity costs, it receives special emphasis in the presentations. Attention is also called to insulation of doors and windows, as well as the timely repair of faulty plumbing. Principals and building energy coordinators are encouraged to develop an understanding of heating and air conditioning controls, and further encouraged to monitor scheduled maintenance of that equipment. In addition to these conservation approaches, a division-wide lighting upgrade program (conversion to energy-saving T-8 fluorescent lamps and electronic ballasts) is ongoing. The division estimates that it has achieved over $3 million in savings to date, and over $1.5 million has been paid out to schools.

The Loudoun County school division has a contract with a private energy education company, which guarantees the division savings of 15 to 18 percent on its energy costs if students and staff follow certain energy-related rules, such as turning off lights when they leave a room. The division stated that their cost per square foot for energy was $1.10 per square foot in the early 1990s, and it is $.97 per square foot now, even with an increase in energy usage due to technology. Loudoun is also part of a consortium of schools to negotiate energy prices. The Portsmouth City school division has an energy management system in all of its schools, and they stated that the system has resulted in $5.6 million in utility cost savings.

The Staunton City school division installed an IceStor Thermal Energy Storage cooling system in two of its schools. This system allows the schools to shift all or part of their air conditioning requirements from “peak” to “off-peak” hours (for example, the division buys its electricity at night) by storing thermal energy in ice. The systems can be controlled from a computer in the maintenance department, and maintenance staff can monitor the temperature and other factors in each room. The

division said the system costs more initially, but they believe it will save them money in the long run.

Small divisions can also benefit from energy management improvements. The Mathews County school division has installed an automated energy management system in its schools. They indicated that they saved enough money in utilities to pay for new lights, and that the buildings are more comfortable now with the system. School administrators can operate the controls from home on a laptop. The division has also installed new thermal pane windows.

The Patrick County school division has made several modifications at its schools to reduce energy costs, including: adding R-21 insulation to the roof, replacing electrical strip heaters with heat pumps, replacing lights with electronic ballasts and T-8 lamps, installing motion switches in classrooms for lights, and installing 7-day programmable thermostats for each heat pump unit. The division indicated that they are saving approximately $100,000 per year in energy costs.

Recommendation (11). **To help keep utility costs manageable and to ensure comfortable temperatures in classrooms, school divisions should consider the use of various energy management systems and practices that are available.**

Challenge: Keeping Track of Maintenance Work Orders. A work order is documentation of a specific maintenance task that needs to be performed. Work orders can be initiated by school-based staff or by central office administrators. Most divisions use some type of work order system to document work requests, assign tasks to staff, confirm that work was done, and track the cost of parts and labor. Work order systems range from manual, paper-based systems to more sophisticated automated systems.

Virginia school divisions use a variety of systems to track work orders, some of which provide useful data that can be used to improve the productivity of maintenance staff. The Roanoke City school division, for example, uses a computerized work order system that tracks employee efficiency by type of job, by skill, and by the school at which jobs are performed. Division managers use the work order system to measure efficiency of the tradesmen by reviewing labor and materials costs and the length of time elapsed to complete a job. The Staunton City school division has a computerized work order system that is accessed through the internet. The Loudoun County school division has a maintenance management system and they are moving toward a web-based service for submitting work orders. The Chesapeake City school division has an automated work order system that gives principals a monthly work order tracking report. These automated systems help to ensure that staff are used in the most productive manner and that work orders are prioritized effectively. They also allow the maintenance department to provide customers with instant information on work order status.

Some of the smaller divisions visited, such as Harrisonburg and Dickenson, do not have automated systems. In Harrisonburg, staff fill out paper work orders to request maintenance work. In Dickenson, staff fax written work orders that are ap-

proved by the principals to the maintenance office. These types of manual systems make it more difficult to keep track of which work orders have been completed and which are still outstanding. These divisions also lack data allowing them to analyze the productivity of maintenance staff.

Challenge: Prolonging the Lifespan of School Facilities. JLARC's 2002 report entitled *Review of Elementary and Secondary School Funding* found that more than half of schools (53 percent) responding to a Commission on Educational Infrastructure were built before 1970, and 27 percent were built before 1960. Since many divisions cannot afford to build new schools, they often look for ways to prolong the life spans of their current facilities.

Staff of the Prince William County school division report that funds are set aside every year to renovate and maintain schools. The division allocates 3.5 percent of the replacement value of its buildings for renovation purposes, which equates to about $30 million a year. The money is used for projects such as renewing ceilings and floors, reorganizing space, and renovating kitchens. The division's goal is to renovate buildings every 20 to 25 years.

Another approach for prolonging the lifespan of older school buildings is to perform regular preventive maintenance. Staff of the Harrisonburg City school division think that the preventive maintenance that they do is very effective. Actions the division takes include annual roof inspections, and using a painting schedule.

Challenge: Keeping Up to Date With the Latest Developments in the Operation and Maintenance Area. There are substantial technical issues and some different schools of thought that are involved in the operation and maintenance field. On some issues, school division staff expressed divergent views as to whether or not particular approaches were or were not cost-effective. One school division indicated that using a multi-fuel boiler, and switching between gas and oil use depending on which is more economically priced at the time, was producing meaningful savings. Another division expressed reservations about this approach. As previously mentioned, one division reported the use of an ice chiller and thinks that this arrangement will work well for them. Another division expressed the view that ice chillers may have maintenance issues, and probably require a large maintenance staff. The latter division said that it prefers easy-to-maintain options.

While some issues come down to differences in local circumstances or preferences, for other issues there may be demonstrable evidence that one approach is more cost-effective than another. There appears to be a large amount of material available on school operation and maintenance issues. Resources to consult include the recently published *Planning Guide for Maintaining School Facilities* (School Facilities Management Task Force, February 2003), the "FacilitiesNet" web site, and www.asumag.com (American School and University annual maintenance cost study and other articles). Staff from the Danville City school division also indicated that www.schooldude.com was a useful web site. Maintenance supervisors should seek ways to keep abreast of the best technical information that is available.

In addition, some maintenance supervisors indicated to JLARC staff that there is less communication among maintenance staff statewide than there appears to be for some other support services. These supervisors indicated that additional communication about ideas that work well would be welcomed.

Planning Maintenance Work

The development and use of facility maintenance plans is a practice in the operations and maintenance category that was not cited by school divisions in either phase of this review as a best practice example. However, such plans appear to be commended by maintenance experts. For example, the development and use of such plans is a key element in the recently published document entitled *Planning Guide for Maintaining School Facilities*, developed by a task force that was national in scope.

Facility maintenance plans represent an attempt to systematically identify what needs to be maintained (information that comes from facility audits). The plans also set priorities as to the maintenance work that is needed, and identify a strategy for conducting the needed maintenance work.

The extent to which Virginia divisions have formal plans that are consistent with the type of plan envisioned by the maintenance task force is unclear. Based on contacts with several divisions, it seems likely that most divisions have processes that address some of these issues, but do not have a formal plan that is specifically directed to maintenance issues. Divisions contacted indicated, for example, that they try to achieve purposes similar to those described in the task force document through evaluating maintenance needs as part of the Capital Improvement Plan process, and through the use of maintenance schedules for activities such as roof and filter replacements. However, the Capital Improvement Plan process mostly focuses on replacement needs.

There are some concerns about the practicality of such plans in some school divisions. Unfortunately, this may be a case where some of the divisions that might benefit most from being able to follow such a plan are in a relatively poor position to implement it. For example, a maintenance supervisor interviewed for the study said that it would be nice to have and follow such a plan. However, if a division is in a situation where it has been "way understaffed," nice plans "go out the window" to keep up with emergency situations.

Still, divisions in these situations may need to pursue additional staffing to get out of a vicious cycle of reactive maintenance. The *Planning Guide* indicates that a benefit of facility maintenance plans is that it helps divisions to avoid making ad hoc decisions that are inadequately considered. Moreover, maintenance plans are seen as a useful vehicle to help ensure that a division gives adequate attention to preventive and predictive maintenance. The *Planning Guide* identifies a five-category spectrum of maintenance activity that ranges from a low to a high ranking of overall efficiency: (1) no maintenance, (2) emergency maintenance, (3) routine maintenance, (4) preventive maintenance, and (5) predictive maintenance. Among

the preferred maintenance approaches within this spectrum, preventive maintenance involves the servicing of items to prevent the need for emergency or "breakdown" maintenance. Predictive maintenance involves using data on the typical life spans of equipment to schedule maintenance in advance of "predictable" declines in item performance.

A recent journal article on facility maintenance best practices suggested that all maintenance should be covered by work orders, that 40 percent of work orders should be generated by preventive maintenance inspections, and 30 percent of work should be preventive maintenance. As previously indicated, during the site visits, some school divisions indicated that they give a priority to preventive maintenance activities. In addition, several divisions indicated that they use work order systems to help organize and track work order requests.

The development and use of facility maintenance plans, increasing the priority given to preventive maintenance, and the use of work order systems to track maintenance work all appear to be best practice ideas that may offer benefits to some school divisions in Virginia not currently employing these practices.

Recommendation (12). **School divisions should consider the development and use of a facility maintenance plan.**

Recommendation (13). **School divisions should ensure that preventive / predictive maintenance activities receive a high priority, and use a maintenance work order system that is adequate for efficiently organizing, tracking, documenting, and analyzing the work performed.**

V. Virginia School Division Practices for Pupil Transportation and School Food Services

Pupil transportation and school food are two services that in most divisions are provided for shorter periods of time than the full school day, and serve a subset of students. In Virginia, about 78 percent of the pupils in fall membership are transported by the division's transportation system on a daily basis, but 22 percent are not. Most students are transported by buses, but other arrangements are sometimes used, most frequently involving the use of passenger vehicles to transport special education students. Special education transportation has a substantial cost impact. For example, DOE data for 2001-02 indicates that the average per-pupil transportation cost for students on regular buses was $212 per student transported. In comparison, the average cost for the transport of students on exclusive schedule buses used by special education students was more than ten times as much, at $2,742 per student. However, 886,835 pupils were transported that year on regular buses, compared to only 30,876 pupils transported on exclusive schedule buses.

Safety is a predominant concern for pupil transportation services. Transportation by school bus is considered to be a safe way to get children to school. (According to the School Bus Information Council, there are approximately 0.94 deaths per 100,000 passenger miles in passenger cars, while there are about 0.01 deaths per 100,000 passenger miles on school buses.) However, tragedies do occur. According to *School Transportation News*, an average of 11 pupils each year are fatally injured inside school buses. With regard to school bus loading and unloading zone fatalities, the last year of annual survey data indicates that relative to previous years, the number of these reported fatalities was at a low level (Table 27).

Table 27

Fatalities Nationally in Bus Loading and Unloading Zones

	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001
Fatalities	20	22	32	20	25	19	10	18	22	9

Source: Annual survey performed by the Kansas State Department of Education's School Bus Safety Education Unit, as reported in *School Bus Fleet* magazine.

The number of bus drivers needed to transport pupils, and the costs for pupil transportation, are heavily impacted by the land area that is served by the school division. One of the means that urban and suburban school divisions can use to keep per-pupil costs low is to stagger arrival schedules, so that the same bus can be used to make several runs to pick up students. In rural divisions where the bus routes are lengthy, this may not be feasible. In addition, in urban and suburban areas, it is often feasible to pick up multiple children at a single stop. In many rural

areas, houses are either so spread out, or located along the side of roadways with no sidewalks, such that door-to-door service for most children is common.

Table 28 shows a comparison of Virginia with the national average and with other states in the southern region with regard to pupil transportation costs. Relative to the number of pupils in fall membership, Virginia's pupil transportation costs per pupil, as indicated in the table, are high relative to the national average and most states in the southern region. However, Virginia transports a higher proportion of its pupils than most states, and also travels more bus miles. Relative to the number of pupils actually transported and the bus miles driven, Virginia's average per-pupil costs are below the national and southern region averages.

Table 28

Virginia's Pupil Transportation Costs Compared to Other Southern Region States and National Average (FY 2000 data)

Per-Pupil Cost, Across Total Number of Pupils		Per-Pupil Cost, Across Number of Pupils Transported Only		Total Cost Per Bus Route Mile	
$ 461	West Virginia	$ 616	South Carolina	$ 6.40	Louisiana
$ 451	Delaware	$ 611	Florida	$ 3.28	Tennessee
$ 373	Maryland	$ 608	West Virginia	$ 3.16	West Virginia
$ 306	**VIRGINIA**	***$ 534***	***U.S. Average***	***$ 3.08***	***U.S. Average***
$ 298	Louisiana	$ 523	Delaware	$ 2.80	Alabama
$ 294	Kentucky	$ 523	Maryland	$ 2.78	Maryland
$ 285	***U.S. Average***	$ 487	Texas	$ 2.57	South Carolina
$ 262	South Carolina	$ 449	Louisiana	$ 2.49	Delaware
$ 249	Florida	$ 444	Alabama	***$ 2.36***	***SREB Average***
$ 240	Georgia	$ 439	Kentucky	$ 2.33	Georgia
$ 237	***SREB Average***	***$ 439***	***SREB Average***	$ 2.21	Florida
$ 237	Alabama	$ 396	North Carolina	$ 2.20	Arkansas
$ 216	North Carolina	**$ 391**	**VIRGINIA**	$ 2.17	Texas
$ 213	Arkansas	$ 367	Tennessee	$ 2.16	Oklahoma
$ 204	Mississippi	$ 348	Oklahoma	**$ 2.10**	**VIRGINIA**
$ 185	Oklahoma	$ 316	Georgia	$ 1.92	Mississippi
$ 183	Tennessee	$ 306	Arkansas	$ 1.88	Kentucky
$ 167	Texas	$ 250	Mississippi	$ 1.86	North Carolina

Source: JLARC staff analysis of data from: the U.S. Census Bureau's *Public Elementary-Secondary Education Finances: 1999-2000*; *School Bus Fleet* magazine, statistics from the table "School Transportation: 1999-2000 School Year"; and the National Center for Education Statistics, *Digest of Education Statistics, 2002*.

With regard to school food services, all school divisions in Virginia operate school food programs, which consist of breakfast, lunch, and/or afterschool snack programs. In 2001-02, school food services in Virginia served a reported 30,194,873 breakfasts to an average of 178,363 students per day. Also, 113,589,367 lunches under the National School Lunch Program (NSLP) were served to an average of 678,369 students per day. According to the Annual School Report, food service expenditures in 2001-02 were about $334,397,000. Little of these costs are borne by local and State government, however. Most of the costs are paid for by federal funding and receipts from the students that are charged for their lunches.

Table 29 shows a comparison of Virginia's costs with the national average and other states for school food services. Whether measured on a cost per pupil in

Table 29

Virginia's School Food Costs Compared to Other Southern Region States and National Average (FY 2000 data)

Per-Pupil Cost, Across Total Number of Pupils		Cost Per NSLP Lunch Served *		Cost Per NSLP Meal Served **	
$ 422	West Virginia	$ 3.82	West Virginia	$ 3.33	Delaware
$ 389	Delaware	$ 3.74	Delaware	$ 3.15	West Virginia
$ 382	Louisiana	$ 3.14	Alabama	$ 2.75	Alabama
$ 377	Alabama	$ 3.12	Texas	$ 2.70	Maryland
$ 344	Georgia	$ 3.09	Oklahoma	$ 2.65	North Carolina
$ 339	North Carolina	$ 3.09	North Carolina	$ 2.62	Texas
$ 330	Kentucky	$ 3.05	Maryland	$ 2.61	Florida
$ 324	Mississippi	$ 3.03	Florida	$ 2.59	Oklahoma
$ 322	South Carolina	***$ 2.91***	***SREB Average***	***$ 2.48***	***SREB Average***
$ 317	Texas	***$ 2.82***	***U.S. Average***	***$ 2.47***	***U.S. Average***
$ 313	***SREB Average***	$ 2.76	Louisiana	**$ 2.34**	**VIRGINIA**
$ 297	Arkansas	$ 2.71	Georgia	$ 2.32	Louisiana
$ 295	Oklahoma	$ 2.69	South Carolina	$ 2.30	Georgia
$ 289	Florida	**$ 2.64**	**VIRGINIA**	$ 2.28	South Carolina
$ 276	***U.S. Average***	$ 2.62	Arkansas	$ 2.20	Kentucky
$ 270	Tennessee	$ 2.60	Kentucky	$ 2.18	Arkansas
$ 257	**VIRGINIA**	$ 2.45	Tennessee	$ 2.12	Tennessee
$ 232	Maryland	$ 2.43	Mississippi	$ 2.00	Mississippi

*NSLP is the National School Lunch Program.

**Each breakfast served was counted as half a meal in calculating this statistic. Thus, costs are standardized by the number of "meals," which is equal to the sum of the number of lunches served plus half of the breakfasts served.

Source: JLARC staff analysis of: food service expenditure data for 1999-2000 from the *Digest of Education Statistics, 2002*, a document of the National Center for Education Statistics; fall membership data from *Public Education Finances, 2001*, U.S. Census Bureau, issued March 2003; and the U.S.D.A Food and Nutrition Service, statistics on breakfasts and lunches served by state.

fall membership, per-lunch served, or per-meal served basis, Virginia's costs are below the national and southern region averages. The figure for costs per meal served is probably the best among these indicators for comparing the magnitude of Virginia's costs relative to the services that are provided.

This chapter discusses staffing practices and service delivery practices for pupil transportation and school food services in Virginia. There are some policy choices that local communities can make that have an impact upon the size of the costs for these services.

PUPIL TRANSPORTATION SERVICES

Pupil transportation services involve transporting students to and from school, field trips, and extracurricular activities safely and in a timely manner. There are two major components of pupil transportation services:

- **school bus operations**, which involves all activities related to transporting students, such as hiring and training drivers, purchasing buses, determining which students are eligible for transportation, designing bus routes, and picking up, transporting, and dropping off students.
- **school bus maintenance**, which includes repairing buses and conducting periodic inspections.

Each of these components is discussed below.

Overview of School Bus Operations

All school divisions in Virginia provide some form of transportation to public school students. Most of the school divisions in Virginia choose to provide transportation to students themselves. There are some exceptions, however. For example, in the City of Harrisonburg, students are transported to and from school by the city's transit system. The school division pays the city for this service, although they indicated that the city does not appear to charge them the full cost of providing the service. The city of Hampton also transports its mainstream middle and high school students via the local city transit system. They indicated that this arrangement has been in place a number of years and has proven to be cost effective for the division. It does not appear that any school divisions in the State have privatized their entire school bus operation, although some have contracted out specific services, such as bus maintenance (discussed below).

The level of transportation service provided varies among the school divisions, which can affect a division's transportation costs. School divisions have different policies regarding which students are eligible for transportation, and how far eligible students must walk to catch the bus. In some divisions (King and Queen and Dickenson, for example), all students are eligible for transportation services no matter how close they live to their school. This appears to be the case in many rural

school divisions. In other divisions, students must live a certain distance from their school to be eligible for transportation. In Portsmouth, for example, the division provides transportation to elementary school students who live ½ or more miles from school, and middle and high school students who live 1½ miles from school.

Differences in the level of transportation service provided are also seen in the policies regarding how far students who are eligible for transportation are required to walk to catch the bus. Some divisions provide door-to-door service for students and some require students to walk to bus stops, which is a higher level of service and therefore more expensive than picking children up at bus stops. However, in some parts of the State, student homes are sufficiently scattered that the use of bus stops may not be very practical. Further, several of the rural divisions indicated that this level of service is necessary for safety reasons because there are no sidewalks for the students to use. The Loudoun County school division picks up its suburban students at bus stops on corners, but provides door-to-door service to students in rural areas where there are no sidewalks. Most divisions visited indicated that they provide door-to-door service for special education students.

Several divisions have sought to make better use of their buses (and thereby reduce costs) by staggering the operating hours of their schools. For example, they may have the elementary schools open before the middle and high schools, so that a bus can pick up and drop off elementary school students, and then make a second run and pick up the secondary school students. The Loudoun County school division has a three-tier schedule (elementary schools start first, then middle, then high schools), so they get three loads out of every bus. Virginia Beach operates schools on four staggered operating hours, so most school buses are used for four school assignments. They indicated that staggering the operating hours of schools greatly increases the efficiency of the school bus fleet. Salem City has a three-tiered schedule, but indicated that this is problematic because the middle schools start very late. Several other divisions also use staggered schedules.

The Mathews County school division does not have staggered schedules. All students ride the same bus, regardless of grade, although students are segregated on the bus by grade. Mathews would like to implement staggered schedules (elementary school would start an hour later), because they could save money by eliminating buses, but many parents do not like the idea because of day care and babysitting issues. High school students often babysit for their younger siblings before or after school, and having elementary and secondary students on different schedules would leave some children without babysitters. Dickenson County school division staff said that the division transports all ages at the same time because of the long travel times.

Transporting special education students can be a major expenditure for school divisions. Most divisions have a separate fleet of smaller buses to transport these students, although some divisions, such as Chesapeake, use full size buses for special education students. These smaller buses are equipped to handle wheelchairs and other special equipment that these students may need. Another expense associated with special education transportation is the use of attendants or aides on buses, which some divisions chose to use even though it is not required in Virginia.

Although most divisions have a separate bus fleet for special education students, some do not. The Virginia Beach City school division uses both the regular education school bus fleet and the special needs fleet to provide service to all students. Some divisions use cars or taxis to transport special needs students. In some cases, cars or taxis are used if students need to be transported to a school outside the division. In other cases, cars or taxis are used if the student's individualized education plan requires a controlled air environment. The Fairfax County school division, however, has begun equipping buses with dual-unit air conditioning units, which they say allows them to transport students who require a controlled air environment on buses rather than in cars or taxis.

Outsourcing school bus operations is not a common practice in Virginia. The Virginia Beach school division outsources the fueling for school buses, and the division feels this has been very beneficial because they were able to eliminate underground storage tanks and the liability associated with the possibility of leakage. By privatizing the fueling operation, the division stated that it placed this function in the hands of fueling professionals, provided its drivers with convenient fueling sites, and saved taxpayer dollars.

Overview of School Bus Maintenance

School bus maintenance is an important aspect of the pupil transportation operation. In addition to repairing buses, divisions are responsible for inspecting buses. The State requires divisions to inspect buses "at least once every 30 operating days or every 2,500 miles traveled, whichever occurs first" (8 VAC 20-70-130), and to conduct yearly state inspections. Divisions are also required to perform a more in-depth inspection every 180 days.

There is a great deal of variation in the arrangements used by divisions for bus maintenance. Some divisions handle maintenance in house with school division staff, some have arrangements with the local government, and some have private contract arrangements. In almost all of these arrangements, major maintenance work, such as transmission repair and major body work, is contracted out.

In Staunton, the city government inspects and repairs the school division's buses. The division pays the city for the services of one mechanic, and it also pays for parts. In Salem, the city handles all bus maintenance for the school division, and charges the division for maintenance services. In Loudoun, the school division operates a maintenance facility for both school division and county vehicles, and the county government pays the division to maintain its vehicles.

The Portsmouth City school division has privatized the maintenance of buses and other vehicles. A contractor works on site in the city bus garage, and performs all bus maintenance and inspections. Maintenance employees work for the contractor, and the contractor pays for all parts. The Richmond City school division has also privatized the maintenance function. School division staff indicated that the quality of maintenance has improved, and the vehicles have less down time.

Most divisions contract out major or specialized maintenance work, such as major engine and transmission repairs. Loudoun County school division staff estimate that 31 percent of their work is contracted out. Hampton City contracts out "big ticket" maintenance items such as transmissions and engine replacements in an effort to avoid tying up mechanics' time. They indicated that this allows preventive maintenance on division vehicles to be done thoroughly, effectively, and efficiently.

Some divisions have taken advantage of technology in the bus maintenance area. The Pittsylvania County school division, for example, has computer software to maintain its parts inventory and assist in tracking work orders.

Pupil Transportation Staffing

There were 15,791 FTE staff engaged in providing pupil transportation services during 2001-02, according to Annual School Report data. About 87 percent of the staff were reported as "operative" staff (bus drivers), and about 3 percent of staff were reported as "trades" staff (typically, garage mechanics who inspect and repair buses). In addition, about 2 percent of the FTEs were reported as "service" staff (typically, bus aides).

The data in the lower half of Table 30 illustrates the impact of the land area served by the school division upon the staffing levels of school divisions. This can be seen, for example, by comparing the median staffing levels per 1,000 pupils for urban as compared to suburban divisions, and by comparing the median staffing levels for rural cities and towns as compared to rural counties.

Table 30

Pupil Transportation Staffing

Total FTEs Statewide

Position Category	ASR Object Code	Statewide FTEs	FTEs Per 1,000 Pupils
Administrative/Other Professional	1110, 1130	258	0.23
Clerical Staff	1150	258	0.23
Operative Staff	1170	13,804	12.06
Technical, Trades, and Service Staff	1140, 1160, 1190	1,471	1.29
Overall		**15,791**	**13.81**

Spread in Total FTEs (Per 1,000 Pupils)

Locality Category	Median	25th Percentile	75th Percentile
Urban	10.39	8.15	11.23
Suburban	17.18	12.95	20.35
Rural cities, towns	8.48	5.75	15.83
Rural counties	22.30	18.06	25.76
Overall	17.64	11.23	23.03

Source: JLARC staff analysis of DOE Annual School Report data.

In some instances, school divisions with similar characteristics have very different FTE staffing patterns, due to policy choices. For example, as part of the site visit process, JLARC staff visited the Brunswick and Greensville school divisions, two rural Southside localities. Brunswick had a ratio of FTEs to pupils that was more than double that of Greensville. Staff at Greensville explained that their division is the only division in the southside region that does double bus runs. They indicate that they have been doing double runs for about 13 years, so the community is used to it, and it does save costs because the division needs about half as many buses and drivers. However, there are some disadvantages to the policy. The staggered schedules that are used means that some children in the division are picked up as early as 6:15 or 6:30 in the morning. High school starts at 7:25, which is considered a less than ideal time from an instructional standpoint, as it is earlier than what studies indicate is most productive for students of that age group.

Delivery of Pupil Transportation Services

Table 31 outlines some of the challenges in the pupil transportation area and provides examples of solutions that are utilized by some divisions in the State. The table also provides other potential solutions, which may be solutions that were suggested by divisions during the site visit process or solutions that are used by school divisions in other states. The remainder of this section discusses these challenges and the potential practices used to address them.

Challenge: Reviewing the Route System for Bus Runs to See if Additional Improvements Can Be Made. Two of the school divisions that were visited during the study were seeking an outside review or assistance to address, at least in part, whether any improvements could be made in their bus routes and schedules. The Hanover County school division, for example, recently contracted with a consulting service to conduct a study of its school bus transportation system, including consideration of the division's bus routes and schedules. The Brunswick school division indicated that it is working with a transportation supervisor who is retired from another school division to examine the efficiency and effectiveness of its bus routes. These divisions felt that their routes were close to being about as efficient as they could be, but nonetheless were interested in obtaining any feedback that might lead to improvements.

Some school divisions visited during the review indicated that they had automated routing systems to help plan bus routes, while others did not. Divisions with the systems generally seemed to think that the systems were helpful, but noted that a lot of information needed to be obtained and inputted to make the systems useful. Some divisions without the systems did not think that the systems would be useful to them.

Challenge: Hiring an Adequate Number of Bus Drivers. Several school divisions mentioned that their inability to hire bus drivers is one of the big-

Table 31

Pupil Transportation Challenges and Solutions

Pupil Transportation Services Challenges	Examples of Potential Solutions
Planning the most efficient route system for bus runs	• Seek outside expertise, particularly if routing expertise and a useful automated routing system is lacking.
Hiring an adequate number of bus drivers	• Increase salaries for drivers • Provide health benefits to drivers • Give bonuses to division staff who help recruit drivers • Provide a tax-sheltered annuity for drivers who are not eligible for VRS • Increase awareness in the community about the need for drivers • Recruit off-duty police officers and firemen • Encourage bus aides to get CDLs (providing more options to fill positions internally)
Providing transportation for Head Start students in light of new federal requirements	• Install convertible bus seats • Install harnesses on buses (buses must be seat-belt ready; if not, buses must be retrofitted)
Replacing buses in a cost-effective manner	• Replace buses on a 12-year replacement schedule, as recommended by the State • Potentially increase the replacement cycle timeframe by considering other factors in addition to the age of the bus (such as mileage, wear and tear, and cost of maintenance) when deciding when to replace buses* • Set aside funds for bus replacement.
Keeping drivers up-to-date on passenger safety and health issues	• Provide periodic safety training to drivers • Train drivers in glucagon administration and the use of EpiPens • Larger divisions should allow smaller divisions to participate in their driver training programs
Achieving economies of scale in bus maintenance and fueling	• Utilize the local government's bus maintenance facility • Utilize the local government's fueling station • Purchase parts through a parts consortium
Finding parts for older model buses	• Request DOE to facilitate a bus parts exchange program

Note: This table includes examples of solutions reported by Virginia school divisions (from site visits or best practice submissions), unless otherwise noted.
*This potential solution has been recommended in other states.

Source: JLARC staff analysis.

gest problems in the support services area. Potential reasons for this difficulty in recruiting drivers are the fact that drivers typically only work a 180-day schedule, and they have to work a split shift every day (in the morning and afternoon). While this type of schedule may be appealing to some, it can cause difficulties for men or women for whom this is their main source of income. Low salaries may also contribute to the problem.

The impact of not having enough drivers and substitute drivers can be significant. It can mean that students do not arrive at school on time, which can affect their education, or that buses are driven by staff whose primary job is not driving buses, which could be a safety issue. The Portsmouth City school division, for example, indicated that they usually have about 15 drivers absent on any given day, but they have only five substitute drivers to cover the absent drivers' routes. Therefore, other drivers have to double up to cover these routes. They indicated that there are buses that are late almost every day because of bus driver absenteeism. The Roanoke City school division indicated that they have two maintenance workers who have Commercial Drivers Licenses (CDLs) who often drive buses.

Divisions have used several practices to help recruit drivers. They have raised driver salaries, and many provide health benefits to drivers, even though in many divisions these staff are considered part-time staff. The Loudoun County school division raised the salaries for drivers and they indicated that they have not had a problem filling vacancies since that time. The Prince William County school division has raised salaries and offered health benefits to drivers, but staff indicated that up to the point in time of the interview, this has not helped them with their recruiting efforts. The Roanoke City school division has also raised driver salaries. In the Brunswick County school division, bus drivers cannot participate in the Virginia Retirement System, so the division gives drivers a tax-sheltered annuity of $300 per year in lieu of participation in VRS, which they indicated has helped with recruitment.

Other divisions have found other innovative practices to recruit drivers. For example, Loudoun and Fairfax have implemented bonus programs to recruit drivers. In Fairfax, school division employees who recommend someone for a bus driver position receive a $1,000 bonus when a recruited driver has worked 90 days. In Loudoun, school division employees who recommend someone for a bus driver position receive $500 if the employee that they recommend stays with the division for six months (employees also receive bonuses for referring cafeteria workers).

Several school divisions have implemented programs aimed at increasing their pool of bus driver applicants. For example, Virginia Beach has an ongoing driver recruitment program that involves different methods of publicizing the need for bus drivers such as radio and television, newspapers, and fliers.

The Salem City school division indicated that they have had some success using off-duty police officers and firemen as bus drivers. They indicated that the police officers and firemen like the supplemental pay, and they make excellent bus drivers.

Challenge: Providing Transportation for Head Start Students in Light of New Federal Requirements. Several divisions indicated that new federal requirements for the transportation of Head Start students will increase their transportation costs. Table 32 summarizes the new requirements and shows the date by which the new requirements must be implemented.

The requirement that seems to be causing the most concern among school divisions visited is the use of restraints. Several of the divisions visited by JLARC staff indicated that it will be expensive to equip buses with these restraints, and that the expense could potentially prohibit them from transporting Head Start students. One division indicated that the new mandate in effect requires them to have a separate fleet of buses to transport Head Start students.

Table 32

Head Start Changes

New Requirement	Date by Which New Requirements Must Be Implemented
At least one monitor must be assigned to every vehicle that transports one or more Head Start passengers	January 20, 2004
Every vehicle must be equipped with appropriate passenger restraints for adults and Head Start passengers	January 20, 2004
Vans, public transit buses and other non-school buses must be replaced by school buses or "allowable alternate vehicles" (AAVs). (AAVs are school buses in every respect except they do not include alternately flashing lights and stop arms to control traffic and they are painted colors other than school bus yellow and black.)	January 18, 2006

Source: "New Deadlines Loom for Head Start Agencies," by George Horne, Schoolbusfleet.com

The Loudoun County school division appears to have found a workable solution to this issue that may be beneficial to other divisions. They have purchased and installed convertible seats in some of their buses (only a couple of seats in each bus have these convertible seats). These seats can flip up or down and are equipped with restraints. In the "down" position, the seats and restraints can be used as car seats or booster seats for younger children, and when they are folded back up in the seat, the seat can be used for other passengers. This way, the division does not need a separate fleet for Head Start passengers.

The Hanover County school division has five buses that are solely designated for Head Start students, and all of the buses were purchased with harnesses. Each Head Start student is fitted for a vest that clips into the harness. The division indicated that buses must be seat-belt ready to use the harnesses; otherwise the buses would need to be retrofitted.

Challenge: Replacing Buses in a Cost-Effective Manner. School bus replacement can be a big expense for school divisions. In FY 2002, ASR data shows that expenditures for bus purchases (regular and lease purchases) ranged from 0 percent to 34 percent of the divisions' pupil transportation budgets. Sixty-four divisions did not have expenditures for school bus purchases in FY 2002. (However, it should be noted that some divisions may have these expenditures recorded as debt service.)

DOE recommends that the divisions replace their buses every 12 years, but it is not a requirement. Most of the divisions visited said that they try to adhere to a 12-year replacement cycle, but some indicated that they are not able to keep up with this replacement cycle. The Chesapeake City school division, for example, replaces buses every 15 years, which they say increases the cost of maintenance and prevents them from taking advantage of new safety features.

Some divisions have a shorter replacement cycle. The Mathews County school division, for example, purchases its diesel buses on a 10-year cycle. Since Mathews is a fairly small school division in terms of land area, many of the buses have less than 100,000 miles on them when they are replaced. These buses may be able to last much longer, and replacing them on a 12-year or longer cycle could potentially save the division money. They indicated that they replace buses every 10 years because the new buses have better safety features, such as escape hatches and push-out windows.

Several divisions indicated that certain types of buses may have longer life spans than others. For example, some divisions indicated that the diesel engines can have a lifespan of 15 years or longer and can run for 200,000 or more miles, so replacing these buses every 12 years may not be necessary. (However, one division noted that even through diesel engines can last much longer than 12 years, the body of the bus is usually worn out after 12 years.) Some divisions are purchasing buses that they say can last as long as 15 years. The Loudoun County school division, for example, is trying to buy Type D transit-style buses, which they say cost more money, but can last three to four years longer than a typical bus. Based on the average miles driven per year by buses in Virginia's school divisions, there are 19 divisions for which a 12-year bus replacement schedule would have their school buses retired after less than 70,000 miles driven, and 58 divisions where a 12-year bus replacement schedule would have the buses retired after less than 100,000 miles.

A study of the Fort Worth Independent School District in Texas recommended that "the buses to be replaced each year should be determined based on years of service, total miles operated, and the cost of maintenance. Some buses may be retired in 10 or 12 years, while other buses may be kept in active service up to 18 years." A potential problem with keeping buses in service past 12 years is that newer buses tend to have more safety features.

***Recommendation* (14). In addition to the age of the bus, DOE and the school divisions should consider other factors such as mileage, wear and tear, cost of maintenance, and the presence or absence of significant safety features when replacing buses.**

Challenge: Keeping Drivers Up-to-Date on Safety and Health Issues. It is important that school bus drivers be well-trained in how to handle a school bus and drive it safely. Accident data for Virginia school buses indicate that there were 411 accidents involving school buses in 2002-03 that entailed an injury or damage of greater than $1,000, and in 183 of these accidents, the bus driver was reported as being at fault (see Table 33). The data in the table reflect the data for all divisions in which at least one accident was reported. DOE staff are still reviewing the information to determine if 62 divisions which have no cases reported are actually free of bus accidents that year, or whether there are data that has not been reported. The fact that the bus drivers were rated as being at fault in about four of nine reported accidents indicates that there is probably room for improvement in bus driver safety performance.

Table 33

Virginia Bus Accident Data, 2002-2003

	Divisions with at Least One Accident Reported*			
Note: Numbers in parentheses are the number of divisions in the group reporting one or more accidents.	Number of Accidents	Accidents with Bus Driver at Fault	Accidents as a Percentage of the Total Active Fleet**	Miles Traveled per Accident
Urban (14)	83	44	5.4%	164,919
Suburban (28)	262	112	4.2%	249,892
Rural City or Town (4)	5	3	8.6%	115,136
Rural County (22)	61	24	3.6%	264,672
Total (68)	411	183	4.3%	233,286

*This table only includes accidents that resulted in damage greater than $1,000 and/or involved an injury.
**FY 2003 data on number of active buses by division not yet available, so FY 2002 data was used.
Source: JLARC staff analysis of data provided by the DOE transportation unit.

Driver training is considered a critical aspect of pupil transportation. The Virginia Administrative Code requires that new drivers complete a minimum of 20 hours of classroom training and 20 hours of behind-the-wheel training. The State also requires school divisions to provide drivers with at least two hours of in-service training before the opening of schools and at least two hours during the second half of the school year "devoted to improving the skills, attitudes and knowledge of the drivers."

Several school divisions have training programs that go above and beyond the State requirements. For example:

- The Loudoun County school division trains its bus drivers in glucagon and EpiPen administration so that these medications can be administered immediately if a student has a medical emergency on a bus.

- The Fairfax County school division has a driver training center that employs 12 full-time employees who train new and veteran drivers in the division. Drivers are paid for 140 hours of training. Training focuses on driving skills, pupil management skills, first aid and CPR, special needs requirements, and basic bus maintenance, and provides driving and pre-trip experience on each model of bus in the fleet. Fairfax's transportation department also conducts a Transportation Academy in July and August each year, in which 20 drivers and bus driver supervisors participate in a 5-week, 150-hour program that introduces them to supervisory and management skills required by first-line supervisors.

- The York County school division operates a Transportation Academy, where in-service training is provided to school bus drivers twice per school year (August and January). All transportation employees are required to attend the academy, including drivers, assistants, crossing guards, and all substitutes.

- The Virginia Beach City school division employs a full-time safety and training supervisor to oversee the division's driver training efforts. The division provides the required 40 hours of classroom and behind-the-wheel training, and provides additional training to drivers who are convicted of a moving violation.

Smaller school divisions, however, may not be able to afford these types of training programs. Therefore, larger division should consider letting drivers from smaller divisions participate in their training programs.

Recommendation (15). **Large school divisions with comprehensive driver training programs should consider opening their classes to drivers from smaller, neighboring divisions (for free or for a fee).**

Challenge: Achieving Economies of Scale in Bus Maintenance and Fueling. Bus maintenance and fueling can be expensive operations for small school divisions because each of these activities requires specialized facilities and equipment. Several divisions – including Martinsville, Staunton, Salem, Hanover, Brunswick, and Danville – have attempted to achieve economies of scale by performing these functions in conjunction with the city government. The city of Staunton, for example, provides maintenance for the school division's buses, and allows access to its fueling station. The division pays for one mechanic to service its buses in the city garage and also pays for all parts. The division has been very pleased with the city garage's turnaround time. The division feels that it would be very expensive to have its own bus garage. The buses also get their fuel from the city's fueling station. The city bills the division for fuel on a monthly basis. The division feels that it pays good rates for fuel because the city is able to purchase fuel in bulk.

In Salem, the city handles all bus maintenance for the school division, and charges the division for maintenance services. The division feels that they avoid a lot of overhead this way. They indicated that there have been times when priorities have been an issue, but the school division usually has had priority in emergency

situations. In Brunswick County, the responsibilities are reversed. The school division performs maintenance on all county vehicles, and the county reimburses the division for this work.

In Hanover County, the county took over maintenance of the school division's bus fleet on April 1, 2001. The division indicated that the service they receive from the county is good. However, they feel that the arrangement may be more expensive because the county has a 20 percent markup on parts to help offset the cost of mechanics and its new maintenance facility.

The Hampton City school division has also tried to achieve economies of scale in the transportation area by purchasing bus parts through a parts consortium. They feel that this allows the division to receive the lowest prices for parts, thus reducing their in-house inventory needs.

Challenge: Finding Parts for Older Model Buses. As discussed earlier, some divisions are operating buses that are more than 12 years old, and some indicated that they often have difficulty finding parts for these buses. The Staunton City school division, for example, has some buses that were purchased in 1987, and mechanics indicated that it is getting more difficult to find parts for them because the manufacturer stopped making the engines that are in those buses in 1988.

A potential solution for this problem is for the State Department of Education to facilitate a bus parts exchange program. DOE could set up a web site and divisions could post requests for specific parts, and let other divisions know if they have needed parts.

Recommendation (16). **DOE should facilitate a bus parts exchange program, where information is made available over the internet.**

Tracking / Efficiency Measures for Pupil Transportation

There are several measures that school divisions can use to track their transportation operations over time and assess changes in the efficiency levels of the system. Examples of such measures include: (1) the load factor, (2) “deadhead” miles, and (3) costs per mile. The load factor divides the total pupils transported by the number of operational buses in the fleet. “Deadhead miles” is a measure of the percentage of bus miles that are driven with no riders. The cost per mile is a standard of the industry for measuring efficiency. These measures are common management tools for pupil transportation, and DOE staff indicate that many divisions in Virginia track these measures.

While these measures appear to be useful tools for helping to track and manage pupil transportation operations within a division, there are some issues involved with regard to comparing the results on these measures across school divisions to assess the relative “efficiency” of divisions. There are numerous factors that are generally outside of the pupil transportation system’s control that can impact

costs. The geographic land area covered by the school division, the miles of land area per school, and the population density of the community are factors that can determine whether actions such as double or triple bus runs can be reasonably undertaken, and hence lead to major differences in the load factor and costs. Other locality features, such as the location of the schools within the locality and the length-to-width ratio of the locality, can have an impact (the length-to-width ratio of the locality appears to be a factor in high per-pupil costs for transportation in King and Queen County). In addition, the results for these tracking measures can be affected by a number of deliberate local policy choices, such as the extent of program offerings for which special bus runs are necessary, walk-zone policies, the extent to which bus aides are used, and the pupil transportation personnel compensation levels that are considered necessary or appropriate to meet the needs of the school division.

SCHOOL FOOD SERVICES

All school divisions in the State operate school food programs, which consist of breakfast, lunch, and/or afterschool snack programs. According to the Department of Education, 619,000 school lunches and 162,000 school breakfasts are served every day to Virginia students (112 million lunches, 30 million breakfasts annually). Schools can also offer a la carte food items to students and staff.

All divisions participate in the National School Lunch Program, although some divisions do not have the program in all schools (Hanover, for example, does not operate the program in its high schools). Many divisions also participate in the national breakfast and afterschool snack programs. These programs reimburse school divisions for each meal served, if it meets federal requirements. The U.S. Department of Agriculture (USDA) administers the program at the federal level, and DOE administers the program at the State level through agreements with local school divisions. Table 34 summarizes the federal school food programs.

Most of the support that the USDA provides to schools in the National School Lunch and School Breakfast Programs comes in the form of a cash reimbursement for each meal served (see Table 34). In addition to cash reimbursements, schools are entitled by law to receive commodity foods, called "entitlement" foods, at a value of 15.25 cents for each meal served. Schools can also get "bonus" commodities as they are available from surplus agricultural stocks. These bonus commodities are usually free to the division, except for shipping charges.

Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, for which students can be charged no more than 40 cents.

The school food program is different than most other support services programs because the program typically is not funded with division operating funds. Food programs are funded by revenues from the sale of meals, federal government reimbursements for free and reduced-price meals, and some state funds. In theory, each division's fund should be self -supporting – that is, the revenue generated by

Table 34

Description of Major Federal School Food Programs

Program Description	Federal Reimbursement Rate*
National School Lunch Program: a federally assisted meal program, which provides nutritionally balanced, low-cost or free lunches to school-aged children. School divisions participating in the NSLP get cash subsidies and donated commodities from the U.S. Department of Agriculture for each meal they serve. The lunches must meet federal requirements, and they must offer free or reduced-price lunches to eligible children.	Free lunch: $2.19 Reduced-price lunch: $1.79 Full-price lunch: $0.21
The School Breakfast Program: a federal program that provides cash assistance to states for non-profit breakfast programs in schools.	Free breakfast: $1.20 Reduced-price breakfast: $0.90 Full-price breakfast: $0.22
Afterschool Snack Program: School food authorities which operate the National School Lunch Program may sponsor an afterschool snack program if they provide children with scheduled activities, including educational or enrichment activities after the school day. Schools receive reimbursement for snacks served to students.	Free snacks: $0.60 Reduced-price snacks: $0.30 Full-price snacks: $0.05

*Reimbursement rates are the rates the federal government reimburses school divisions for each meal served. The rates are effective July 1, 2003 through June 30, 2004.
Source: Virginia Department of Education web site and the Federal Register, Vol. 68, No. 130, Tuesday July 8, 2003.

the program (including federal reimbursements) should pay for all costs associated with the program, and the program should not require any funds from a division's operating budget. However, if these revenues fail to cover costs, then divisions must subsidize their food service operations through their general operating budgets. Many divisions operate with a surplus in their food services funds. These surplus funds are not permitted to be used for purposes other than the school food program.

School divisions are responsible for all of the major elements of the school food program, including planning the menus, purchasing and preparing food, and filing for federal reimbursement. Most schools operate their own cafeteria, with a few exceptions. The Norfolk school division has used a central commissary cook-chill facility since January 1984. All foods prepared from scratch are made in this facility, and then reheated at individual schools. In Mathews, the elementary and middle schools, which are located next to each other, share a single cafeteria.

Several of the divisions visited operate centralized food services programs. This means that the central office is responsible for most major functions, such as planning menus, purchasing food, determining the number of staff in each cafeteria, and hiring these staff. Other divisions operate hybrid systems, where some functions, such as food purchasing, are performed centrally, and some functions, such as menu planning, are performed at the schools. The Staunton City school division has found that this type of hybrid system works best for them. The division's food services operation had been decentralized for many years, until the division decided to centralize food services a couple of years ago. All of the individual cafeterias' funds were brought together. The division ended up losing $40,000 over a period of two years, which had to be paid out of the division's operating budget, so the division decided to decentralize most functions. Now food buying is still done centrally, but cafeteria managers are responsible for menu planning and are accountable for their cafeteria's profit/loss. The division said that centralized food buying has cut food costs by about 20 percent. The division thinks that the centralized system did not work because the division is "not large enough to have that kind of overhead."

Divisions have different ideas on the most economical way to purchase and store food items. Some divisions feel that it is more economical to store food in a division-owned central warehouse. Schools order the necessary items from the central warehouse and a warehouse delivery person delivers the food to the school. Other divisions have schools order food from a central bid that is prepared by the central office, and have vendors deliver directly to the schools. Greensville uses the central warehouse approach. The division has a central food warehouse with refrigerator and freezer banks to store at least a month's worth of food items. Vendors drop ship items to the warehouse only, not to schools. Schools order from the warehouse every two weeks and the warehouse delivers the items to the schools. They feel this is cheaper than having vendors deliver food to individual schools. Hanover uses the vendor delivery approach. They feel that the cost of maintaining a warehouse and employing a delivery person is equal to or greater than the additional costs charged by vendors to make deliveries directly to schools.

Many of the school divisions visited made use of computerized point-of-sale (POS) school lunch accounting systems in their cafeterias. These point-of-sale software systems automate sales activity, meal and eligibility counts, and state claim form preparation. Typically, these systems allow for a cashless operation, because parents can put money into an account for their children, and then the price of the meal is deducted from the student's account each day. This results in faster delivery and shorter lines. These systems also allow parents to decide how they want the money spent; for example, they may say that the money can only be used for full meals, and not a la carte items. DOE estimates that 50 percent of school divisions in Virginia have POS systems.

School Food Staffing Practices

In 2001-02, school divisions reported employing 9,970 FTEs for school food services (see Table 35). This amounts to 8.71 FTEs per 1,000 pupils in fall membership, or a ratio of one school food service staff FTE per 115 students.

Table 35

School Food Services Staffing, 2001-2002

Total FTEs Statewide

Position Category	ASR Object Code	Statewide FTEs	FTEs Per 1,000 Pupils
Administrative/Other Professional	1110, 1130	391	0.34
Clerical Staff	1150	709	0.62
Tech, Trades	1140, 1160	245	0.21
Operative, Laborer, and Service Staff	1170 - 1190	8,625	7.54
Overall		**9,970**	**8.71**

Spread in Total FTEs (Per 1,000 Pupils in Fall Membership)

Locality Category	Median	25th Percentile	75th Percentile
Urban	7.97	6.12	12.41
Suburban	9.09	7.03	10.12
Rural cities, towns	10.22	8.48	11.77
Rural counties	12.24	10.42	13.85
Overall	10.25	7.97	12.78

Source: JLARC staff analysis of DOE Annual School Report data.

Like custodial staffing, there are a number of standards that are available for determining or assessing food services staffing levels. The staffing standard used by DOE's school nutrition unit is shown in Exhibit 3.

JLARC staff reviewed the DOE school food unit's files for the school divisions that staff visited as part of the site visit process. Between February 2001 and May 2003, DOE staff had done a "Needs Assessment Review" in at least one school in each division, and at 36 schools in divisions that do not have a central cook-chill operation. Of these 36 schools, 11 had a meals equivalent factor of less than 14, although six of these 11 had a factor greater than 13. The following case examples illustrate some of the variation that exists in staff practices and service efficiency.

> *One elementary school had a meal equivalency per labor hour of 18.65 with a la carte sales, and 18.20 without. DOE school food staff wrote that, "This small staff did a good job of preparing menus with choices. Good use of labor was apparent. Meals per labor hour were within recommendations for the type of service provided."*

> *At one high school, the meal equivalency ratio was 8.0 with a la carte sales, and 7.70 without. The division was using 26.3 hours of labor per day. DOE school food staff wrote that: "With the current meal requirements, 15 labor hours is all that is needed to effectively staff the kitchen."*

Exhibit 3

Virginia DOE's Staffing Guideline for School Food Staffing

Step 1: Sum Lunch ADP Plus ½ Breakfast ADP + Adult Lunch ADP
(note: ADP is the number for Average Daily Participation)

Step 2: Translate a la carte sales into meal equivalents by dividing a la carte revenues by the number of days of service by a factor of 2.35

Step 3: Sum Step 1 and Step 2 to calculate meal equivalents.

Step 4: Divide meal equivalents by number of staff labor hours.

The result of Step 4 is the number of meal equivalents per labor hour. The recommended range in meal equivalents per labor hour is 14 to 20.

Source: JLARC staff summary of DOE staffing guideline for school food services.

Recommendation (17). **School divisions should examine their school food staffing practices in schools that are staffed outside of DOE's meal-equivalency range and consider whether there is a need for adjustments.**

Delivery of School Food Services

Table 36 outlines some challenges in the food services area and provides examples of solutions that are utilized by some divisions in the State. The exhibit also provides other potential solutions, which may be solutions that were suggested by divisions during the site visit process or solutions that are used by divisions in other states. Each of these challenges is discussed in the following section.

Challenge: Ensuring that the Food Services Program Is Self Supporting. As stated before, school food programs are funded by revenues from the sale of meals, federal government reimbursements for free and reduced-price meals, and some state funds. A well-managed food services program should be self- supporting. Several of the divisions visited had school food programs that were self-supporting (i.e., revenues were equal to or higher than expenses). For example, Greensville indicated that its program breaks even every year, and the Portsmouth City food services program operates at a surplus. Even after Portsmouth pays for all expenses associated with the food services program (including all staff salaries and benefits, equipment, food, and 16 percent for overhead expenses, such as utilities), there is money left over each year. The division attributes its success in this area to having good control over the food services program. Brunswick County also has a surplus each year which is rolled over to the next year's food services budget and used as a cushion for the beginning of the year (before reimbursements are received). Several other divisions visited during the site visit process also have self-supporting food services programs.

Table 36

School Food Services Challenges and Potential Solutions

School Food Services Challenges	Examples of Potential Solutions
Ensuring that the food services fund is self supporting	• Exert strict control over the food services program • Utilize commodities and bonus commodities as much as possible • Conduct a review of the food services program to determine reasons the program is not self-supporting* • Implement cost controls in kitchens – evaluate meal prices, portion sizes, and staffing levels; provide staff training*
Obtaining the best price when purchasing food items	• Participate in food purchasing consortia • Research and compare the best deals from a variety of sources (food sellers, brokers, etc.) • Maintain a centralized food warehouse so that vendors only deliver to one location
Increasing participation in the school lunch program	• Implement food court style serving areas in high schools • Conduct promotions that market school breakfast or lunch in the schools • Increase the variety of foods served, such as including more international/ethnic foods • Hold an annual food show to let customers taste new food and let them have a say in which foods are served in the cafeterias • Use computerized point-of-sale systems (or other methods) so that students on free and reduced lunch are not overtly identified when going through the lunch line • Increase the number and length of lunch periods, and expand points of service* • Ensure that free and reduced lunch applications are available in a variety of languages
Having adequate kitchen space, storage space, and equipment	• Operate the food services program at a surplus so that surplus funds can be used to purchase new equipment
Providing students with meals that are both appealing and nutritious	• Use the School Foods Tool Kit developed by the Center for Science in the Public Interest

Note: This table includes examples of solutions reported by Virginia school divisions (from site visits or best practice submissions), unless otherwise noted.
*This potential solution has been recommended in other states.

Source: JLARC staff analysis.

Some divisions, however, are operating their food services programs at a deficit, which means that their revenues do not cover their expenses, and they require money from the division's operating fund to operate. The Staunton City school division had a deficit in recent years, which they attribute to a reorganization of the food services organizational structure. The King and Queen County school food services also operates at a deficit, although division staff indicate that they are losing very little money each year. They indicated that the program is not self-

supporting because they do not budget for gas increases and increases in food costs each year.

School divisions that have self-supporting programs were not able to provide information on specific practices that enabled their programs to be self supporting, other than that they monitor their programs very closely. A best financial management practice review from the state of Florida, however, offers some suggestions for controlling food service program costs:

- evaluate menu prices on an annual basis and make adjustments, where appropriate, to keep pace with increasing costs of administration, training, food, labor, and other operating expenses;
- focus on manager and employee training programs to strengthen food and labor cost controls; and
- increase the level of monitoring and improvement of food portion controls during meal service times at schools.

Recommendation (18). **Divisions whose programs are not self supporting may want to conduct a thorough review of the program to determine if there are aspects of the program within their control that are able to be performed more economically. This review could be conducted in-house or by an outside consultant.**

Challenge: Obtaining the Best Price When Purchasing Food Items. Food purchases are a major component of a division's food services budget. One source indicates that food purchases should be no more than 36 percent of the food services budget. One practice that was mentioned as being particularly successful in reducing food purchasing costs is participation in food purchasing consortia to obtain better prices through volume purchasing.

One consortium that was cited as being successful is the Shenandoah Food Buying Cooperative. The Shenandoah Food Buying Co-op consists of seven divisions: Fauquier, Alexandria City, Culpeper, Falls Church City, Harrisonburg City, Rockingham, and Shenandoah County (Fauquier County is the lead district). The co-op serves a combined student population of over 50,000, and serves over 28,000 meals daily. Product testing meetings are held every other month to approve or reject new products. The co-op looks at approving the best quality items that are low in fat and sodium that their customers will enjoy. Benefits cited include an increase in the quality of food and the ability to network and combine expert opinions and experiences. The divisions have had various degrees of cost reductions in food cost, and duplication of effort has been reduced as well. The bid opening process is handled in Fauquier County, which saves time for the other six school districts by not duplicating this activity.

Other divisions, however, feel that they can achieve better prices on their own. Staff of the Hanover County school division think that the prices the division gets are as good as those prices they could get by participating in a consortium. Division staff feel they are able to reap the benefits of being in close proximity to three large school divisions, and that they are able to get the same prices from vendors as those divisions, even though they don't have the volume of purchases that those divisions have. Greensville County indicated that they are able to reduce food purchasing costs by being aggressive about purchasing food from a variety of sources, and being knowledgeable about the food services industry.

Challenge: Increasing Participation in the School Food Program. Since the federal government reimburses divisions for every meal served, increasing participation rates results in maximization of federal revenue potential. Division participation rates for the school lunch program roughly ranged from 34 percent to 86 percent. This does not include students who purchased a la carte items. Participation rates for the school breakfast program ranged from one percent to 53 percent.

Virginia school divisions have implemented several practices to increase participation in their school breakfast and lunch programs. The Norfolk City school division indicated that installing food court style serving areas in its high schools has resulted in increased high school participation in the National School Lunch Program. For example, some schools have deli lines that produce made-to-order sandwiches. The Norfolk City school division also attempts to increase participation by conducting promotions that market school breakfast or lunch in the schools. Each school year a promotional calendar, which gives promotion ideas for each month, is created and distributed to all cafeteria managers. All managers are required to conduct promotions throughout the year. The division indicated that this has helped to increase student participation in the School Breakfast Program and National School Lunch Program.

The Alexandria City school division has attempted to increase the variety of food offerings and participation in the school lunch program by integrating international foods and learning materials into school lunch menus. In its high schools, the division installed three different food court restaurants (International Market Place Café, Peppers Cantina, and Pepperoni Tony's Café). The division indicated that participation rates at the high schools increased as follows: a modest increase in the number of free meals, a 25 percent increase in the number of reduced meals, a 100 percent increase in the number of adult meals, and a 53 percent increase in the number of full-priced meals served daily.

The Prince William County school division hosts an annual food show for its customers, including students, parents, and school staff. At the show, customers are given the opportunity to taste and rate approximately 20 food items the central office staff is considering as future menu items. All items shown met requirements for nutrition, cost, and ease of preparation. The only additional test the item must pass is customer acceptance. In theory, this should help to increase participation because customers are helping to choose the items that will be served.

As shown in Table 34, the federal government provides reimbursement at a higher rate for free and reduced meals. Therefore, identifying students who are eligible for free and reduced lunches and making sure they eat these meals regularly results in more federal revenue for divisions. Divisions have implemented several practices to increase the number of students who take free and reduced lunches. For example, they have free and reduced lunch applications available in several different languages so that low-income parents who do not speak English can still read and complete the applications.

Many students do not participate in the free and reduced lunch program because they do not want their peers to know that they cannot afford a full-priced lunch. Therefore, any type of system that does not overtly identify these students when they go through the lunch line (such as a computerized point-of-sale system in which all students simply enter a PIN rather than paying in cash) can increase participation in the free and reduced lunch program. This type of system is in place in several divisions, including Alexandria, Danville, Greensville, and Hanover.

Challenge: Having Adequate Kitchen Area Space, Storage Space, and Equipment. The kitchen space, equipment, and storage areas of individual school cafeterias varied widely. Most of the newer schools had new state-of-the-art kitchens, while many of the older schools had older equipment and less than optimal space for food preparation.

The King and Queen County school division indicated that they have very old equipment, which causes their food services costs to be higher due to lack of efficiency. They indicated that much of their equipment is 40 to 50 years old, and they spend a lot of money to repair it. They cited the following obstacles to buying new equipment: space limitations in the buildings, wiring/voltage incompatibility of the buildings, and lack of funding. Staff of the Salem City school division also indicated that they have a number of cafeterias in which the equipment is quite old. The Harrisonburg City school division, on the other hand, indicated that they have been able to purchase new equipment for most of their kitchens, often using surplus funds generated by the food services program.

Challenge: Providing Students with Meals that Are Both Appealing and Nutritious. According to the Center for Science in the Public Interest, a national non-profit nutrition advocacy organization, obesity rates have doubled in children and tripled in adolescents over the last two decades. One in seven young people are obese and one in three are overweight. In addition, the center notes that one quarter of children ages five to ten years show early warning signs for heart disease, such as elevated blood cholesterol or high blood pressure. Since, outside of the home, children and adolescents spend the majority of their time in school, it is important that schools provide an environment that promotes healthy nutrition. However, serving food that is both nutritious and appealing to students can be a challenge.

The Center for Science in the Public Interest has developed a School Foods Tool Kit to help schools provide meals that are both nutritious and appealing. This

tool kit is available on line for no charge at www.cspinet.org/schoolfoods. The first section of the kit includes goals and strategies for improving school foods and beverages as well as background materials and fact sheets on children's diets and health, school meal programs, and vending and other school food venues. It also has a section on techniques that division staff can use to affect change, with guidance and model materials for communicating with decision makers, the press, and other members of the community. The second section of the kit provides model legislation, sample letters, and a list of resources that can be adapted and used as appropriate for individual communities. The final section of the kit provides contact information for individuals, organizations, and states working to improve the nutritional quality of school foods and beverages.

VI. Cross-Cutting Issues and Implementation of Best Practice Ideas

Preceding chapters of this report have discussed issues pertaining to the provision of several individual support services provided by school divisions. This chapter addresses several issues that are relevant to multiple services. These issues include: consolidations, outsourcing and privatization arrangements, the role of teamwork and employee morale, and employee compensation issues. In addition, the chapter addresses issues related to the implementation of best practice ideas.

The primary types of consolidations that are under consideration by at least some school divisions during the timeframe of the review are: consolidations between the school division and the local government, consolidations between divisions, and consolidations of schools. Under some circumstances, school division staff see potential cost-saving opportunities offered by these actions.

Some services are being delivered in the divisions by private sector providers. For example, Portsmouth and Richmond City both have outsourced the provision of bus maintenance services, and Madison, Orange, and Warren have outsourced the management of their school food programs. The benefits of these alternative arrangements are probably clearest for divisions that have had difficulties in achieving an appropriate level of managerial oversight when the services were run by division personnel.

Managerial attention to the need for team work and to support staff morale was an issue that was raised in several divisions, and that cuts across occupational categories and support service areas. Several divisions cited practices that may promote cooperative working arrangements, or discussed the impact of staff team work and morale on productivity.

Employee salary levels for support staff are a concern in a number of divisions, although the type of positions which divisions experience difficulty in hiring is not consistent in all parts of the state. Generally speaking, however, salaries for skilled trades staff (maintenance trade staff and bus mechanics) are often a concern, as is the ability to recruit bus drivers. However, divisions also acknowledge that part of the difficulty in hiring bus drivers can be the limited hours and split-schedule nature of the work. Several divisions visited for the review commented that their salaries for custodial staff are too low.

Salary concerns, however, may be less significant than the issue of the costs of employee health insurance benefits. Premium rates paid in many divisions have risen dramatically over recent years, and there is little sign of abatement. Some divisions are generous in their decisions to extend certain fringe benefits to staff such as bus drivers and food service workers that do not work a full school day. However, one of the practices used by school divisions to economize on employee costs is to pay a limited share of premium costs for dual and family health insurance coverage. Given the salary levels of support staff, the employee share of the costs of health insurance, particularly for dual and family coverage, is beyond the reach of most staff.

There are some obstacles to achieving more widespread use of best practices across divisions. For example, some divisions are reluctant to enter into cooperative arrangements with their local government, due to concerns about the priority level that their service needs will receive or about whether a positive collaborative arrangement will be sustained over time. In addition, there may be a trade-off in some instances between the desire to achieve low administrative staffing levels, and the need for good planning, analysis, and management to effect best practices.

However, there are also some actions that could be taken at the local and State levels to promote best practices. Some of these actions could require an initial investment of resources in order to achieve a net efficiency gain and prevent duplication of work. For example, it makes sense for either the State or for the divisions to all come together in defining a coordinative or facilitating role with regard to best practices work, and in assigning a fixed responsibility for the performance of this work. There ought to be a mechanism established whereby all support service specialists would routinely be asked for best practice ideas, and would routinely receive information from other divisions and understandable synopses of the best and most recent literature in the field on best practice ideas. In addition, the availability of unusual spare parts and other types of information could be routinely shared.

It may be that some of the professional associations in the support service areas could contract for such a facilitating or coordinative role, or it could be done by another entity, such as the Department of Education, taking advantage of its access to various statistical data. However, it does not make sense for every division on its own to try to track and analyze the substantial amount of material that is available as to what some of the leading trends are in the various areas, and then to share that information on a haphazard basis as opportunities arise.

CROSS-CUTTING ISSUES

There are several issues that cross-cut service areas. Two examples of such issues from the study mandate include consolidations and outsourcing services. Two other issues that cross-cut service areas are staff teamwork and morale, and certain employee compensation issues, such as fringe benefit policies.

Consolidations

HJR 34 requested that the JLARC review identify "those programs and services that might be consolidated, are not achieving their intended purpose, or for which the mission is no longer relevant or discernible." None of the types of support services addressed in this review are failing to achieve their intended purpose or have no discernible or relevant mission. Administrative support, attendance services, health services, pupil transportation services, operation and maintenance services, and school food services, are all relatively discrete service areas with clear and relevant missions. Also, the consolidation issue at the program or service level within divisions does not make sense. However, there are opportunities for consolidations of services between local governments and the school divisions they support,

or among school divisions that could consolidate together, or among particular schools that could be part of a school consolidation plan.

Consolidation or Sharing of Services Between School Divisions and Local Governments. There are a number of services that the local government and school divisions each may have an interest in receiving, that could be provided solely by one or the other, and not both. Chapter III of this report has discussed several administrative services where economies of scale have been achieved by school divisions by consolidating service delivery with the local government. Examples of consolidations in administrative areas include: data processing, payroll, purchasing, and human resources. In addition, several visited divisions indicated that they have obtained benefits from consolidations or cooperative arrangements for the delivery of building and/or grounds maintenance, and vehicle maintenance services.

It should be noted that in some instances the consolidations or cooperative arrangements that are achieved work primarily to the benefit of the school division, and in other instances the primary benefits go to the local government. Also, whether or not these arrangements cause the school division to <u>appear</u> to be more or less efficient in the cost data they report can depend on the nature of the consolidation or cooperative arrangement, and how the data are reported. For example, the City of Norfolk does grounds maintenance work for the school division, and the work is funded as part of the city budget. This decreases the size of Norfolk's school division expenditures in the operation and maintenance category, and therefore reduces the apparent per-pupil cost for that work in the Annual School Report data. On the other hand, some divisions reported that the county or city government uses their staff to assist with some services, or uses the division's fueling stations at the division's expense. This practice can cause a school division to appear to have somewhat higher staffing levels and costs per pupil than is really used in the delivery of services to students. (School division costs are accurately represented in instances where the local government provides the service, and the school division pays its share of the costs from its budget. However, if the service is staffed by city and not division employees, the division's staffing – FTE positions – data can be misleading.)

Consolidating School Divisions. A number of studies of school division costs and consolidation issues have expressed a cautious note regarding whether division-level consolidations represent a positive step other than for exceptionally small divisions. However, in some instances, the need for more than one division to serve a geographic area may be questionable from an efficiency standpoint.

Closing and Consolidating Schools. During the course of this study, the Henry County School Board voted to close five schools and consolidate several others. Several other school divisions indicated during the site visits that their locality faces situations where, due to shifts in local populations and enrollment, there are schools that are of a size that no longer makes sense from a cost standpoint. Staff noted that consolidation of the schools could potentially offer the benefit of expanded program offerings as well. There are also situations where placing new schools in a central location and ending the use of existing schools are anticipated to lead to efficiencies. Some examples of consolidation-related comments made during the site visit process include the following.

At one school division, a major point of emphasis during the discussion was the desire for a State incentive fund to promote consolidations. School division staff indicated that the State ought to use a model similar to the regional jail model used by the legislature. Staff indicated some frustration in stating that "Once a school is there, it is there forever, despite declining enrollment," and in stating that "we've got to get past Friday nights (football tradition)" as the basis for preserving schools.

Another school division indicated that the size of its elementary schools are not conducive to operating efficiency.

One school division is currently the subject of a study of a potential merger with another division. School division staff indicated that it is not cost-efficient to have all of the schools they have open, but parents strongly oppose any closings.

Staff at another division indicated that the division could be operated more economically if three schools could be located in the middle of the county, where staff could be shared among schools.

As the case examples indicate, some divisions do not think that the schools within their division are optimally configured to achieve operating efficiency. However, the closing of schools can be disruptive, and, as a practical matter, is often a very unpopular action locally.

Outsourcing Services

School divisions are currently outsourcing a number of support services. Services that are frequently outsourced include major HVAC work, boiler installations and welding, major boiler and chiller maintenance work, large painting jobs such as an entire school, pest control, bus body work, bus transmission work, and kitchen equipment maintenance. In addition, some divisions have contracted for private sector entities to manage certain services, such as custodial services, and a few services have been fully privatized (for example, fleet maintenance in Portsmouth and Richmond City, and food service operations in Madison, Orange, and Warren). A summary of findings regarding the use of outsourcing by school divisions visited during this review is provided in Table 37.

Several school divisions indicate that contract arrangements are working well for them. Perhaps the most successful privatization efforts are in the area of food services. Three school divisions – Madison, Orange, and Warren – have privatized the management of their food services programs, and all three divisions indicate that they are very satisfied with the arrangement. The three divisions use the same contractor, and the contracts are very similar in that the divisions contract for the management of the program, but the staff are still school division staff (except for

Table 37

Services That Are Outsourced or Privatized in Visited Divisions*

Division	Some HVAC Maint. Work	Some Boiler Maint. Work	Painting	Pest Control	Bus Body Work	Bus Trans-Mission	Kitchen Equipment Repair	Other Items Mentioned
Bedford			● (Buildings)		●	●	● (Maintenance contract)	Water treatment.
Brunswick	●	●	● (Specialized jobs)	●	●	●	● (Specialized repairs)	Some technology infrastructure work, bells and fire alarm systems, athletic field lights.
Chesapeake	●	●	● (Entire schools. Buses)		●			Asphalt work. Tree work.
Danville		● (Standard maintenance agreement)	● (Bus painting; large paint jobs under the CIP)	●	●	●		Under standard maintenance agreement, contractor sets up chillers in the spring. Also, city contracts some other bus work, such as tires, upholstery.
Dickenson		● (Boiler welding)	● (Large jobs)	●	●			Contract to update lighting at 6 schools. Roof work. This year, contract coal hauling. Also bid out for architectural services.
Greensville	● (Contracts for HVAC systems)	●		●	●	●	●	Contract for security systems. Contract out big maintenance projects.
Hanover			● (Buildings)		The county provides the bus maintenance services			Use consultants for risk management.
Harrisonburg			● (If a large job)	●	The school division does not have a bus fleet – school bus transportation is provided by the city transit system		●	Big ticket items such as concrete work, paving. Sometimes contract cleaning service for summer school remediation.
King and Queen	● (Most is in-house)	●	●	●	●	●	●	
Loudoun	● (Very major projects)	● (Large jobs)	● (Summer painting is outsourced)	●	● (Depending on difficulty level)	●	● (If major problem)	
Martinsville	(Almost all in-house)	(Almost all in-house)	● (Very large jobs only)	●	●	(Division tries not to, unless problem is severe)		Contracts out for some janitorial services to supplement staffing.
Mathews	●	●		●	●			Compressors. Company cleans hoods in kitchens every 6 months.
Norfolk			●		●			Pays company to manage custodial operations.

(Table continues on next page)

Table 37 (continued)

Services That Are Outsourced or Privatized in Visited Divisions *

Division	Some HVAC Maint. Work	Some Boiler Maint. Work	Painting	Pest Control	Bus Body Work	Bus Trans-mission	Kitchen Equipment Repair	Other Items Mentioned
Portsmouth	●	●	●	●	●	●		Has privatized its bus maintenance operations. Also contracts out all elevator work, A & E services, construction management, water treatment, large glass and thermal pane glass work, bus body work, and transmission rebuilds.
Prince William					●	● (About half of this work is done in-house, and about half is contracted out)	● (Hood system repairs)	Uses company for its human resources and financial operations, price reduction for being a demonstration site. Biggest contract is chiller contract. Certain engineering. Sewer and grease trap maintenance.
Roanoke City	●	●	● (Buildings and buses)	●	●	●	● (Some equipment)	Contract out for construction, A & E services. Bus upholstery.
Salem			● (Almost all building painting)	●	●	●	(Done in-house, unless complicated beyond staff expertise)	
Staunton	●	●		●	● (City does the contracting)	● (City does the contracting)	● (Some specialized kitchen repairs)	All elevator work. Decisions on bus work are handled by city.
Wise	●	●	● (Some painting, if needed to catch up; not standard practice)	●				

* Bullets in the table are based on services identified by divisions to JLARC staff during site visits in response to open-ended question about privatized services, and JLARC staff follow-up with school division staff to go over the items most frequently cited to help check on the completeness of the information.
Note: In addition to the divisions listed above, Richmond City was visited during the review to discuss its privatized bus maintenance operation.

Source: JLARC staff interviews from site visits, spring/summer 2003, and fall 2003 follow-up.

the contractor's general manager and one administrative staff person). The school divisions maintain ultimate control over the program.

The contractor handles the day-to-day management of the program, and is responsible for purchasing food, monitoring finances, planning the menus, training staff, interviewing job candidates, and making recommendations about who to hire. Divisions were unable to provide specific cost savings, but cited several benefits of privatization, including the following:

- Purchasing power of the contractor results in better food prices
- Contractor monitors the program's finances on a daily and monthly basis
- Contractor has marketing expertise, and makes food appealing to students
- Contractor's safety training program is very stringent
- Contractor provides access to staff expertise at the contractor's headquarters who focus on certain areas – for example, the contractor employs a staff person who focuses solely on commodities, and how they can be processed and best used by divisions.

Exhibit 4 provides brief descriptions of the privatization efforts in each of the three Virginia school divisions that contract for food services.

Exhibit 4

Privatized School Food Services in Virginia

Madison County Public Schools. Contract for privatized food service operation began on July 1, 2003. Decided to privatize because participation in the food services program had decreased over time, and financially, the division was always close to having to supplement the food services fund with funds from the operating budget. Contractor guarantees that the division's food services fund will operate in the black, or the contractor will make up the difference. Superintendent stated that it appears that participation has already increased, even though the contract is in the very early stages.
Orange County Public Schools. Contract for privatized food service began in August 2001. Division decided to privatize because the food services program was losing money on a consistent basis (operating "in the red"). Since the program has been privatized, the financial picture has improved, although the division is not quite operating in the black at this point. Division has saved money because less money is required from the operating budget to supplement the food services fund. Participation has also increased; at the middle school, for example, participation increased from 60 percent to 75 percent. Division management indicated that they are very satisfied with the privatization effort.
Warren County Public Schools. Contract began in August 2000. Division decided to privatize the food services operation because the program was experiencing a deficit for the first time in several years. In addition, the food services manager was retiring and the division was unsure whether they could find someone with the required expertise to fill the position, given the rural nature of the area. The contractor improved the program's finances, and the program is now profitable. In addition, participation has increased at a faster rate than the division's enrollment increases. Participation increases are attributed to better marketing of the program. The division was unable to give specific cost-savings, because they do not know what would have happened to the program if the contractor had not been there; but the contractor has improved the program's finances. Division management indicated that they are very satisfied with the privatization effort.
Source: Interviews with school division and contractor staff.

Examples of successful privatization efforts in other support services areas include the following:

> *One division has contracted with two different companies to provide bus maintenance services. In the early 1990s, these services were costing the school board "an extreme amount of dollars" and the use of parts was "out of control." The division contracted with a private company to provide the service, and its full complement of employees were absorbed by the contractor at their current salaries (over time, these employees departed from service). However, the first contract did not go well. A new contractor was employed in 2000, and this arrangement has been working well, in the view of the division's assistant superintendent for operations and the division's transportation director. All technicians used by the company are ASE certified, the quality of maintenance has reportedly improved, and down time on the vehicles is said to be less. Division staff stated some examples of operational advantages that are achieved by the contractor. These examples included the fact that the company had specific standards regarding how long various bus repair procedures "should" take, and its process for relieving poor-performing employees of their position is simpler.*
>
> *Another division that has privatized its bus maintenance operations reported that the contractor is doing a good job. Division staff believe that the contractor's aggressive preventive maintenance approach will save costs in the long run.*
>
> *Two divisions indicated that they have contracted out for night custodial services at some of their schools because of difficulties finding staff to fill these night custodian positions, and problems with the cleanliness of the buildings. Both divisions indicated that they are very pleased with the contract arrangements, and the schools are much cleaner.*
>
> *A division reported that a contract to maintain kitchen equipment is working well for them, and that the contract enabled them to achieve a staffing reduction.*

School divisions report, however, that much of the time when they review the possibility of contracting for a routine service delivery operation, the cost comparison is not favorable. Some examples of comments received from school divisions during the site visits regarding contracting out services include the following:

> *One division reported that it spent $96,000 in a year for contracted HVAC maintenance services. After deciding to hire an employee for a 12-month contract at $13 an hour, the division reported net savings of about $50,000 in the delivery of these services.*
>
> *Another division reported meeting with several custodial companies. The contractor who was most interested in the work thought that*

their costs were competitive given the division's costs for operation and maintenance services, but did not realize that the division cost figure he was using included the costs of not only custodians, but also grounds staff.

Another division reported looking at the cost-effectiveness of out-sourcing refuse hauling. It found that it saves $250,000 annually (compared to the contractor price of $800,000) by doing the work in-house.

The experience of the school divisions suggests that it is not feasible on an a priori basis to assume that contracting a service will – or will not – offer cost savings or improve services. The viability and desirability of contractual arrangements depends on various factors. One of the decisive points in determining whether to aggressively pursue the privatization of a service may be the quality of managerial talent that the division is able to employ. Several divisions that appear to be benefiting from privatized arrangements were experiencing managerial difficulties when they had responsibility for delivering the services. In these divisions, unit costs for the service may not change much with the contracting of the service, but the division may benefit from improved professionalism and quality in the delivery of services. In contrast, private sector vendors may experience more difficulty in bringing tangible benefits or cost savings to services that are already well-managed by responsible school division personnel.

Employee Teamwork and Morale

The issue of teamwork and staff morale was raised as a factor in support staff effectiveness in several divisions. For example, a supervisor of maintenance and a supervisor of school food services in two of the divisions visited noted that they had been brought into their positions to bring improvements in areas that were having some productivity issues. Both supervisors indicated that a key aspect of turning operations around was improving the teamwork of staff.

In addition, several school division staff cited the importance of communication and cooperation across departments in successful operations. For example, some school food service staff noted the importance to their operations of responsiveness by the maintenance department when equipment breaks down. School food staff and health services staff indicated that their operations were assisted by the fact that construction planning staff in the division had worked to take their needs into account in the planning of new facilities. The involvement of school division maintenance staff in planning new facilities may also lead to the design of facilities that take into account maintenance issues and concerns.

Several divisions indicated that they use practices to promote positive morale and good communications across operations. For example, there were efforts to include support staff in functions so that they would feel a part of the team. Maintenance staff in one division visited have a family day each year at King's Dominion to recognize their work. One of the private contractors for bus maintenance services indicated that they promote communication between the division's bus drivers and

their bus maintenance staff through the use of feedback cards that are placed in the bus after each bus repair job.

Employee Compensation Practices

Another issue that cross-cuts service areas is employee compensation. School divisions report difficulties in obtaining quality support staff at the salary levels paid. The particular type of staff that are difficult to obtain varies somewhat from division to division. Skilled maintenance staff, such as operations and maintenance trades staff and bus mechanics, are frequently cited as problem areas. Many divisions find that the salary levels they pay enable them to save substantial costs over the cost of outsourcing the service. However, if the pay is too low to attract applicants when positions become vacant, the division has a problem. Another frequently-cited problem area is bus driver compensation, although it is acknowledged that it is often the limited hours and the split-day nature of the job that causes some of the hiring difficulties. The difficulty of employing quality custodial and school food staff seemed to vary, depending on local employment conditions, and division salary levels and benefit policies.

Perhaps surpassing the salary issues, however, is the rising costs that are associated with health insurance premiums. This situation is causing budget difficulties in many localities, and the employee share of these costs in some divisions already is, or is becoming, out of the reach of employees in low-paying support jobs.

Changes in School Division Fringe Benefit Expenditures Include a Sharp Rise in Health Insurance Costs, and Economies in VRS Costs That May Not Be Sustainable. From FY 2000 to FY 2002, a major shift occurred in fringe benefit expenditures by school divisions (see Table 38). In two fiscal years, school division expenditures for medical insurance premiums increased by about 29 percent for support staff, and by 31 percent across all staff. FY 2002 expenditures for support staff medical insurance benefits were $22.4 million greater than in FY 2002, and expenditures for all staff increased by $107.1 million.

However, during those years, the rise in health insurance costs was cushioned by State decisions to decrease State and local contributions to the Virginia Retirement System (VRS). These contribution reductions meant that division expenditures for VRS in FY 2002 were 70 percent of FY 2000 levels. As a result, total fringe benefit expenditures in FY 2002 were just $32.2 million more than two years prior.

School division expenditure data for FY 2003 are not yet available. However, most school divisions visited for this review reported that they are continuing to experience double-digit increases in medical insurance premium costs in FY 2003 and FY 2004. Meanwhile, with negative changes in the size of the portfolio of the Virginia Retirement System, the State is potentially looking at the need to increase VRS contribution rates, and reverse changes that had lowered division expenditures by $184.2 million in FY 2002 compared to FY 2000 levels.

Table 38

Changes in School Division Fringe Benefit Expenditures, FY 2000 to FY 2002
(Support staff and all staff)

Benefit	FY 2000 Expenditure ($ Millions)	FY 2001 Expend. ($ Millions)	FY 2002 Expend. ($ Millions)	Percent Change, FY 2000 to FY 2001	Percent Change, FY 2001 to FY 2002
Health Insurance Expenditures					
Support	$ 78.0	$ 87.2	$ 100.4	**+ 11.8 %**	**+ 15.1 %**
All Division Staff	$345.7	$ 390.4	$ 452.8	**+ 12.9 %**	**+ 16.0 %**
VRS Payment Costs					
Support	$ 76.1	$ 67.9	$ 60.4	- 10.8 %	- 11.1%
All Division Staff	$ 617.5	$ 583.3	$ 433.3	- 5.5 %	- 5.7 %
Other Fringes					
Support	$ 91.4	$ 101.5	$ 107.2	+ 11.1 %	+ 5.7 %
All Division Staff	$ 511.2	$ 586.9	$ 620.4	+ 14.8 %	+ 5.7 %
Total Benefit Expenditures					
Support	$ 245.5	$ 256.5	$ 268.0	+ 4.5 %	+ 4.5 %
All Division Staff	$ 1,474.3	$1,560.6	$ 1,506.5	+ 5.9 %	- 3.5 %

Source: JLARC staff analysis of Annual School Report data.

Employee Costs for Spouse Coverage and Family Health Insurance Packages Are Beyond the Reach of Many Support Staff. The health premium costs that divisions pay are a reflection of several factors, including the extent of competition in the area for the division's business, the scope of the coverage selected, the claims history of the division, and employee co-payments. In 2003-04, the mean premium rates in divisions visited during this review will be somewhat higher than the premium costs for State employees:

- For single coverage, $3,873 compared to $3,504,
- For dual coverage, $6,542 compared to $6,492,
- For family coverage, $10,133 compared to $9,468.

The proportion of costs paid by the school divisions (the employer share) varies dramatically among divisions, particularly for dual coverage and family

plans. Consequently, there is great variation among divisions in the costs division staff bear if they need insurance coverage through the school division for a spouse or family. On the one hand, one of the ways that some school divisions economize on costs is by paying limited shares of dual coverage and family plans. On the other hand, for many school division support staff that are eligible to participate in the health insurance plan, the employee share of the costs for dual and family coverage is beyond the reach of many staff in these relatively low-paying positions (see Table 39). One division noted that a consequence of this is that divisions are in a poor position to compete for potential employees who are middle-aged and have families.

Table 39

Health Insurance Coverage: Percent of Premiums to Be Paid by Divisions, and Annual Premium Costs to Be Paid by Employees, 2003-04

	Percent of Premium Paid by Employer			Annual Premium Cost to Employee		
	Single	Dual	Family	Single	Dual	Family
Portsmouth	96.6 %	59.0 %	32.0 %	$ 140	$ 2,757	$ 8,447
Greensville	82.8 %	53.4 %	42.5 %	$ 894	$ 4,488	$ 8,070
Brunswick	75.3 %	49.4 %	39.7 %	$1,074	$ 4,074	$ 7,080
Bedford	91.6 %	45.4 %	30.4 %	$ 257	$ 3,390	$ 6,463
Staunton	90.0 %	50.7 %	45.5 %	$ 413	$ 3,056	$ 6,196
Mathews	88.3 %	48.9 %	35.3 %	$ 438	$ 3,445	$ 6,055
King and Queen	73.3 %	54.1 %	31.3 %	$ 982	$ 2,286	$ 5,929
Danville	99.7 %	66.5 %	38.7 %	$ 10	$ 1,875	$ 5,902
Martinsville	100.0 %	47.6 %	30.3 %	$ 0	$ 2,798	$ 5,849
Hanover	71.0 %	44.9 %	32.5 %	$ 1,104	$ 3,318	$ 5,598
Salem	100.0 %	76.4 %	52.5 %	$ 0	$ 1,428	$ 4,644
Roanoke City	91.1 %	62.1 %	49.0 %	$ 400	$ 2,500	$ 4,250
Harrisonburg	65.0 %	65.0 %	65.0 %	$ 1,281	$ 2,453	$ 3,949
Norfolk	92.3 %	62.6 %	62.4 %	$ 245	$ 2,158	$ 3,895
Chesapeake	97.5 %	79.0 %	71.8 %	$ 100	$ 1,542	$ 2,985
Loudoun	90.0 %	86.0 %	77.5 %	$ 450	$ 1,074	$ 2,531
Wise	86.8 %	83.1 %	81.7 %	$ 582	$ 1,380	$ 2,184
Prince William	88.5 %	65.2 %	65.2 %	$ 227	$ 1,336	$ 2,055
Dickenson	93.7 %	94.3 %	94.0 %	$ 300	$ 360	$ 600
Mean for Divisions	88.1 %	62.8 %	51.4 %	**$ 468**	**$ 2,406**	**$ 4,878**
Comparison to State Practice for State Employees:	90.4 %	87.1 %	87.5 %	$ 336	$ 840	$ 1,188

Source: JLARC staff analysis of data received from school divisions. For divisions with more than one plan that is available to employees, the table shows the mean cost of the available plans. Dual plan premiums are based on an average of the employee plus spouse and employee plus minor rates, if separate rates are given.

Some of the divisions visited during the site visit process, including Brunswick and Greensville, participate in the Local Choice Health Benefits Program, which is administered by the State's Department of Human Resource Management. This plan is available to local governments and school divisions, and its goal is to "offer a better than average benefits plan at reasonable cost." Benefits cited by the plan include the following:

- Lower administrative costs through substantial purchasing power
- Financial protection through shared claims experience is possible since all groups, regardless of size, share the advantage of mental health, prescription drug, and dental cost pooling over the entire Local Choice membership
- Minimum performance standards must be met by all health plans offered under the Local Choice plan
- Member groups save the time and expense of separately procuring health coverage.

Rates for program participants are determined on a pooled basis only for divisions that have fewer than 49 employees participating in the program. The rates for divisions that have between 50 and 300 employees participating in the program are based on a percentage of the group's medical/surgical experience, and the rates for divisions with 300 or more employees participating are based on the individual division's experience. (The plan does have stop-loss insurance, which allows individual claims to be pooled if they are $50,000 or more, for groups with fewer than 300 employees, or $70,000 or more for groups with more than 300 employees.) Premium rates for individual school divisions may still be quite expensive under the Local Choice plan, however, if the divisions have a high-cost claims experience.

The Issue of Health Insurance Costs May Merit Further Review. There appear to be some options available that could be pursued to respond to the problem of rapidly rising health insurance costs. Some of these are already in place in Virginia school divisions, and some are in use in other states. It may be desirable for the State, with the input of local governments and school divisions, to look at the feasibility of various ideas that might be used to obtain more uniform and lower premium rates for school divisions than are currently being negotiated.

One option that may merit further examination is the use of self-funded insurance plans. Self-funded or self-insured plans are ones where the employer assumes the financial risk of covering employees, paying medical claims from its own resources, as opposed to a fully insured plan in which an insurance company or other underwriter assumes full risk for medical expenses. The Prince William school division has a self-funded program, and its total health insurance premiums were the least expensive among the divisions visited (although the division did note that their co-payments may be higher than other divisions). The division has stop-loss insurance that allows high-cost claims to be turned over to an insurance company, which helps to limit the division's risk. School divisions in other states also have found that self-funded plans reduce health insurance costs. For example, the

Fort Bend Independent School Division in Texas stated that they achieved significant savings by operating a self-funded plan and negotiating contracts directly with medical providers. On the other hand, Virginia's Local Choice plan is described as a self-funded plan, and its premiums do not appear to be consistently and substantially lower than other plans. Nonetheless, self-funded plans may have potential, and their use merits further exploration. Small divisions could potentially join together to operate a single self-insured plan so that the risk to a single division would be minimized.

Another potential option that may merit further exploration is to allow school divisions to participate in the health insurance plan that is available to State employees. This approach is currently used in Kansas. It would allow school division employees to pay the same rates that State employees currently pay, which are considerably lower than many divisions.

Recommendations from other states to contain health insurance costs include the following:

- Adjusting the plan design so that more cost-effective managed-care options are used
- Participating in purchasing alliances or coalitions
- Requesting breakdowns of administrative fees and negotiating lower administrative fees
- Increasing the use of utilization review
- Requiring employees to bear a greater share of health insurance premium costs
- Offering incentives for healthy lifestyles and increasing coverage for prevention-oriented benefits.

Recommendation (19). **The State should consider hiring an independent consultant with health benefits expertise to look at the feasibility of various alternatives for obtaining more cost-effective premium rates across school divisions than are currently being negotiated in many divisions under the existing system.**

IMPLEMENTATION OF BEST PRACTICE IDEAS

The following section describes some of the potential obstacles to more widespread use of best practices. It also discusses some of the actions that can be taken to promote the use of best practices by school divisions. The potential impact of best practices upon school division costs is also considered.

Obstacles to More Widespread Use of Best Practices

Implementing and using best practices appears on the surface to be a common sense idea. However, the JLARC team heard from several divisions that best practices should not be viewed as one-size-fits-all solutions, because what works for one division may not work for another. There may be several valid reasons that divisions may not desire or be able to implement certain best practices. Some of these potential reasons are discussed in the following section.

Concerns About the Reliability Over Time of Cooperative Arrangements with the Local Government. Divisions may be hesitant to implement some best practices because of concerns about the reliability over time of certain arrangements. For example, many of the divisions that have cooperative relationships with their local governments indicated that these arrangements worked well because the people involved on both the school division and local government sides were committed to making them work. However, some expressed concern that the viability of these arrangements could diminish in the future if different people held key positions in the local government and school division. Similarly, a division that does not have a congenial working relationship with its local government would likely be very reluctant to enter into any type of cooperative arrangement.

Lack of Up-Front Funds to Implement Best Practices. Several of the best practices discussed in this report require divisions to make an up-front investment in funds to implement. For example, although it has been shown that energy management systems and energy efficient lighting can result in substantial savings in utility costs and can pay for themselves many times over, many divisions simply do not have the up-front funds to invest in these systems. The implementation of automated systems for bus routing or maintenance work orders, for example, can also be expensive.

Availability of Good, Timely Comparative Data. Some divisions may not be inclined to actively seek out and implement best practices, especially best practices that reduce costs, because they may not know whether their costs or staffing levels are out of line when compared to other divisions. There is no source of good, timely comparative data on expenditures and staffing levels available for divisions to use to compare themselves to other school divisions in the State. The Annual School Report provides some information, but it is not currently in a format that is user-friendly (costs at a detailed level are not provided on a per pupil basis, for example), and the available data are generally one to two years old.

One superintendent who previously worked in a school division in another state indicated that this state's DOE compared groups of school divisions on various indicators, such as expenditures and test scores. The divisions were grouped based on division characteristics such as size, demographics, and wealth. The superintendent indicated that this information was very useful. Since the construction of reasonably-sized peer groups is difficult to achieve for many school divisions, another approach is to use models with statistical controls for various factors to estimate the expenditure and staffing levels for a division that might be expected, given data on its needs and workload. School divisions could compare their actual resource use against their predicted use of the resource, as a tool in identifying areas where their

costs may be higher than necessary, or areas where they may be underfunded. Regardless of the technique used, however, the ideal of achieving exact matches or statistical controls that account for all differences is not attainable, so the information needs to be used carefully.

Unique Difficulties Faced by Relatively Isolated, Rural Divisions. Several of the rural divisions visited during the site visit phase of the study indicated that certain characteristics of their locality prevent them from implementing certain best practices. For example, providing door-to-door transportation service to all students in the division may not be viewed as a best practice because it is a high level of service and therefore very expensive. Several rural divisions, however, stated that they have no choice but to provide this level of service because there are no sidewalks, and forcing children to walk to a bus stop would be hazardous. In addition, if an isolated, rural division is interested in privatizing a particular support service, they may find it more difficult to find private contractors who are willing to bid for the work.

Potential Ways to Promote More Widespread Use of Best Practices

There are several actions that can be taken to promote more widespread use of best practice ideas. The executive branch has initiated a pilot effort that could contribute to the dissemination of some best practice ideas to divisions under review. In addition, the legislative branch may wish to play a role in promoting best practices.

Executive Branch's Initiative, Currently in a Pilot Phase, May Be a Vehicle to Promote the Use of Best Practices. In September 2003, the Governor announced an initiative that could serve in part as a vehicle for identifying and promoting the use of best practices. The Governor announced that staff from the Department of Planning and Budget will conduct intensive reviews of individual school divisions. The goal of this initiative is to "help the divisions realize greater efficiencies and identify good practices that can be shared with other school divisions." This initiative may in part expand on the type of work conducted during this JLARC review, and could be used as a way to promote the use of best practice and cost saving ideas among school divisions.

The Governor's initiative also includes a statewide performance review that will provide comparative data on expenditures by category, staffing levels, among other things. According to the Governor, this review will allow for the creation of a statewide education database presented in an understandable format, allowing students and parents (and presumably school divisions) to do "apples-to-apples" comparisons. It is unclear at this point what variables will be included in the database, and what controls will be used to achieve comparability.

The Department of Education currently has a small role in promoting best practices in the pupil transportation area. The department facilitates regional meetings among division transportation directors to discuss common issues and good ideas, and DOE indicated that it is planning to facilitate regional meetings among

transportation maintenance coordinators to promote networking among these staff too.

There are other actions that the State could take to promote the use of best practices. For example, the Department of Education could assume responsibility for the best practices web site that JLARC staff developed for this study, and encourage divisions to continue submitting additional best practices to the site. DOE staff could also conduct research on best practices and trends in each of the support services areas, and send out periodic bulletins to divisions to update them on best practices and trends in their areas. This research could be conducted by current DOE staff who are responsible for the various support services areas, or this responsibility could be assigned to a single DOE staff person who could serve as the department's best practices guru for support services. Either way, assigning this responsibility to centralized DOE staff is more efficient than having individual staff in each of the school divisions conduct this type of research on their own.

Recommendation (20). **The State or any of the various education associations should consider establishing a single focal point for the collection and dissemination of best practice information regarding non-instructional support services.**

Potential Ways the Legislative Branch Can Promote the Use of Best Practices. The General Assembly could also help to promote the use of best practices, primarily by establishing a best practices incentive fund. This fund could be used to offset a portion of the up-front costs that may deter the use of best practice ideas, such as acquiring energy management systems, or acquiring other automated systems such as bus routing software. A few divisions also indicated an interest in incentive funds to promote school consolidations that would achieve efficiencies. This fund would likely be limited, given the current finances of the State, so divisions could be required to compete for these funds by submitting grant-type proposals to the Department of Education, or some other designated entity. If such a fund is established, care should be given to ensure that funds be provided for best practices that will result in substantial cost savings or will considerably improve the delivery of a particular support service.

Recommendation (21). **The General Assembly may wish to consider establishing a best practices incentive fund.**

Can Dollar Savings from Support Service Best Practices Be Reinvested Back Into Classrooms?

Support costs themselves are subject to cost pressures. As indicated in this report, the price that divisions pay per unit of support costs is not static. For example, some divisions report finding it difficult to recruit for some vacancies at current salary levels. Health insurance costs for all staff, including support staff, have seen double digit annual growth increases, similar to the national experience. Rising costs in non-instructional areas means to some extent that economies and efficiencies that are found may be needed to pay for these cost increases, as opposed to being transferable to other purposes.

Future assessments of the support services of school divisions by the State should consider both need factors and cost pressures as well as efficiency factors. Any set of assessments that ignore either end of this spectrum cannot produce a realistic perspective of the condition and prospects for the delivery of the services. To some extent this has been done in the division-level performance reviews conducted in other states. For example, in some of the Texas school division reviews, added costs have been identified for items such as bus driver salaries, where divisions have a serious problem. However, a consideration of unmet needs appears to be more the exception than the rule.

Can Dollar Savings from Best Practices Be Used to Reduce State Fund Payments for Support Services from Current Levels?

The State does not reimburse localities based on their actual expenditures for support costs. It uses a methodology to fund the typical (prevailing) cost across all school divisions using a measure called the linear weighted average. The use of a formula approach as opposed to a cost reimbursement system promotes efficiency. The State's method emphasizes the costs of moderate-cost divisions in setting the cost it pays a share toward. School divisions that may have substantially higher costs due to inefficiencies are not paid on the basis of their higher costs. School divisions therefore have some incentive to minimize support costs, because if they can deliver the services at a lesser cost than is recognized by the formula, they may apply that amount elsewhere in their budget (to meet instructional needs).

Increased billing of certain health services to Medicaid has the potential to produce some revenue savings for the State as well as localities. However, the potential for other State savings in the non-instructional support services covered by this review appears to be more limited than for localities, in that the State currently uses a number of funding practices that limit its cost responsibility. Like most local governments, the State currently provides little funding for school food services; these costs are mostly paid by federal reimbursements under the National School Lunch and Breakfast Programs and by receipts from students. Also, State funding for other division non-instructional support costs is based on a methodology that emphasizes the unit costs of moderate-cost divisions. (The State does not reimburse high-cost divisions for their high expenditure levels.) In addition, the State has not paid a share of some support costs (for example, certain dropped administrative personnel costs), and has tended to assume that school division salary and fringe benefit costs will stay static (or largely static) during the years being funded.

However, over time, economies and efficiencies in school divisions through best practices could cause a reduction in prevailing costs, either as an actual reduction, or as a diminishment in where the costs otherwise would be. Realizing savings in this way is the appropriate way for the State to achieve any cost savings.

Conclusion

Some best practice ideas are intended to increase the quality of services, and may increase costs while other best practice ideas are designed to achieve more cost-effective operations and reduce costs. Because support costs are not static, the identification of dollar-saving possibilities due to the dissemination of best practices will not necessarily lead to a true reduction in the base costs paid for support services. Consequently, the effort to implement best practice efficiencies in support services will not necessarily lead to a direct increase in the availability of dollars flowing to the classroom.

However, the pursuit of best practice ideas is a worthwhile objective. The recommendations and best practice ideas reflected in this report indicate a number of ways in which divisions might be able to achieve some cost savings or improve the quality of service. The use of best practices promoting efficiency and economy has the potential, at a minimum, to reduce the rate of increase that may be experienced in the future in support cost areas, or help maximize the use of available dollars. Also, if particularly high-dollar value savings can be identified in some divisions, there is the possibility of obtaining a real reduction in the base cost for the support services in those divisions. Since the State's support funding is based on typical school division practices, the State will only realize major economies if large saving opportunities can be found across numerous divisions. However, individual local governments could realize substantial savings in the local dollars that are utilized to pay for these services.

A continuation of best practice activity with a broad scope (that is, collecting and disseminating best practice ideas across the school divisions, and from the literature) could be an asset for divisions. A focus on individual school divisions (for example, through the DPB pilot initiative) may lead to the identification of additional ways in which school division practices can be made more efficient and effective.

Appendixes

Appendix A

House Joint Resolution No. 34
2002 Session

Directing the Joint Legislative Audit and Review Commission (JLARC) to examine best administrative, fiscal, and service practices in the Commonwealth's public school divisions.

WHEREAS, pursuant to Article VIII, § 1 of the Constitution of Virginia, the General Assembly must "provide for a system of free public elementary and secondary schools...and...ensure that an educational program of high quality is established and continually maintained"; and

WHEREAS, integral to the provision of a quality public education system is efficiency in the administration of programs, services, and budgetary matters; and

WHEREAS, with the adoption of Senate Joint Resolution 171, the 1989 Session of the General Assembly established a commission to study the efficiency of the use of public education funds, and directed this commission to "review the requirements of state and federal mandated educational programs to determine the feasibility of consolidating certain programs, services, and school division functions, assess whether and to what extent the instructional, supervisory and administrative staff levels exceed need, particularly given the number of students enrolled in the public schools of the division, review the organizations, planning, and budgetary structures of the school divisions to determine the need and ways in which such structures may be improved to maximize the utilization of personnel and funds, and recommend such statutory, regulatory and policy changes as may be necessary to facilitate the efficient use of public education funds"; and

WHEREAS, more than a decade has passed since the commission explored these efficiency concerns, and the Commonwealth's public schools face continuing challenges as enrollments grow and required programs and services increase; and

WHEREAS, while the Standards of Quality establish within the Department of Education a "best practices" unit to "identify and analyze effective instructional programs and practices and professional development initiatives," there is no similar mechanism for the identification of effective administrative and fiscal practices to assist school divisions in promoting efficiency and program effectiveness; and

WHEREAS, the identification of practices that would result in revenue savings to school divisions and to the Commonwealth and services that might be effectively out-sourced will assist school divisions in providing the highest quality system of public education; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Joint Legislative Audit and Review Commission be directed to examine best administrative, fiscal, and service practices in the Commonwealth's public school divisions. In conducting the study, the Commission shall select from among the several school divisions, a sample that is representative of urban, suburban, and rural school divisions in the Commonwealth. The Commission shall also (i) consider, among other things, the work of the Commission on Efficiency in the Use of Public School Funds; (ii) identify those programs and services that might be consolidated, are not achieving their intended purpose, or for which the mission is no longer relevant or discernible; (iii) identify those services, such as transportation, maintenance, food service, and other initiatives that might be effectively out-sourced; and (iv) develop recommendations regarding revenue-saving initiatives and practices.

All agencies of the Commonwealth and those local school divisions included in the sample shall provide assistance to the Commission, upon request.

The Commission shall submit an interim report of its findings and recommendations to the Governor and the 2003 Session of the General Assembly, and shall complete its work by November 30, 2003, and submit its final written findings and recommendations to the Governor and the 2004 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Appendix B

Overview of Other States' Best Practice Initiatives

As stated in the report, two states appear to have done the most work in terms of developing best practices for use in potentially improving the efficiency and effectiveness of public education support services: Florida and Texas. In addition, other states, such as Pennsylvania and Arizona, conduct performance audits of local school divisions, and many of the recommendations made in these reports can be considered recommendations for divisions to implement best practices. This appendix provides a brief overview of these states' work in addressing best practices for support services.

Florida's Best Financial Management Practices. In 1997, the Florida state legislature directed the state's Office of Program Policy Analysis and Government Accountability (OPPAGA) and the Auditor General to develop an assessment system to improve school districts' management and use of resources. The assessment system that was created was based on a comprehensive set of best practices that were developed by OPPAGA and the Auditor General. The best practices, called Best Financial Management Practices, cover a broad range of school district educational and operational programs and services, including: management structures, administrative technology, personnel systems and benefits, facilities construction and maintenance, student transportation, food service operations, and safety and security.

To develop the best practices, OPPAGA and the Auditor General conducted an extensive literature review and contacted a broad range of education stakeholders, professional organizations, legislative staff, universities, departments of education in Florida and other states, and other agencies to obtain input in developing the best practices and indicators. They also consulted with more than half of Florida's school districts.

OPPAGA groups each of its best practices under broad goals. Then, OPPAGA provides several indicators for each best practice to help assess whether school districts are meeting each best practice. Table B-1 provides an example from the Facilities Maintenance functional area.

As stated above, Florida's best practices are used as part of the state's program to improve school district management and use of resources and to identify cost savings. Each school district is supposed to undergo a Best Financial Management Practices Review once every five years. These reviews are designed to encourage school districts to:

- use performance and cost-efficiency measures to evaluate programs;

Table B-1

Example of Goal, Best Practice, and Best Practice Indicators From OPPAGA Best Financial Management Practices

Facilities Maintenance	
Goal	The district has an annual budget for facilities maintenance and operations that is equitable throughout the district, supports annual ongoing and deferred maintenance requirements, and allows administrators to track and control maintenance and operations costs.
Best Practice	The district accurately projects cost estimates of major maintenance projects.
Indicators	a. Cost estimates are based on the district's experience with prior similar projects, current estimating cost standards, and market conditions. b. The cost of inflation for maintenance projects is projected for five years. c. The district regularly evaluates projected cost estimates for accuracy and utilizes this information to improve future estimates.

Source: OPPAGA's "Best Financial Management Practices for Florida School Districts."

- use appropriate benchmarks based on comparable school districts, government agencies, and industry standards to assess their operations and performance;
- identify potential cost-savings through privatization and alternative service delivery; and
- link financial planning and budgeting to district priorities, including student performance.

The results of these reviews are detailed reports that include findings, recommendations, fiscal impacts, and implementation plans.

The Florida legislature did not appropriate funds for OPPAGA's performance audit program for the 2003-04 fiscal year. Consequently, OPPAGA does not plan to conduct any new reviews in 2003-04. It is currently unclear whether the reviews will be funded and conducted in future years.

The Texas School Performance Review Program. The state of Texas has taken a slightly different approach to developing best practices for education support services. Rather than proscribing which best practices school districts should be using, Texas developed a database of best practices that are currently in use in Texas school districts.

As part of the Texas School Performance Review (TSPR) program, the goal of which is to improve the management and finances of individual public school

districts, the Comptroller of Public Accounts conducts performance reviews of school districts. The goal of these reviews is to identify a district's administrative, organizational, and financial problems and recommend ways to cut costs, increase revenues, reduce overhead, streamline operations, and improve the delivery of educational services.

Some of the cost savings identified in these reviews have been in non-instructional support service areas. However, other reviews have not found savings in these areas, or limited savings in these areas, and instead have found most of the savings in school administration or even classroom instruction activities. For example, the majority of savings indicated in the review of the Brownsville school district came from applying minimum accreditation standards for assistant principals and school clerical staff as staffing maximums, and calculating the resulting savings. (Another major component of the identified Brownsville savings were school food cost savings, a non-instructional support service cost that is largely funded nationally by federal reimbursements and lunch payments by students.) All of the savings identified in the 2003 Calvert school district review came from reducing education aides in the classroom, and all of the savings for the Chilton school district review came from reducing teacher and education aide positions.

Best practices that are identified during the school review process are verified by the districts and then compiled in a database called "A+ Ideas for Managing Schools" (AIMS). School districts can also submit best practices to the database, subject to verification by TSPR staff.

The database contains more than 400 best practices. The following are examples of best practices in the database:

- charge students for transportation that is not funded by the state and provide revenue for the district;
- implement a second breakfast period to increase revenues;
- contract with an energy management firm to develop and implement energy conservation measures and realize cost savings;
- hire a small core maintenance staff augmented by contractors for peak loads; and
- foster partnerships with businesses and other groups as resources to support and enhance district computer services.

Pennsylvania's Performance Review Program. The Pennsylvania Department of the Auditor General has been conducting school district performance reviews since 1997. The goal of the reviews is to identify ways to improve school district efficiency and effectiveness and identify best management practices. The reviews are intended to help districts "use tax dollars as efficiently and effectively as possible" and to help ensure that the "maximum amount of... hard earned tax

dollars… reach the classroom for teaching and learning." The reviews also point out strengths of the school districts, which are similar to best practices.

From 1997 to July 2001, the department completed 18 such reviews. Each of the reviews entails a substantial amount of work by the department. For example, the number of interviews conducted at the district sites has ranged from a low of 13 to a high of 104, with an overall average of 49 interviews per site.

Each of the primary written products containing observations and recommendations from the performance reviews have been entitled "A Strategic Blueprint for Moving More Tax Dollars Into the Classroom." The intensive reviews have led to the identification of some projected savings. For example, the most recent school district review found $690,000 in potential savings. Recommendations in this review, some of which can be considered best practices, include the following:

- establish a central warehouse and an inventory system,
- segregate employee duties in the business office,
- evaluate the benefits of implementing Internet purchasing, and
- hire a full-time grant writer to explore more grant opportunities.

Arizona's Division of School Audits. In fiscal year 2002, the State of Arizona Office of the Auditor General created a new audit division, established by the legislature to conduct performance audits of school districts and monitor the percentage of dollars spent in the classroom. The audits are to focus on how well the districts are doing to spend more money in the classroom and whether districts are using Proposition 301 money, which uses a six-tenths of a percent sales tax to provide more monies for teachers' pay and classroom use, as the law intended.

To date, the Division of School Audits has conducted audits of four Arizona school divisions. The division has also published reports on school district administrative costs, and school districts' dollars spent in the classroom. The four audit reports provide recommendations for saving money, but do not quantify specific dollar savings. Recommendations include:

- analyze and increase meal prices;
- make greater use of financial analyses in managing the food service program;
- periodically evaluate bus routes to ensure routes are efficient;
- establish salary ranges for administrative assistants based on market surveys or other factors; and
- better negotiate proposed contracts to obtain more favorable rates.

Appendix C

Summary of Best Practices Received During the Study*

School Division	Best Practice Summary
Administrative Systems and Services	
Chesapeake	Submit budget on line
Chesapeake	Automate the calculation of overtime and substitute pay
Chesapeake	Purchase textbooks on consignment
Chesapeake	Automate data related to employee and retiree benefits
Chesapeake	Create a web page for information regarding attendance zones and capital improvement plans
Chesapeake	Use a mailing service for school administration mail
Chesapeake	Identify and employ outstanding teacher candidates through an early commitment process (Career Commitment Program)
Chesterfield	Purchase goods and services cooperatively with the county government
Clarke	Combine various school division administrative functions with local government
Fairfax	Streamline the grants reimbursement process by submitting reimbursements electronically
Fairfax	Implement a procurement (credit) card program
Fairfax	Establish a Grants Development section in the Budget Office
Fairfax	Require new employees to use direct deposit
Fairfax	Use school finance support team and other tools to assist school-based personnel in financial matters
Fairfax	Work with other school divisions to obtain and publish budget information and comparative data that use common definitions and calculations
Fairfax	Implement program budgeting
Fairfax	Manage shipping costs associated with textbook orders by implementing centralized freight management
Fairfax	Implement a "passive order" program for products/supplies that are ordered on a recurring basis
Fairfax	Automate the warehouse request system
Fairfax	Implement an employee self-service system that allows employees to access their human resources and payroll information online
Hampton	Order textbooks through a centralized textbook ordering system
Henrico	Provide school attendance boundary information via the Internet
Henrico	Develop a CD with information on employment opportunities, application forms, etc. to use as a teacher recruitment tool
Loudoun	Implement an online employment application
Norfolk	Link operating budget to districtwide accountability system
Norfolk	Implement a comprehensive accountability system
Norfolk	Implement an Electronic Document Cabinet for processing and maintaining employee records

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Norfolk	Cross train employees in the Department of Pupil Services
Norfolk	Relocate ID badge and fingerprinting operations to an off-site facility that is more accessible to employees
Norfolk	Consolidate the banking arrangements for all schools that maintain student activity funds
Norfolk	Develop a systemic approach to allocating teachers within the division
Norfolk	Limit the number of vendors who provide Tax Sheltered Annuity plans to employees to a few "best in class" vendors
Norfolk	Consolidate vending operations throughout the division
Prince William	Allow vendors to register with the purchasing department on-line
Roanoke City	Consolidate locality and school system financial and payroll records
Roanoke City	Use a joint purchasing consortium for office and paper supplies
Roanoke County	Offer special recognition programs to support employees
Roanoke County	Have Human Resources personnel give breaks to support personnel to familiarize themselves with the job responsibilities and increase morale among the support staff
Roanoke County	Monitor and provide support to new employees
Roanoke County	Operate joint financial systems with the county government
Roanoke County	Include local government staff in the school division budgeting process
Roanoke County	Place outstanding support applicants immediately
Surry	Establish a school system UPS account online
Virginia Beach	Implement a document imaging system
West Point	Use a student information database, an electronic gradebook, and an attendance dialer phone system
York	Use an intranet to allow access to various documents/ publications, time and attendance system, and maintenance/ computer repair requests
York	Redesign the applicant screening process and implement an online applicant tracking system
York	Allow a fund balance rollover to instructional technology
York	Develop a School Activity Funds manual
York	Use procurement cards for purchases under $1,000
York	Establish a Revenue Stabilization Fund
York	Share a centralized purchasing operation with the county government
York	Produce the school division budget on a CD
York	Use Business Process Reengineering (BPR) method to examine traditional practices/procedures
York	Publish a Standard Operating Procedures manual

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Attendance Services	
Fairfax	Use school attendance officers (SAOs) to address student attendance/ truancy issues
Lancaster	Have a strong networking arrangement with all schools in the tracking of attendance
Lancaster	Automate the monitoring of student attendance
Lancaster	Involve parents early in the truancy process
Lancaster	Develop a close working relationship with the court system
Norfolk	Hire attendance technicians using Safe Schools/Healthy Students Grant funds
Pittsylvania	Use an interagency, multidisciplinary approach to truancy reduction
Prince William	Implement a program for interagency truancy prevention and intervention
Rappahannock	Have an answering machine for parents to call absent students in early, and have the SRO or other staff pick up truants
Rockingham	Establish multi-level services to address prevention, intervention, and enforcement of the mandatory attendance laws
Food Services	
Alexandria	Increase the variety of food offerings and participation in the school lunch program by integrating international foods and learning materials into school lunch menus
Alexandria	Provide a financial incentive for food services staff to learn more about safety and sanitation
Alexandria	Implement an incentive award program for perfect attendance
Alexandria	Implement an Employee of the Month (and Year) program
Alexandria	Implement a computerized school lunch accounting system
Alexandria	Develop a Pictorial Training Manual for staff with limited reading abilities
Alexandria	Donate a portion of cafeteria cookie sales to the Kindergarten Snack Program
Alexandria	Develop a plan to feed students and staff during emergency situations
Bedford	Control food cost using a "food cost analysis" software program
Chesapeake	Update the database of students receiving free and reduced lunch electronically instead of manually
Fairfax	Centralize vending services throughout the division
Fauquier	Participate in a multi-district food buying co-op
Fauquier	Allow Child Nutrition administrators to become certified instructors, and provide training to managers and staff locally
Norfolk	Operate a central commissary cook-chill facility
Norfolk	Use food court style serving areas in the high schools
Norfolk	Have the Child Nutrition Department input its own payroll
Norfolk	Conduct promotions that market school breakfast and lunch

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Norfolk	Implement a "self-service" breakfast program during the summer
Prince William	Host an annual food show
Prince William	Develop a Quality Standards Manual as a tool for employee training, quality monitoring, and employee evaluation
Prince William	Operate a centralized food service program and conduct "Hazard Analysis at Critical Control Points"
Radford	Use Excel templates to compile daily and monthly reporting information and the lunch count
Roanoke County	Use technology to improve inventory control
Roanoke County	Develop written cycle menus and cycle production records
Health Services	
Carroll	Provide a registered nurse in each school, and a full-time registered nurse as health supervisor/administrator
Chesapeake	Use in-house staff instead of contract staff for occupational therapy and physical therapy services
Hampton	Have a Registered Nurse (RN) in every building
Hampton	Use the Internet for health-related research and communications
Hampton	Track student health information using a customized health service data base
Hampton	Maintain a close working relationship with the local health department
Portsmouth	Employ at least one full-time registered nurse at every school, and additional nurses at schools with more than 750 students
Prince William	Hire additional nurses, identify children with special health care needs early, and collaborate with outside agencies
Roanoke City	Establish an employee health clinic to provide outpatient services and worker's compensation screenings
Roanoke County	Staff each school with a registered nurse on a part-time basis
Washington	Place a nurse in each school building
Williamsburg-James City	Employ a full-time registered nurse and full-time clinic assistant in every high school, and a full-time registered nurse in every middle and elementary school
Wise	Have a full-time school nurse in every school
Operation and Maintenance Services	
Chesapeake	Install computer graphics packages on HVAC control systems
Chesapeake	Use surplus phone systems from schools in support service buildings
Hampton	Consolidate maintenance and custodial services into one department
Hampton	Use maintenance and technology staff to complete the networking of school offices and classrooms
Patrick	Make up-front investments to save on energy costs over the long-term and provide air conditioning
Prince William	Implement an energy management program

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Prince William	Standardize the division's telephone systems
Prince William	Conduct facility sanitation evaluations
Prince William	Use bar codes and scanners to inventory the division's equipment
Prince William	Use a temporary worker pool to handle the summer workload
Pupil Transportation	
Fairfax	Require bus drivers to hang a pennant in the back window of their bus when it is parked as a way to ensure that drivers check to make sure that no children are left on the bus
Fairfax	Purchase buses that have air-actuated service doors
Fairfax	Provide supervisory and management skills training to bus drivers to prepare them to become supervisors
Fairfax	Provide comprehensive training programs for new and veteran school bus drivers and attendants
Fairfax	Purchase buses using an RFP process that focuses on the lowest total cost of ownership rather than an IFB process
Fairfax	Encourage school division employees to recruit new bus drivers by providing employees with a $1,000 bonus
Fairfax	Reduce the number of crossing guards needed by transporting students on existing buses that have space available
Fairfax	Foster communication with drivers and attendants by having monthly advisory council and pyramid meetings, and publishing a monthly newsletter
Fairfax	Equip buses with 2-way radios
Fairfax	Equip new buses with video cameras that record on-board activity to tape
Fairfax	Equip new buses with dual-unit air conditioning
Hampton	Use buses more efficiently by using a two-tier school bell time system, consolidating runs and routes for special events and academic programs, and using automation
Hampton	Publicize bus stops for the upcoming school year via a booklet rather than the newspaper
Hampton	Reduce transportation maintenance costs by contracting out "big ticket" items, and purchasing parts through a consortium
Hampton	Transport middle and high school students via local city transit system
Norfolk	Trade in old school buses as part of the new bus purchase process
Northampton	Purchase gasoline in bulk, and purchase gasoline buses instead of diesel buses
Pittsylvania	Utilize technology and participate in quarterly meetings with other area school divisions
Prince William	Establish express bus stops for students in specialty programs
Prince William	Implement strategies to eliminate contaminated fuel
Rockingham	Bus routing software, two-way radios, and other practices
Virginia Beach	Stagger operating hours of schools
Virginia Beach	Outsource the fueling of school buses

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Virginia Beach	Use court-ordered weekend community service individuals to wash and clean school buses
Virginia Beach	Implement a computerized routing system
Virginia Beach	Use both the regular education school bus fleet and the special needs fleet to provide service to all students
Virginia Beach	Equip all school buses with two-way radios and video cameras
Virginia Beach	Distribute the transportation newsletter electronically
Virginia Beach	Employ a full-time safety and training supervisor to provide training to bus drivers and assistants
Virginia Beach	Conduct a bus driver recruitment program on an ongoing basis
York	Provide training to bus drivers twice per school year (transportation academy)
Safety and Security	
Fairfax	Examine the use of various door access technologies
Fairfax	Submit, review, and store site-specific crisis plans electronically
Fairfax	Install exit door number signs in all schools
Fairfax	Implement a weather warning pilot project
Williamsburg-James City	Give all principals and key administrators pagers so they can be contacted via group-paging in emergency situations
School Construction	
Chesapeake	Develop standardized layouts of elementary and middle school spaces
Chesapeake	Develop guide specifications for construction projects
Chesapeake	Develop written, uniform guidelines for project managers
Chesapeake	Use digital cameras to document construction progress and concerns
Loudoun	Use prototypical designs for school construction
Norfolk	Utilize an independent construction consultant to help manage and provide cost-cutting advice for major capital improvement projects
Technology Support Services	
Accomack	Train students to assist with technology support needs
Carroll	Use the division's Internet site to disseminate information
Chesapeake	Use email as primary means of communication between school division personnel and Information Technology staff
Chesapeake	Deliver antivirus software and updates to all computers electronically
Chesapeake	Use parts from surplus computers to repair and upgrade computers
Chesapeake	Have teachers enter grades directly into computer system
Chesapeake	Use cross-trained teams of information technology professionals to handle technology problems, and have them meet daily to coordinate schedules and service calls

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Chesapeake	Designate a primary and secondary contact person in each school to interact with the Department of Information Technology and troubleshoot problems
Craig	Report and track classroom maintenance and technology support needs through the use of outsourced "TroubleTrakker" services
Fairfax	Implement an Education Decision Support Library (EDSL) that provides access to institution-wide data to support decision-making throughout the school system
Fairfax	Develop a public-private partnership to address the division's technology objectives
Fairfax	Implement an integrated technology support model, which includes several entities that provide focused, direct technical support to schools and administrative sites
Hanover	Reorganize the technical operations department, and implement a web-based work order system
Harrisonburg	Develop a database to help school division personnel troubleshoot common technical problems
Henry	Implement wireless WAN and LANs
Isle of Wight	Install software that monitors networks and servers and detects problems
Prince George	Automate technology support
Radford	Use proxy servers to help control the need for more bandwidth to the Internet
Radford	Employ a full-time staff person in the technology lab of each school to assist students and staff
Radford	Standardize software for grades K through 12
Radford	Develop replacement plans for key computer equipment
Radford	Use e-mail to communicate with parents, and for attendance information, announcements, and work orders
Radford	Assign one person responsibility for providing SASI support (training, creating manuals, etc.)
Radford	Assign personal digital assistants to teachers
Stafford	Use wireless transmission of data
Staunton	Install software in student computer labs that eliminates any changes made to a computer upon rebooting
Virginia Beach	Implement a five-year instructional computer equipment replacement policy
Virginia Beach	Implement a Customer Support Center (comprising the Help Desk and Data Operations) and track requests for assistance electronically
Virginia Beach	Use version control software to store all custom-developed programs and documentation
Virginia Beach	Implement single platform standards
Virginia Beach	Use an intranet to distribute reports and data

Summary of Best Practices Received During the Study (continued)

School Division	Best Practice Summary
Virginia Beach	Elevate the information technology function within the division's organizational structure and appoint a Chief Information Officer
Williamsburg-James City	Perform detailed reviews of invoices from the division's digital services provider to ensure charges are appropriate
Williamsburg-James City	Switch long distance account to Virginia DIT long distance contract
Williamsburg-James City	Review cell phone usage, and implement a centralized cell phone management system

*To read more about these best practices, go to the JLARC web site at http://jlarc.state.va.us.

DISCLAIMER: The best practices in this database are for information purposes. Their inclusion in this database does not mean that they are endorsed by JLARC, nor does it mean that all school divisions can or should implement all of the best practices in the database. For example, some best practices may not be applicable to all school divisions, or may not be feasible for some divisions to implement. In addition, there is no guarantee that the estimated cost savings will be achieved by other school divisions.

Source: JLARC staff summary of school division best practice submissions.

Appendix D

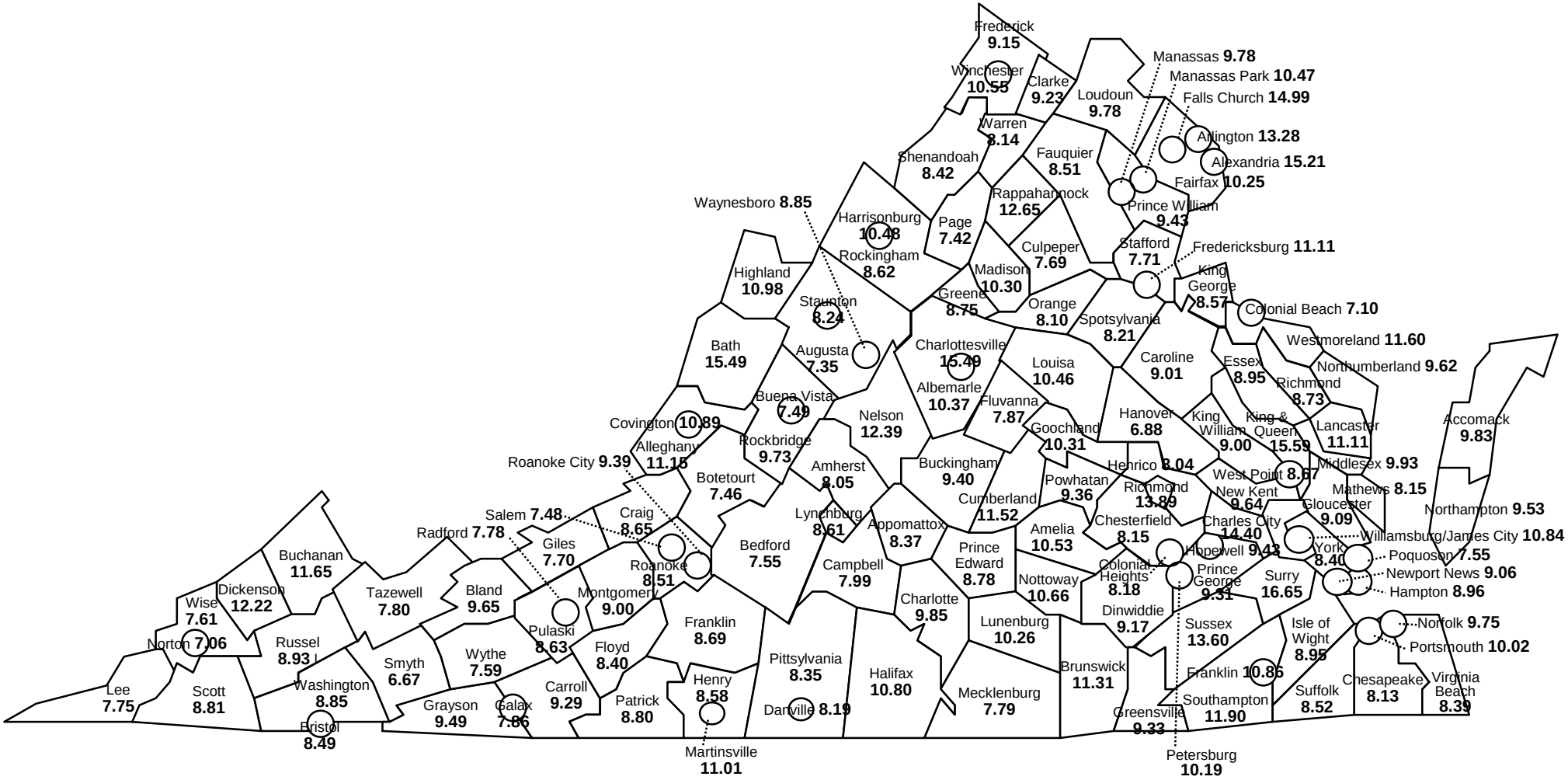
Daily Per-Pupil Expenditures for Non-Instructional Support Services FY 2002

Note: Expenditures are operating expenditures in the administration, attendance and health, operation and maintenance, pupil transportation, and school food functions of the Annual School Report. Costs do not include expenditures reported under the technology function series.

Source: JLARC staff analysis of the Department of Education's Annual School Report.

Appendix D (continued)

Daily Per Pupil Expenditures for Non-Instructional Support Services FY 2002



Note: Expenditures are operating expenditures in the administration, attendance and health, operation and maintenance, pupil transportation, and school food functions of the Annual School Report. Costs do not include expenditures reported under the technology function series.

Source: JLARC staff analysis of the Department of Education's Annual School Report.

Appendix E

Virginia's Per-Pupil Expenditures for Non-Instructional Support Services Compared to Southern Region States, FY 2001

(Southern Region = Southern Region Education Board states)

Per-Pupil Costs Without Pupil Transportation	Per-Pupil Costs With Pupil Transportation*
$ 2,347 Delaware	$ 2,827 Delaware
$ 2,155 Oklahoma	$ 2,383 West Virginia
$ 1,895 West Virginia	$ 2,358 Oklahoma
$ 1,867 U.S. Average	$ 2,226 Maryland
$ 1,825 Maryland	***$ 2,171 U.S. Average***
$ 1,745 Florida	$ 2,008 Florida
$ 1,708 Texas	**$ 1,958 VIRGINIA**
$ 1,690 South Carolina	$ 1,929 South Carolina
$ 1,643 Southern Region Average	***$ 1,893 Southern Region Average***
$ 1,620 VIRGINIA	$ 1,879 Texas
$ 1,604 Alabama	$ 1,852 Alabama
$ 1,525 Georgia	$ 1,802 Kentucky
$ 1,509 North Carolina	$ 1,802 Louisiana
$ 1,489 Kentucky	$ 1,787 Georgia
$ 1,484 Louisiana	$ 1,727 North Carolina
$ 1,482 Arkansas	$ 1,709 Arkansas
$ 1,353 Mississippi	$ 1,577 Mississippi
$ 1,282 Tennessee	$ 1,479 Tennessee

*Virginia transports a high proportion of its students. The transportation costs in Virginia are high on a per-pupil in fall membership basis compared to other states, but are low on a per-pupil transported and on a per-bus-mile driven basis.

Source: JLARC staff analysis of data from Public Education Finances, 2001, a document of the U.S. Census Bureau, issued March 2003.

Appendix F

Agency Response

As part of an extensive data validation process, the major entities involved in a JLARC assessment effort are given an opportunity to comment on an exposure draft of the report. Appropriate technical corrections resulting from the written comments have been made in this revision of the report.

This appendix contains the written response of the Department of Education.

COMMONWEALTH of VIRGINIA
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October 8, 2003

The Honorable Kevin G. Miller
Chairman, Joint Legislative Audit and Review Commission
Suite 1100, General Assembly Building
Capitol Square
Richmond, Virginia 23219

Dear Senator Miller:

Thank you for allowing the Department of Education (DOE) to review and comment on the exposure draft of the report on *Best Practices for the Support Services of School Divisions*. The draft report contains a number of recommendations intended to increase the efficiency and effectiveness of services provided by school divisions that support the instructional mission of the public schools. We have provided written comments and suggestions to Joint Legislative Audit and Review Commission (JLARC) staff in response to the draft report, as well as a variety of information throughout the course of the study. We hope this information and feedback have been helpful.

We have reviewed the report recommendations in the exposure draft and wish to comment specifically on those that have the potential to most directly affect the Department of Education:

Recommendation #3: DOE should involve the divisions in the development of the new system for tracking students, and in student tracking implementation issues.

The department has involved school divisions on an on-going basis in issues related to collecting student-level data and information through an advisory committee of school division representatives with expertise in information systems. This advisory committee has been providing input to DOE for over a year. The committee was involved in the development of a student-level data collection process that DOE is conducting this school year; in addition, this committee will be involved in the development of the new education information management system that will have enhanced capacity to collect student-level information and longitudinal data.

Recommendation #5: Divisions should bill Medicaid for eligible student health services.

DOE, in conjunction with the Department of Medical Assistance Services (DMAS), continues to work to increase the number of school divisions participating in the Medicaid reimbursement process, as well as to increase the level of reimbursement activity of divisions already participating. Several DOE staff are involved in this effort. These staff provide on-going training and technical assistance to school divisions to initiate and increase participation, as well as to address barriers to participation. The latest data from DMAS for the 2002-2003 school year indicate that approximately 83 of 132 school divisions billed Medicaid for $7.4 million in direct services and administrative reimbursements. The school divisions' share of these reimbursements was approximately $3.0 million and the state-level share was approximately $4.4 million.

Recommendation #16: DOE should facilitate a bus parts exchange program.

Such an exchange program could be helpful to school divisions; however, DOE does not have the staff available to assess, monitor, and broker the information posted on an on-going basis. With a minimal amount of additional resources, DOE may be able to host such a system on its Web site, if the system was operated only as a public message board on which divisions voluntarily posted parts information. This level of involvement would require little on-going monitoring of the posted information by DOE; however, staff and computing resources would be required to develop and maintain the Web site.

Recommendation #20: The State or any of various education associations should consider establishing a single focal point for the collection and dissemination of best practice information regarding non-instructional support services.

While a central source of best practice information for support services would benefit school divisions, DOE could not provide this level of service with current resources. In addition, allocating the amount of resources that would be required to identify, assess, disseminate, promote, and monitor best practices information statewide is not within the core mission of the agency. As suggested in the report (page 108), a clearinghouse of best practices information for support services could become a function of the proposed School Efficiency Reviews for Virginia Education (SERVE) process, a component of Governor Warner's Education for a Lifetime initiative. The SERVE process involves efficiency reviews of individual school systems by state reviewers. One of the goals of the process is to identify and disseminate administrative and management best practices that can be shared with and replicated in other school divisions statewide.

DOE staff working in the support areas addressed in this report will continue to assist school divisions in providing cost-effective support services as resources allow. We look forward to working further with JLARC and the General Assembly in addressing the report recommendations as well as other important issues addressed in the report.

Sincerely,

Jo Lynne DeMary

Jo Lynne DeMary, Ed.D
Superintendent of Public Instruction

JLD:cle

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